Prepared for the International Working Group on Taxonomic Databases for Plant Sciences (TDWG)

Economic Botany

DATA COLLECTION STANDARD

Frances E M Cook

ROYAL BOTANIC GARDENS KEW

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INTRODUCTION

AIM

The aim of the Economic Botany Data Collection Standard is to provide a system whereby uses of plants (in their cultural context) can be described, using standardised descriptors and terms, and attached to taxonomic data sets. Studies on the uses of plants are becoming increasingly important and the standardisation of terms and a unified system to describe uses would be of enormous benefit to gatherers of information, especially where exchanges of data sets are involved.

POTENTIAL USERS

There are various potential users of a standard which allows descriptions of plant uses to be related to taxonomic data sets. They include:

1. educationalists, taxonomists, biochemists, anatomists etc. who wish to record plant use, often at a broad level;

2. economic botanists and ethnobotanists whose purpose is to record all known information about the uses of a taxon;

3. economic botany collection curators who need to describe accurately the uses and values of specimens in their collections;

4. bibliographers who need to describe plant uses referred to in publications and to apply keywords consistently for ease of data retrieval.

HISTORY OF THE STANDARD

It was first decided that the International Working Group on Taxonomic Databases for Plant Sciences (TDWG) should become involved with the setting up of a standard for economic botany at its fifth meeting in 1989 (TDWG5). As the Royal Botanic Gardens, Kew was already much involved in this type of work, I agreed to convene the subgroup for this topic. The first year was spent contacting various individuals and institutes to find out the types of economic botany data then being recorded, and the means used for handling these within databases. From this, and discussions at TDWG6 (1990), it was decided that the most important tasks for the subgroup were to produce i) a stable top and second level classification of uses and ii) a classification of useful plant parts. During the following year I produced a draft standard drawing on the experience of three databases at the Royal Botanic Gardens, Kew concerning economic plants, namely SEPASAL (Survey of Economic Plants for Arid and Semi-Arid Lands), the Economic Botany Bibliographic Database, and the Catalogue of the Economic Botany Collections. With a decade of experience of coding information, I was aware of the wide range of uses and other factors that are included in economic botany data and of the various ways in which they can be organised. A draft proposal for standard economic botany descriptors was presented at TDWG7 (1991) and circulated for comments. The draft document was revised in the light of these comments and presented to TDWG8 (1992). The proposed standard was voted on and accepted in its

entirety as a standard for economic botany data. The present publication is essentially the same as was passed at TDWG8 but with some modifications resulting from discussions at the meeting, together with format changes to aid understanding and practical use of the standard.

DESCRIBING USES AND VALUES OF PLANTS - GUIDELINES FOR DATA COLLECTION

An ideal and complete description of the use and/or value of a plant should include the following:

Source of information on use. Is the source personal observation, or from elsewhere? If the latter, reference citations should be given. Where appropriate, voucher specimen details should be provided (collector, number, date, herbarium) and details of the informant recorded (name, gender, approximate age, occupation, ethnic identity, locality and language spoken).

Use/value. What is the plant used for, or what negative values does it have (e.g. as a weed affecting food production, or as an accidental poison)?

Plant part used. Which plant parts are used, or have any negative values?

Organisms. Which organisms use the plant/plant parts (e.g. for forage, medicines) or are affected by the plant (e.g. by poisons)?

Users. Who recognises the value of the plant? State ethnic group (tribe/caste/sect etc. with language/dialect, locality/area).

Vernacular name(s). The name of the taxon must be distinguished from the name of plant parts, the names of any processing stages, and the final product. Names used in trade should be identified. It should also be mentioned if any vernacular name refers to more than one taxon. The use of some names may be restricted to a time of year or occasion, or have sacred connotations. The language and dialect to which the names belong should be stated along with details of ethnic group. Care should be taken with transliteration into the Roman alphabet; if a standard system exists, use it and note which one it is.

Production details (where relevant). Are wild/protected/cultivated plants used? Give details of cultivation, harvesting, yields, processing and storage methods and take note of special tools, timing etc.

Means of application/administration. This is of particular relevance to medicines, poisons (e.g. insecticides), social products and some environmental purposes (e.g. fertilisers).

Season of availability and season of use. Note these and, if relevant, time of day.

Conservation data. Record frequency of plants, details of regeneration, sustainability or over-exploitation and note any locally imposed bans on felling or harvesting.

Use type. Is it a traditional, modern industrial or just a possible use?

Economics. Is there trade in the live plants, plant parts, or derived products, and, if so, on what scale?

Rating and Popularity. Is the plant highly valued for its use or are other species preferred and, if so, which? Try to record factors influencing any preference, e.g. rarity, inaccessibility, depleted source, or low quality, ineffectiveness, difficult harvesting or processing requirements.

Properties. Provide details of properties which influence its value for a specified purpose, e.g. nutritional value for foods; occurrence of bioactive compounds for medicines/poisons; mechanical and physical properties of woods; nectar flow periods and flowering dates for bee plants; calorific values and burning qualities of fuels; sizes of plants used environmentally etc.

Problems. Is the plant, for example, an invasive crop weed, a host for crop pests or diseases, or a livestock poison? Problems can also be linked to popularity (or lack of it).

Potential. Could the use, cultivation, manufacture of products etc. be increased and/or introduced to other areas or social groups?

Many of the categories listed above are better left to structured notes (or free text) fields in any database but, for other categories, descriptors with carefully defined states can be usefully assigned. Some descriptors will be common to many use types whilst others need to be specifically created to satisfy recording requirements within a single broad use type.

STRUCTURE, MAINTENANCE AND IMPLEMENTATION OF THE ECONOMIC BOTANY DATA COLLECTION STANDARD

OVERVIEW

The previous section illustrated the numerous aspects involved in fully describing and evaluating the use of a plant in its cultural context. The Economic Botany Data Collection Standard has tried to account for these various information categories and has recognised that different users will be interested in collecting or storing data at differing levels of detail, hence the flexibility built into it. Appendix H (Table 66) provides a worked example of how this standard can be used to describe all uses of a taxon. Table 67 within this Appendix provides a guide to the interpretation of fonts which are used to help the reader understand the different levels of the standard. For the purpose of this standard a descriptor is defined as an information category for which there is a list of terms from which appropriate states can be selected.

There are three levels to the main part of the Economic Botany Data Collection Standard. Table 3 shows the relationship between these three levels. The broadest is **LEVEL 1** and the most specific is Level 3. There are thirteen states at **LEVEL 1** (Table 1) and 107 at **Level 2** (Table 2). Level 3 differs from **LEVEL 1** and **Level 2** in that it is not a list of states for a single descriptor that is available for selection; rather it comprises between one and four descriptors (each with their own list of states). It is

the linking of the selected states for the available descriptors at Level 3 that allows the detailed description of a specific use (see Appendix H). The descriptors available at Level 3 are dependent on the **Level 2** status.

In addition to the three levels, there are some independent descriptors that are related to uses but which are not linked directly to Levels 1-3; these have been called Stand-Alone descriptors. They have been included as descriptors for information categories that concern use-related properties of a plant or plant part, where retrieval of taxa with specific states from the database could be important.

Finally there are *Note Categories* where free text can be stored. These enable the storage of fine details about the uses of a plant and are useful where searching for specific terms is not a requirement. Some keywords, however, have been suggested to allow for some uniformity, but terms recorded in the *Note Categories* need not be restricted to the keywords.

MAINTENANCE

LEVEL 1 and **Level 2** of this standard are stable. It should be possible to classify **all** uses into **LEVEL 1** and **Level 2** states. No new **LEVEL 1** or **Level 2** states should be necessary. By contrast, at Level 3, new states will continually need adding, as new specific uses for plants are discovered or invented, but new Level 3 descriptors ought not be added. It is likely that new Stand-Alone descriptors and *Note Categories* may be required as there becomes greater awareness of the factors involved in the description and evaluation of the uses of plants, certainly new states for the Stand-Alone descriptors and new keywords for the *Note Categories* will be necessary. The author is happy to act as co-ordinator responsible for any additions to the standard.

IMPLEMENTATION

The implementation, into a computer database, of a standard such as this depends on a coding system. A trial is currently underway at the Royal Botanic Gardens, Kew to implement this standard in its entirety, in the revised version of the SEPASAL database. The codes for the system will be published once its success has been ensured. However, due to their predicted stability, codes for **LEVEL 1** and **Level 2** are provided in this document.

LEVEL 1 STATES

Thirteen **LEVEL 1** states cover all uses of plants (Table 1). This should therefore be a stable list, requiring no additions.

TABLE 1. **LEVEL 1** states, with codes.

CODES	**LEVEL 1** states
0100	**FOOD**
0200	**FOOD ADDITIVES**
0300	**ANIMAL FOOD**
0400	**BEE PLANTS**
0500	**INVERTEBRATE FOOD**
0600	**MATERIALS**
0700	**FUELS**
0800	**SOCIAL USES**
0900	**VERTEBRATE POISONS**
1000	**NON-VERTEBRATE POISONS**
1100	**MEDICINES**
1200	**ENVIRONMENTAL USES**
1300	**GENE SOURCES**

A summary of the kinds of uses of plants included within each **LEVEL 1** state is described below. Further details are given for each of these between pages 15 and 73.

FOOD. Food, including beverages, for humans only.

FOOD ADDITIVES. Processing agents and other additive ingredients which are used in food preparation.

ANIMAL FOOD. Forage and fodder for vertebrate animals only.

BEE PLANTS. Pollen or nectar sources for honey production. This has been separated from **INVERTEBRATE FOOD** as a **LEVEL 1** state owing to its importance particularly within developing countries.

INVERTEBRATE FOOD. Only plants eaten by invertebrates useful to humans, such as silkworms, lac insects and edible grubs, are covered here.

MATERIALS. Woods, fibres, cork, cane, tannins, latex, resins, gums, waxes, oils, lipids etc. and their derived products.

FUELS. FUELS - wood, charcoal, petroleum substitutes, fuel alcohols etc. - have been separated from **MATERIALS** because of their importance.

SOCIAL USES. Plants used for social purposes, which are not definable as food or medicines, for instance masticatories, smoking materials, narcotics, hallucinogens and psychoactive drugs, contraceptives and abortifacients and plants with ritual or religious significance.

VERTEBRATE POISONS. Plants which are poisonous to vertebrates, both accidentally and usefully, e.g. for hunting and fishing.

NON-VERTEBRATE POISONS. Both accidental and useful poisons (e.g. molluscicides, herbicides, insecticides) to non-vertebrate animals, plants, bacteria and fungi, are included. Two **LEVEL 1** states for poisons are included as Level 3 treatments of these differ quite markedly.

MEDICINES. Both human and veterinary.

ENVIRONMENTAL USES. Examples include intercrops and nurse crops, ornamentals, barrier hedges, shade plants, windbreaks, soil improvers, plants for revegetation and erosion control, waste water purifiers, indicators of the presence of metals, pollution, or underground water.

GENE SOURCES. Wild relatives of major crops which may possess traits or qualities, such as disease resistance, cold hardiness etc., of value in breeding programmes.

Level 2 STATES

There are 107 **Level 2** states (Table 2). How these states are derived depends on the **LEVEL 1** use. For instance, for **FOOD**, the most important fact, other than that a plant is used for food, is the part of the plant. Hence, for **FOOD, FOOD ADDITIVES**, and **ANIMAL FOOD** the **Level 2** classification is based on plant part. For **MATERIALS**, on the other hand, it is the type of material obtained from the plant that is most important. For **FUELS** it is the fuel type, for **SOCIAL USES** it is the social use type, for **MEDICINES** it is the medicinal disorder group, and for **ENVIRONMENTAL USES** it is the environmental use type. For uses relating to **VERTEBRATE POISONS** and **NON-VERTEBRATE POISONS**, the most important factor is the organism to which the plant is poisonous. **BEE PLANTS, INVERTEBRATE FOOD**, and **GENE SOURCES** are already quite specific uses and have not been further divided at **Level 2.**

TABLE 2. **Level 2** states, with codes. [**LEVEL1** states are also included for those uses not represented at **Level 2.**]

CODES	Level 2 states
0101	**FOOD — Unspecified Parts**
0102	**FOOD — Entire Plant**
0103	**FOOD — Unspecified Aerial Parts**[1]
0104	**FOOD — Seedlings/Germinated Seeds**
0105	**FOOD — Galls**
0106	**FOOD — Stems**
0107	**FOOD — Bark**
0108	**FOOD — Leaves**
0109	**FOOD — Inflorescences**
0110	**FOOD — Infructescences**
0111	**FOOD — Seeds**
0112	**FOOD — 'Roots'**
0113	**FOOD — Exudates**
0201	**FOOD ADDITIVES — Unspecified Parts**
0202	**FOOD ADDITIVES — Entire Plant**
0203	**FOOD ADDITIVES — Unspecified Aerial Parts**[2]
0204	**FOOD ADDITIVES — Seedlings/Germinated Seeds**
0205	**FOOD ADDITIVES — Galls**
0206	**FOOD ADDITIVES — Stems**
0207	**FOOD ADDITIVES — Bark**
0208	**FOOD ADDITIVES — Leaves**
0209	**FOOD ADDITIVES — Inflorescences**
0210	**FOOD ADDITIVES — Infructescences**
0211	**FOOD ADDITIVES — Seeds**
0212	**FOOD ADDITIVES — 'Roots'**
0213	**FOOD ADDITIVES — Exudates**

/continued over

[1] includes unspecified aquatic parts
[2] as footnote 1

CODES	Level 2 states
0301	**ANIMAL FOOD — Unspecified Parts**
0302	**ANIMAL FOOD — Bark**
0303	**ANIMAL FOOD — 'Roots'**
0304	**ANIMAL FOOD — Exudates**
0305	**ANIMAL FOOD — Fertile Plant Parts**[1]
0306	**ANIMAL FOOD — Aerial Parts**[2]
0307	**ANIMAL FOOD — Other Parts**[3]
0400	**BEE PLANTS**
0500	**INVERTEBRATE FOOD**
0601	**MATERIALS — Unspecified Materials**
0602	**MATERIALS — Fibres**
0603	**MATERIALS — Cane etc.**[4]
0604	**MATERIALS — Wood**
0605	**MATERIALS — Cork/Cork Substitutes**
0606	**MATERIALS — Gums/Resins**
0607	**MATERIALS — Latex/Rubber**
0608	**MATERIALS — Tannins/Dyestuffs**
0609	**MATERIALS — Lipids**
0610	**MATERIALS — Essential Oils**
0611	**MATERIALS — Waxes**
0612	**MATERIALS — Alcohols**
0613	**MATERIALS — Other Materials/Chemicals**[5]
0701	**FUELS — Unspecified Fuels**
0702	**FUELS — Miscellaneous Fuels**
0703	**FUELS — Fuelwood**
0704	**FUELS — Charcoal**
0705	**FUELS — Petroleum Substitutes/Alcohols etc.**
0706	**FUELS — Tinder**
0801	**SOCIAL USES — Unspecified Social Uses**
0802	**SOCIAL USES — Smoking Materials/Drugs**
0803	**SOCIAL USES — Antifertility Agents**
0804	**SOCIAL USES — 'Religious' Uses**
0901	**VERTEBRATE POISONS — Unspecified Vertebrates**
0902	**VERTEBRATE POISONS — Fish**
0903	**VERTEBRATE POISONS — Amphibians**
0904	**VERTEBRATE POISONS — Reptiles**
0905	**VERTEBRATE POISONS — Birds**
0906	**VERTEBRATE POISONS — Mammals**
1001	**NON-VERTEBRATE POISONS — Unspecified Non-Vertebrates**
1002	**NON-VERTEBRATE POISONS — Unspecified Microbes**
1003	**NON-VERTEBRATE POISONS — Viruses**
1004	**NON-VERTEBRATE POISONS — Bacteria**
1005	**NON-VERTEBRATE POISONS — Fungi**
1006	**NON-VERTEBRATE POISONS — Plants**
1007	**NON-VERTEBRATE POISONS — Protozoa**
1008	**NON-VERTEBRATE POISONS — Mollusca**
1009	**NON-VERTEBRATE POISONS — Arthropoda**
1010	**NON-VERTEBRATE POISONS — Other Eumetazoa**[6]

/continued over

[1] includes inflorescences, infructescences, and seeds
[2] includes leaves, stems, unspecified aerial parts and live plant *in situ*
[3] includes seedlings/germinated seeds, galls and entire plant *ex situ*
[4] includes cane, rattan, bamboo, reed and wicker
[5] material type known but does not fit any of the defined categories; e.g. this section will include gourds, seeds, bark that are used directly as well more unusual processed material types including chemicals
[6] non-Mollusca/Arthropoda includes Platyhelminthes, Nemertea, Nemata, Annelida

CODES	Level 2 states
1101	**MEDICINES — Unspecified Medicinal Disorders**
1102	**MEDICINES — Abnormalities**
1103	**MEDICINES — Blood System Disorders**
1104	**MEDICINES — Circulatory System Disorders**
1105	**MEDICINES — Digestive System Disorders**
1106	**MEDICINES — Endocrine System Disorders**
1107	**MEDICINES — Genitourinary System Disorders**
1108	**MEDICINES — Ill-Defined Symptoms**
1109	**MEDICINES — Immune System Disorders**
1110	**MEDICINES — Infections/Infestations**
1111	**MEDICINES — Inflammation**
1112	**MEDICINES — Injuries**
1113	**MEDICINES — Mental Disorders**
1114	**MEDICINES — Metabolic System Disorders**
1115	**MEDICINES — Muscular-Skeletal System Disorders**
1116	**MEDICINES — Neoplasms**
1117	**MEDICINES — Nervous System Disorders**
1118	**MEDICINES — Nutritional Disorders**
1119	**MEDICINES — Pain**
1120	**MEDICINES — Poisonings**
1121	**MEDICINES — Pregnancy/Birth/Puerperium Disorders**
1122	**MEDICINES — Respiratory System Disorders**
1123	**MEDICINES — Sensory System Disorders**
1124	**MEDICINES — Skin/Subcutaneous Cellular Tissue Disorders**
1201	**ENVIRONMENTAL USES — Unspecified Environmental Uses**
1202	**ENVIRONMENTAL USES — Erosion control**
1203	**ENVIRONMENTAL USES — Shade/Shelter**
1204	**ENVIRONMENTAL USES — Revegetators**
1205	**ENVIRONMENTAL USES — Indicators**
1206	**ENVIRONMENTAL USES — Soil Improvers**
1207	**ENVIRONMENTAL USES — Ornamentals**[1]
1208	**ENVIRONMENTAL USES — Boundaries/Barriers/Supports**
1209	**ENVIRONMENTAL USES — Agroforestry**
1210	**ENVIRONMENTAL USES — Firebreaks**
1211	**ENVIRONMENTAL USES — Pollution Control**
1300	**GENE SOURCES**

In Table 2, the **Level 2** state is given in abbreviated form; for example, **FOOD — Galls** implies galls used as food, and **MEDICINES — Digestive System Disorders** implies use as medicine for digestive system complaints.

Level 3 **STRUCTURE**

Table 3 shows the three levels comprising the major part of the Economic Botany Data Collection Standard. The first column shows **LEVEL 1** states; the second shows how each **LEVEL 1** state is subdivided to give the **Level 2** states; the third lists the descriptors which are used at Level 3. The groups of Level 3 descriptors are linked to each relevant **Level 2** state to provide additional data. These descriptor groups vary depending on the **LEVEL 1** state. Some combinations between the Level 3 descriptors and **Level 2** states are redundant. Later sections in this document (see page 13) expand the **Level 2** X Level 3 matrices to show these redundant combinations.

[1] includes sports turfs

TABLE 3. Schematic diagram showing the relationship between the three levels of the Economic Botany Data Collection Standard.

LEVEL 1 states	**Level 2** states	Level 3 descriptors
FOOD	**Unspecified Parts** **Entire Plant** **Unspecified Aerial Parts**[1] **Seedlings/Germinated Seeds** **Galls** **Stems** **Bark** **Leaves** **Inflorescences** **Infructescences** **Seeds** **'Roots'** **Exudates**	Specific Plant Parts Used Food Types Preparations Used In Situations When Food Used
FOOD ADDITIVES	**Unspecified Parts** **Entire Plant** **Unspecified Aerial Parts**[2] **Seedlings/Germinated Seeds** **Galls** **Stems** **Bark** **Leaves** **Inflorescences** **Infructescences** **Seeds** **'Roots'** **Exudates**	Specific Plant Parts Used Food Additive Types Preparations Used In
ANIMAL FOOD[3]	**Unspecified Parts** **Bark** **'Roots'** **Exudates** **Fertile Plant Parts**[4] **Aerial Parts**[5] **Other Parts**[6]	Specific Plant Parts Used Vertebrates Using Animal Food Types Seasons of Use
BEE PLANTS		Plant Parts Used
INVERTEBRATE FOOD[7]		Useful Invertebrate Types Plant Parts Used by Invertebrates

/continued over

[1]includes unspecified aquatic parts
[2]includes unspecified aquatic parts
[3]vertebrates only
[4]includes inflorescences, infructescences and seeds
[5]includes leaves, stems, unspecified aerial parts and live plant *in situ*
[6]includes seedlings/germinated seeds, galls and entire plant *ex situ*
[7]invertebrates used by man

LEVEL 1 states	Level 2 states	Level 3 descriptors
MATERIALS	**Unspecified Materials** **Fibres** **Cane etc.**[1] **Wood** **Cork/Cork Substitutes** **Gums/Resins** **Latex/Rubber** **Tannins/Dyestuffs** **Lipids** **Essential Oils** **Waxes** **Alcohols** **Other Materials/Chemicals**[2]	Specific Material Types Products Used In Plant Parts Used Dye/Pigment Colour
FUELS	**Unspecified Fuels** **Miscellaneous Fuels** **Fuelwood** **Charcoal** **Petroleum Substitutes/Alcohols etc.** **Tinder**	Plant Parts Used Uses of Fuel Fuel Quality
SOCIAL USES	**Unspecified Social Uses** **Smoking Materials/Drugs** **Antifertility Agents** **'Religious' Uses**	Plant Parts Used Specific Social Use Types
VERTEBRATE POISONS	**Unspecified Vertebrates** **Fish** **Amphibians** **Reptiles** **Birds** **Mammals**	Poisonous Plant Parts Specific Vertebrates Affected Body Parts/*Processes* Affected Disorders Caused/*Harmful Effects* Uses of Poisons
NON-VERTEBRATE POISONS	**Unspecified Non-Vertebrates** **Unspecified Microbes** **Viruses** **Bacteria** **Fungi** **Plants** **Protozoa** **Mollusca** **Arthropoda** **Other Eumetazoa**[3]	Poisonous Plant Parts Specific Non-Vertebrates Affected Effects of Poisons Uses of Poisons

/continued over

[1] includes cane, rattan, bamboo, reed and wicker
[2] material type known but does not fit in any of the defined categories; this section will include gourds, seeds, bark etc. that are used directly as well as more unusual processed material types and chemicals
[3] non-Mollusca/Arthropoda; includes Platyhelminthes, Nemertea, Nemata, Annelida

LEVEL 1 states	Level 2 states	Level 3 descriptors
MEDICINES	**Unspecified Medicinal Disorders** **Abnormalities** **Blood System Disorders** **Circulatory System Disorders** **Digestive System Disorders** **Endocrine System Disorders** **Genitourinary System Disorders** **Ill-Defined Symptoms** **Immune System Disorders** **Infections/Infestations** **Inflammation** **Injuries** **Mental Disorders** **Metabolic System Disorders** **Muscular-Skeletal System Disorders** **Neoplasms** **Nervous System Disorders** **Nutritional Disorders** **Pain** **Poisonings** **Pregnancy/Birth/Puerperium Disorders** **Respiratory System Disorders** **Sensory System Disorders** **Skin/Subcutaneous Cellular Tissue Disorders**	Plant Parts Used Vertebrates Treated Body Parts/Processes Treated Disorders Treated/Medicinal Effects Medicine Types Medicinal Applications
ENVIRONMENTAL USES	**Unspecified Environmental Uses** **Erosion Control** **Shade/Shelter** **Revegetators** **Indicators** **Soil Improvers** **Ornamentals** **Boundaries/Barriers/Supports** **Agroforestry** **Firebreaks** **Pollution Control**	Specific Environmental Uses Materials Used Plant Parts Used Environments Where Used
GENE SOURCES		Beneficial Genetic Traits

Stand-Alone USE DESCRIPTORS

The three level system outlined above enables the basic description and definition of plant uses. In addition, there may be further information on use-related properties or characteristics of a plant which help to evaluate its individual uses or overall value. In this system these data are placed in Stand-Alone descriptors or *Note Categories*. Where it is important to be able to select taxa with specific properties or characteristics, Stand-Alone descriptors are used, otherwise the information can be stored in *Notes Categories* (see page 12). Table 4 provides examples of data which can be handled as Stand-Alone descriptors. It includes descriptors that record the properties of materials and plant parts (e.g. Wood Properties, Fibre Length, or those descriptors that relate to the availability of chemical analyses for plant parts such as Availability of Nutritional Analyses). Stand-Alone descriptors are often relevant to the evaluation of many uses. For example, those descriptors that relate to the availability of chemical analyses for plant parts are relevant to animal food, food, medicines, materials and other uses. Those that are specific to a single use are not precluded from Stand-

Alone descriptors (e.g. Wood Properties, relevant to **MATERIALS - Wood** is included here).

Other Stand-Alone descriptors help to evaluate the value of the plant as a whole, rather than its individual uses. Factors which can be taken into consideration for this include whether the plants are Weeds or Host Plants to Harmful Organisms. Weeds may cause losses to crops and to livestock production and have economic repercussions. Some plants are hosts to disease vectors or to pests and diseases of major crops.

Stand-Alone descriptors should be viewed as an adjunct to the main three level system. It is likely that further Stand-Alone descriptors will need to be defined for different users' needs.

TABLE 4. List of Stand-Alone descriptors and their relevant uses.

Stand Alone descriptors	Relevant to:
Wood Properties Fibre Length	Material uses
Availability Of: Unspecified Analyses Nutritional Analyses Antinutritional Analyses Poisonous Compounds Analyses Biologically Active Compounds (Lab. Tests) Biologically Active Compounds (Clinical Trials) Essential Oil Analysis Chemical Compounds Present	Most Uses
Weeds	Overall Species Evaluation
Host plants to Harmful Organisms	Overall Species Evaluation

Notes Categories

Notes Categories are recommended for descriptive data concerned with 1) placing the use data in a cultural context, 2) use evaluation, and 3) very specific details about the use. These are free text fields, where selection of taxa with particular attributes is not practicable. If the latter is a requirement, then Stand-Alone descriptors should be considered rather than *Notes Categories*. Table 5 lists *Notes Categories* with the use types to which they are pertinent. Within the standard there are recommended keywords relating to the *Notes Categories;* for those categories pertinent to all uses see page 79 and for those that are use-specific see the relevant sections (e.g. Tables 9 and 10 for food related *Notes Categories).*

TABLE 5. List of *Notes Categories* and their relevant uses.

Notes Categories	Pertinent Uses
User Groups *Vernacular Names of Plant Product*[1] *Areas Where Used* *Use Types* *User Evaluation* *Use Frequency* *Production Types* *Trade In Raw Plant Part/Material* *Trade In Manufactured Products* *Trade In Seed/Planting Material* *Industrial Usage* *Potential* *Development Constraints* *Evaluation of the Negative Values*	All Uses (all three levels)
Food Processing Methods *Food Flavours*	Food uses (all three levels)
Food Additive Processing Methods *Food Additive Flavours*	Food Additive uses (all three levels)
Times of Availability of Nectar *Times of Availability of Pollen*	Bee Plant uses (Level 3)
Occasions When Used	Social Uses (all three levels)
Processing Techniques for Medicines	Medicinal uses (all three levels)

EXPLANATION OF TABLES AND APPENDICES

For each of the thirteen **LEVEL 1** states, matrices are provided to show which Level 3 descriptors can be linked to each **Level 2** state. Redundant combinations are shaded in. For example, in the matrix for **FOOD** uses (Table 7), the Specific Plant Parts Used descriptor corresponding to **FOOD — Seedlings/Germinated Seeds** is shaded in because, in the plant parts classification (Appendix A, Table 43), **Seedlings/Germinated Seeds** is not subdivided further; Specific Plant Parts Used cannot therefore be recorded at Level 3.

For each of the thirteen **LEVEL 1** states, lists are provided of the most likely states for each Level 3 descriptor (e.g. Table 8 lists the most likely states for Level 3 descriptors for food). Different **LEVEL 1** states can share the same Level 3 descriptor, e.g. **MATERIALS, FUELS, SOCIAL USES, MEDICINES** and **ENVIRONMENTAL USES** all have the Level 3 descriptor Plant Parts Used. However, the lists of states for these Level 3 descriptors have been tailored to each **LEVEL 1** state. For instance, the list of states for Plant Parts Used in Table 37 for **ENVIRONMENTAL USES** is very short compared to that for **MEDICINES** (Table 31). However, <u>all</u> states for Plant Parts Used are given in the Master List of Plant Parts (Appendix A, Table 43); this can be used as a supplement.

[1] not plant name

Table 6 lists the Level 3 descriptors, with their **LEVEL 1** states that are derived from the same Master List.

Any additions to the Level 3 descriptor lists within the **LEVEL 1** states, should firstly be made from the Master Lists. If terms need to be added to the Master Lists within this standard, then the author should be consulted. (In the computerisation of this system it is likely that all relevant parts of the Master List should be available states for all the related Level 3 descriptors; the abbreviated Level 3 lists have been provided merely as a working aid.)

TABLE 6. Level 3 descriptors, from different **LEVEL 1** uses, which are derived from the same Master List.

Master Lists	Level 3 descriptors	**LEVEL 1 states**
Plant Parts (Appendix A)	Specific Plant Parts Used	**FOOD**
	Specific Plant Parts Used	**FOOD ADDITIVES**
	Specific Plant Parts Used	**ANIMAL FOOD**
	Plant Parts Used	**BEE PLANTS**
	Plant Parts Used by Invertebrates	**INVERTEBRATE FOOD**
	Plant Parts Used	**MATERIALS**
	Plant Parts Used	**FUELS**
	Plant Parts Used	**SOCIAL USES**
	Poisonous Plant Parts	**VERTEBRATE POISONS**
	Poisonous Plant Parts	**NON-VERTEBRATE POISONS**
	Plant Parts Used	**MEDICINES**
	Plant Parts Used	**ENVIRONMENTAL USES**
Preparations Used In (Table 8)	Preparations Used In	**FOOD**
	Preparations Used In	**FOOD ADDITIVES**
Organisms (Appendix B)	Vertebrates Using	**ANIMAL FOOD**
	Useful Invertebrate Types	**INVERTEBRATE FOOD**
	Specific Vertebrates Affected	**VERTEBRATE POISONS**
	Specific Non-Vertebrates Affected	**NON-VERTEBRATE POISONS**
	Vertebrates Treated	**MEDICINES**
Body Parts/Processes (Appendix E)	Body Parts/Processes Affected	**VERTEBRATE POISONS**
	Body Parts/Processes Treated	**MEDICINES**
Disorders/Effects (Table 32 plus Table 65)	Disorders Caused/Harmful Effects	**VERTEBRATE POISONS**
	Disorders Treated/Medicinal Effects	**MEDICINES**

FOOD

Table 7 shows the **Level 2** and Level 3 structure for describing **FOOD** uses. **Level 2** is based on the top level of the plant parts classification (see the Master List of Plant Parts in Appendix A, Table 43; Table 44 provides an alphabetically arranged list showing the relationship of plant parts to the top level terms). At Level 3 there are four descriptors: Specific Plant Parts Used, Food Types, Preparations Used In and Situations When Food Used. Table 8 lists the states for each of these. Stand-Alone descriptors particularly relevant to this use group include those that relate to the availability of chemical analyses for plant parts (Table 39) and Chemical Compounds Present (Table 40). In addition there are the generally applicable *Notes Categories* (Table 5); notes specific to food are those relating to *Food Processing Methods* (Table 9) and *Food Flavours* (Table 10).

TABLE 7. Matrix showing Level 3 descriptors for food and their relationship to the **Level 2** states. (The shaded elements of the matrix represent redundant combinations.)

	Specific Plant Parts Used	Food Types	Preparations Used In	Situations When Food Used
FOOD — Unspecified Parts				
FOOD — Entire Plant				
FOOD — Unspecified Aerial Parts[1]				
FOOD — Seedlings/Germinated Seeds				
FOOD — Galls				
FOOD — Stems				
FOOD — Bark				
FOOD — Leaves				
FOOD — Inflorescences				
FOOD — Infructescences				
FOOD — Seeds				
FOOD — 'Roots'				
FOOD — Exudates				

[1] includes unspecified aquatic parts

TABLE 8. States for the Level 3 descriptors for food.

Specific Plant Parts Used[1] [2]		Food Types	Preparations Used In	Situations When Food Used
(Galls) leaf galls root galls stem galls fruit galls **(Stems)** plumules leafy stems/ branches defoliated stems/ branches stolons tendrils **(Bark)** stem bark[3] inner bark root bark **(Leaves)** cotyledons young leaves[4] old leaves[5] fallen leaves leaflets stipules leaf blades leaf buds **(Inflorescences)** bracts[6] spathes spadices flowers flower buds peduncles[7] receptacles calyces corollas androecia stamens pollen gynoecia/pistils styles/stigmas	**(Infructescences)** fruits entire immature fruits entire mature fruits deseeded fruits fruit pulp fruit juice epicarp **(Seeds)** arils[8] entire seeds seed hairs seeds without testa testa kernels seed oil seed cake solid albumen liquid albumen **('Roots')** debarked 'roots' bulbs/corms tubers/tubercles roots nodules aerial roots[9] pneumatophores rhizomes **(Exudates)** sap latex leaf juice gum resin nectar	cereals pseudocereals[10] pulses nuts dessert fruits vegetables green vegetables root/tuber vegetables leaf protein concentrates starches[11] oils/fats gums/mucilages sugar[12] other food types[13]	raw savoury preparations soups meat dishes fish dishes pulse dishes egg dishes vegetable dishes cereal/starch based preparations porridges[14] bread cakes pastry/shortening dairy/dairy-like preparations yoghurt cheese ice cream margarine condiments/relishes/chutneys pickles pastes sweet dishes confectionery jams/jellies beverages alcoholic beverages wines beers spirits non-alcoholic beverages potable water juices cordials/squashes infusions/tisanes coffee substitutes tea substitutes milk substitutes other preparations	famine food staple food non-staple food ceremonial food snack food children's snack food weaning food regular food diabetic food

[1] terms in brackets are **Level 2** not Level 3 states; they are included only to indicate the hierarchical relationships
[2] this is an abbreviated list containing only the most likely plant parts for food uses; more are in the Master List (Appendix A, Table 43)
[3] of stems, trunks or branches
[4] includes cataphylls
[5] at base of branches/stems
[6] includes bracteoles
[7] includes pedicels
[8] includes arillodes, strophioles, caruncles
[9] includes rhizophores
[10] seeds of non-grasses used like cereals
[11] e.g. sago
[12] includes syrup, honeydew, manna, lerp, jaggery
[13] includes beverage bases
[14] boiled meal/flour in water/milk

TABLE 9. Some suggested keywords for describing *Food Processing Methods* in *Notes* regarding food uses. (Multiples of terms can be selected and used sequentially to denote processing order.)

Food Processing Methods[1]
raw/unprocessed
used whole
chopped
ground/pounded/grated
squeezed
detoxified
soaked
leached
leached in static water
leached in running water
leached in changes of water
cooked
boiled
steamed
roasted/parched/baked
fried
preserved
dried
hot air-dried
sun-dried
salted
preserved in brine
preserved in alcohol
preserved in vinegar
preserved in oil
preserved with sugar
bottled
canned
frozen
fermented

TABLE 10. Some suggested keywords for describing *Food Flavours* in *Notes* regarding food uses.

Food Flavours[2]
acid
bitter
bland/insipid
hot
perfumed
sour
sweet

[1] the same list can be used to describe *Food Additive Processing Methods*
[2] the same list can be used to describe *Food Additive Flavours*

FOOD ADDITIVES

Table 11 shows the **Level 2** and Level 3 structure for describing **FOOD ADDITIVES**. The **Level 2** division of **FOOD ADDITIVES** is based on the top level of the plant parts classification. (See the Master List of Plant Parts in Appendix A, Table 43; Table 44 provides an alphabetically arranged list showing the relationship of plant parts to the top level terms.) At Level 3 there are three descriptors: Specific Plant Parts Used, Food Additive Types (which include food processing agents as well as flavourings, colourings and preservatives etc.) and Preparations Used In (i.e. the types of food preparations to which they are added). Table 12 lists the states for each of these Level 3 descriptors. Stand-Alone descriptors particularly relevant to this use group include those that relate to the availability of chemical analyses for plant parts (Table 39) and Chemical Compounds Present (Table 40). In addition there are the generally applicable *Notes Categories* (Table 5); notes specific to food additive uses are those relating to *Food Additives Processing Methods* (Table 9) and *Food Additives Flavours* (Table 10).

FOOD ADDITIVES have been separated from **FOOD** for the sake of clarity at Level 3. In some instances (e.g. gum arabic), the same plant part can be used both as a food and as a food additive.

TABLE 11. Matrix showing Level 3 descriptors for food additives and their relationship to **Level 2** states. (The shaded elements of the matrix represent redundant combinations.)

	Specific Plant Parts Used	Food Additive Types	Preparations Used In
FOOD ADDITIVES — Unspecified Parts			
FOOD ADDITIVES — Entire Plant			
FOOD ADDITIVES — Unspecified Aerial Parts[1]			
FOOD ADDITIVES — Seedlings/Germinated Seeds			
FOOD ADDITIVES — Galls			
FOOD ADDITIVES — Stems			
FOOD ADDITIVES — Bark			
FOOD ADDITIVES — Leaves			
FOOD ADDITIVES — Inflorescences			
FOOD ADDITIVES — Infructescences			
FOOD ADDITIVES — Seeds			
FOOD ADDITIVES — 'Roots'			
FOOD ADDITIVES — Exudates			

[1] includes unspecified aquatic parts

TABLE 12. States for the Level 3 descriptors for food additives.

Specific Plant Parts Used[1] [2]		Food Additive Types	Preparations Used In
(Galls)	androecia	adulterants	raw
leaf galls	stamens	clarifiers	savoury preparations
root galls	pollen	honey clarifiers	soups
stem galls	gynoecia/pistils	water clarifiers	meat dishes
fruit galls	styles/stigmas	beer clarifiers	fish dishes
		sugar clarifiers	pulse dishes
(Stems)	**(Infructescences)**	colourings	egg dishes
plumules	fruits	emulsifiers	vegetable dishes
leafy stems/ branches	entire immature fruits	fermenting agents	cereal/starch based preparations
	entire mature fruits	rennet substitutes/milk curdlers	porridges[11]
defoliated stems/ branches	deseeded fruits	fermentation retarders	bread
	fruit pulp	flavour fixatives	cakes
stolons	fruit juice	flavourings	pastry/shortening
tendrils	epicarp	herbs	dairy/dairy-like preparations
		spices	yoghurt
(Bark)	**(Seeds)**	souring agents	cheese
stem bark[3]	arils [8]	bitters	ice cream
inner bark	entire seeds	vinegar	margarine
root bark	seed hairs	hop substitutes	condiments/relishes/chutneys
	seeds without testa	essences	pickles
(Leaves)	testa	gelling agents	pastes
cotyledons	kernels	preservatives	sweet dishes
young leaves [4]	seed oil	antioxidants	confectionery
old leaves[5]	seed cake	purifiers	jams/jellies
fallen leaves	solid albumen	water purifiers	beverages
leaflets	liquid albumen	raising agents [10]	alcoholic beverages
stipules		ripening agents	wines
leaf blades	**('Roots')**	salt	beers
leaf buds	debarked 'roots'	stabilisers	spirits
	bulbs/corms	sweeteners (non-sugar)	non-alcoholic beverages
(Inflorescences)	tubers/tubercles	tenderisers	potable water
bracts [6]	roots	meat tenderisers	juices
spathes	nodules	thickening agents	cordials/squashes
spadices	aerial roots [9]	other additive types	infusions/tisanes
flowers	pneumatophores		coffee substitutes
flower buds	rhizomes		tea substitutes
peduncles[7]			milk substitutes
receptacles	**(Exudates)**		other preparations
calyces	sap		
corollas	latex		
	leaf juice		
	gum		
	resin		
	nectar		

[1] terms in brackets are Level 2 not Level 3 states; they are included only to indicate the hierarchical relationships
[2] this is an abbreviated list, containing only the most likely food additive plant parts; more are in the Master List (Appendix A, Table 43)
[3] of stems, trunks or branches
[4] includes cataphylls
[5] at base of branches/stems
[6] includes bracteoles
[7] includes pedicels
[8] includes arillodes, strophioles, caruncles
[9] includes rhizophores
[10] e.g. baking powder substitutes
[11] boiled meal/flour in water/milk

ANIMAL FOOD

ANIMAL FOOD is separate from **FOOD** and **INVERTEBRATE FOOD** as these groups are all treated very differently in economic botany and other literature. They differ in the descriptors which are needed to describe the more detailed aspects of their uses.

Table 13 shows the **Level 2** and Level 3 structure for describing **ANIMAL FOOD** uses. **Level 2** is based on plant part, as it was for **FOOD** and **FOOD ADDITIVES**, but there are fewer **Level 2** states: inflorescences, infructescences and seeds are lumped into **Fertile Plant Parts**; leaves, stems, unspecified aerial parts and live plant *in situ* into **Aerial Parts**; and galls, seedlings and entire plant *ex situ* into **Other Parts**. This simplification can be justified as, in most cases, and for grazing animals in particular, the plant part used is often not known specifically (in contrast to human food uses). The Master List of Plant Parts is in Appendix A (Table 43) and Table 44 provides an alphabetically arranged list showing the relationship of plant parts to the top level terms. Appendix B (Tables 45 and 46) provides the same for organisms.

At Level 3, there are four descriptors: Specific Plant Parts Used (if known), Vertebrates Using, Animal Food Types and Seasons of Use. Their states are listed in Table 14. Stand-Alone descriptors particularly relevant to this use group include those that relate to the availability of chemical analyses for plant parts (Table 39) and Chemical Compounds Present (Table 40). In addition there are the generally applicable *Notes Categories* (see Table 5).

TABLE 13. Matrix showing Level 3 descriptors for animal food and their relationship to the **Level 2** states. (The shaded elements in the matrix are redundant combinations.)

	Specific Plant Parts Used	Vertebrates Using	Animal Food Types	Seasons of Use
ANIMAL FOOD — Unspecified Parts				
ANIMAL FOOD — Bark				
ANIMAL FOOD — 'Roots'				
ANIMAL FOOD — Exudates				
ANIMAL FOOD — Fertile Plant Parts[1]				
ANIMAL FOOD — Aerial Parts[2]				
ANIMAL FOOD — Other Parts[3]				

[1] includes inflorescences, infructescences and seeds
[2] includes leaves, stems, unspecified aerial parts and live plant *in situ*
[3] includes seedlings/germinated seeds, galls and entire plant *ex situ*

TABLE 14. States for the Level 3 descriptors for animal food.

Specific Plant Parts Used[1] [2]	Vertebrates Using	Animal Food Types	Seasons Of Use
(Bark) stem bark root bark inner bark **('Roots')** bulbs/corms tubers/tubercles roots nodules aerial roots pneumatophores rhizomes **(Exudates)** sap latex leaf juice gum resin nectar **(Fertile Plant Parts)** inflorescences flowers flower buds infructescences fruits entire immature fruits entire mature fruits deseeded fruits fruit pulp epicarp arils seeds entire seeds kernels seeds without testa seed oil seed cake **(Aerial Parts)** leaves leaf buds young leaves fallen leaves stems leafy stems/branches unspecified aerial parts[3] live plant *in situ* **(Other Parts)** galls leaf galls root galls stem galls fruit galls seedlings/germinated seeds entire plant *ex situ*	Fish Amphibians frogs salamanders Reptiles turtles crocodilians lizards snakes Birds chickens turkeys game birds[4] Mammals bats primates lagomorphs rabbits hares rodents squirrels rats mice cavies Equidae horses asses donkeys mules Suiformes pigs Camelidae camels llamas ruminants bovines cattle yak buffalo bison caprines sheep goats game mammals[5]	forage grazing browse fodder hay/straw silage concentrates bulk feeds mixed feeds spray on roughage adulterants salt lick substitutes	spring summer autumn winter year round dry season drought season wet season

[1] terms in brackets are **Level 2** not Level 3 states; they are included only to indicate the hierarchical relationships
[2] this is an abbreviated list containing only the most likely plant parts; more are in the Master List (Appendix A, Table 43)
[3] includes unspecified aquatic parts
[4] bird species unspecified
[5] mammal species unspecified

BEE PLANTS

There are no **Level 2** states, but there is one Level 3 descriptor: Plant Parts Used (i.e. nectar and pollen sources; Table 15). Bee Plant specific *Notes Categories* are *Times of Availability of Pollen* and of *Nectar;* there are also the generally applicable *Notes Categories* (see Table 5).

TABLE 15. Sates for the Level 3 descriptor for bee plants.

Plant Parts Used
nectar source pollen source

INVERTEBRATE FOOD

INVERTEBRATE FOOD uses are not subdivided at **Level 2**, as this is already quite detailed compared to other **LEVEL 1** uses. There are two Level 3 descriptors: Useful Invertebrate Types and Plant Parts Used By Invertebrates. Their states are listed in Table 16. For many invertebrates, the Plant Part Used will be the live plant *in situ*. However, many organisms are restricted to a single plant part and it is useful to record this also. Additionally, organisms are sometimes reared away from the live plant, utilising harvested plant parts; this further justifies including the Plant Parts Used as a Level 3 Descriptor. The Master List of Plant Parts is given in Appendix A, Table 43, and Table 44 provides an alphabetically arranged list showing their relationship to the top level terms. The general *Notes Categories* (Table 5) are applicable.

TABLE 16. States for the Level 3 descriptors for invertebrate food.

Useful Invertebrate Types[1]	Plant Parts Used by Invertebrates[2]	
silkworms lac insects manna insects edible insects/caterpillars/larvae poisonous insects/caterpillars/larvae dye-containing insects	live plant *in situ* entire plant *ex situ* bark stem bark root bark inner bark 'roots' bulbs/corms tubers/tubercles roots nodules aerial roots pneumatophores rhizomes exudates sap latex leaf juice gum resin nectar inflorescences flowers flower buds	infructescences fruits entire immature fruits entire mature fruits deseeded fruits fruit pulp epicarp seeds arils entire seeds kernels seeds without testa seed oil seed cake leaves leaf buds young leaves fallen leaves stems leafy stems/branches unspecified aerial parts galls leaf galls root galls stem galls seedlings/germinated seeds

[1] only invertebrates that are used by humans
[2] this is an abbreviated list containing only the most likely plant parts; more are in the Master List (Appendix A, Table 43)

MATERIALS

Within **MATERIALS** there are 13 **Level 2** states, all of them basic material types. There are four Level 3 descriptors: Specific Material Types, Plant Parts Used (as the source of the material), Products Used In, and Dye/Pigment Colour. Redundant **Level 2** x Level 3 combinations (Table 17) occur largely where the **Level 2** states (e.g. **Latex/Rubber, Essential Oils**) are not divided further to give Specific Material Types. Table 18 lists the states for each Level 3 descriptor. Stand-Alone descriptors relevant to this use group in general include those that relate to the availability of chemical analyses for plant parts (Table 39), and Chemical Compounds Present (Table 40); Wood Properties (Table 19) and Fibre Length descriptors relate directly to **Wood** and **Fibres**, respectively. It is likely that the number of Stand-Alone descriptors may need to be expanded to accommodate properties of other material types. The general *Notes Categories* (Table 5) are applicable.

Appendix C (Table 47) lists all the acceptable terms for material types in alphabetical order and shows their hierarchical relationships up to and including **Level 2** terms. Appendices A and D (Tables 43 and 48) have alphabetical lists showing the hierarchy within Level 3 for Plant Parts and Product Used In, respectively.

The placing of terms within the Specific Material Type hierarchy was not simple. The result has been to aim for practicality rather than perfection! Basketry, for example, has been included twice in Specific Material Types, under both **Fibres** and **Cane etc.** This is to distinguish basketry using soft grass-like stems from that using the harder stems such as canes and rattans. Similarly Poles get two entries, once under **Cane etc.** and once, as wooden poles, under **Wood** - timber. It should also be pointed out that the descriptor for Plant Parts Used, rather than Specific Material Type, has been used to allow the differentiation between heartwood and sapwood.

Specific Material Type is of greater importance to **MATERIALS** than the Products Used In. However, a comprehensive list of products is sometimes necessary, especially when an accurate description of an economic botany collection is required for a catalogue; hence its inclusion here.

TABLE 17. Matrix showing Level 3 descriptors for materials and their relationship to the **Level 2** states. (The shaded elements in the matrix are redundant combinations.)

	Specific Material Types	Products Used In	Plant Parts Used	Dye/Pigment Colour
MATERIALS — Unspecified Materials				
MATERIALS — Fibres				
MATERIALS — Cane etc.[1]				
MATERIALS — Wood				
MATERIALS — Cork/Cork Substitutes				
MATERIALS — Gums/Resins				
MATERIALS — Latex/Rubber				
MATERIALS — Tannins/Dyestuffs				
MATERIALS — Lipids				
MATERIALS — Essential Oils				
MATERIALS — Waxes				
MATERIALS — Alcohols				
MATERIALS — Other Materials/Chemicals[2]				

[1] includes cane, rattan, bamboo, reed and wicker
[2] material type known but does not fit in any of the defined categories; this section will include gourds, seeds, bark etc. that are used directly as well as more unusual processed material types and chemicals

TABLE 18. States for the Level 3 descriptors for materials.

Specific Material Types[1]		Plant Parts Used	
(Fibres)	veneer	live plant *in situ*	receptacles
pulp [2]	marquetry wood		calyces
cardboard	wood board	entire plant *ex situ*	corollas
fibreboard	wood chips		androecia
board (non-wood)	wood wool	unspecified aerial parts[8]	stamens
paper	turned wood		pollen
cellulose derivatives	carved wood	seedlings/germinated seeds	gynoecia/pistils
cellulose acetates			styles/stigmas
cellophane	**(Cork/Cork Substitutes)**	galls	
plastics		leaf galls	infructescences
rayon	**(Gums/Resins)**	root galls	fruits
tow	gums	stem galls	entire immature
paper substitutes	mucilages	fruit galls	fruits
cord/string/twine	oleoresins[6]		entire mature fruits
thread/yarn	resins	stems	deseeded fruits
woven material		plumules	fruit pulp
cloth	**(Latex/Rubber)**	leafy stems/branches	fruit juice
sacking		defoliated stems/branches	epicarp
packing/stuffing/filling	**(Tannins/Dyestuffs)**	stolons	
matting	tannins	trunks	seeds
netting	dyes	wood	arils [16]
plaiting	inks	sapwood	entire seeds
basketry (from fibre)[3]	stains	heartwood	seeds without testa
thatch		tendrils	seed hairs
	(Lipids)	thorns	testa
(Cane etc.)	fats		kernels
basketry (from cane etc.)[4]	oils	bark	seed oil
poles (from cane etc.)	drying oils	stem bark[9]	seed cake
	non-drying oils	inner bark	solid albumen
(Wood)[5]	semi-drying oils	root bark	liquid albumen
brushwood			
laminated wood	**(Essential Oils)**	leaves[10]	'roots'
particle board/chipboard		cotyledons	debarked 'roots'
plywood	**(Waxes)**	young leaves[11]	bulbs/corms
sawdust		old leaves [12]	tubers/tubercles
timber	**(Alcohols)**	fallen leaves	roots
beams/scantlings	industrial alcohols	leaflets	nodules
columns		stipules	aerial roots [17]
girders	**(Other Materials/Chemicals)**[7]	leaf blades	pneumatophores
pilings	beads	leaf buds	rhizomes
planks	carved materials (non-wood)		
poles (from wood)		inflorescences[13]	exudates
props	**(Unspecified Materials)**	bracts [14]	sap
stakes/pales/rails		spathes	latex
staves		spadices	leaf juice
struts		flowers	gum
		flower buds	resin
		peduncles[15]	nectar

/continued over

[1] terms in brackets are **Level 2** states not Level 3; they are included only to indicate hierarchical relationships
[2] includes wood pulp
[3] see also basketry (from cane etc.)
[4] see also basketry (from fibre)
[5] place wood pulp under **Fibres** - pulp, with Plant Part Used = wood
[6] includes turpentine
[7] material type known but does not fit in any of the defined categories; this section will include gourds, seeds, bark etc. that are used directly as well as more unusual processed material types and chemicals
[8] includes unspecified aquatic parts
[9] of stems, trunks or branches
[10] of unspecified age; includes cladodes and phyllodes
[11] includes cataphylls
[12] at base of branches/stems
[13] flowering shoots generally without leaves, with bracts, axes of inflorescence and flowers; includes spadices
[14] includes bracteoles
[15] includes pedicels
[16] includes arillodes, strophioles, caruncles
[17] includes rhizophores

Products Used In		
abrasives polishers sandpaper substitutes adhesives wood adhesives cement buildings huts houses large buildings outbuildings barns beehives grain stores hen coops sheds stables windmills temporary shelters tents tent frames clarifiers (not for water/food) cleansers breath fresheners detergents shampoo soap soap substitutes toothpaste/dentrifice clothing clothes headgear hats helmets footwear clogs sandals shoes slippers coagulants latex coagulants coatings paints/varnishes/thinners paints thinners varnishes lacquer protective colloids sizing agents stiffeners (for clothes) vinyl resin emulsions waterproofers house waterproofing textile waterproofing caulking	constructions bridges culverts docks/harbours fences flagpoles locks/weirs mines oil wells piers/jetties railways railway sleepers roads paving blocks road grit telegraph poles tunnels/subways wells containers/holders baby carriers bags barrels/casks/tubs baskets bird cages boxes candlesticks carrier poles coat hangers crates buckets/pails coasters/table mats coffins cups handles (of containers/holders) plant pots plates/bowls pottery purses sacks shoe trees straps trays troughs trunks/cases wrappers food wrappers cosmetics hair oil/lacquer hair dyes hair conditioners shaving creams skin cosmetics cicatrices protective skin creams[1] skin lotions/creams skin lighteners	skin darkeners/tans tattoos lipsticks body paints deodorants body deodorants household deodorants sewage deodorants depilatories descalers emulsifiers explosives gunpowder[2] fasteners/closures buttons nails pegs plugs rivets screws bottle stoppers fermentation agents (non-food) fermentation retarders (non-food) fire controllers fire extinguishers fire retarders fishing equipment fish bait fish hooks fish traps fishing floats fishing lines fishing lures fishing nets fishing reels fishing rods floors decks floorboards parquet floors sawdust-magnesite floors foundations furnishings blankets carpets/rugs curtains cushions lampshades mats ornaments picture frames pillows pot plant holders pot pourri sashes/blinds wall hangings

/continued over

[1] see also sunscreen in **MEDICINES - Skin/Subcutaneous Cellular Tissue Disorders**
[2] carbon/charcoal

Products Used In		
furniture beds bed frames cabinets cradles furniture legs hammocks mattresses seating couches chairs stools tables table tops wardrobes gelling agents harnesses/tack harnesses saddles whipple trees yokes hoops incense illuminants candles torches joinery architraves balconies bathroom/toilet fitments cupboards door frames door handles doors electric light blocks fireplaces gates handrails kitchen fitments light fitments mouldings picture rails porches shelves shutters skirtings stairs/fixed steps water pipes window frames work surfaces lubricants machines machine parts bearings brakes brake blocks cogs machine keys lathe chucks machine frames	propellers medical accessories artificial limbs bandages crutches false teeth surgical powder slings splints stretchers models mordants musical instruments idiophones[1] struck idiophones plucked idiophones[2] rubbed idiophones blown idiophones flutes pipes mouthpieces membranophones[3] struck drums friction drums singing membranes[4] chordophones[5] simple chordophones[6] composite chordophones[7] bows strings printed material books computer output newpapers periodicals perfumes personal items coins/tallies combs fans false hair hairbrushes hair dressings hat pins 'jewellery'/personal adornment bracelets brooches chaplets earrings necklaces rosaries manicure sticks razor strops smoker's equipment pipes (smoker's) cigar cases cigarette holders cigarette wrappers toilet 'paper'	snuff boxes spectacle cases sponge substitutes tooth cleaners toothbrushes chew sticks tooth blackeners umbrellas/parasols walking sticks wreaths plastics plastic extenders plasticisers preservatives antioxidants purifiers (non-water) roofs shingles thatching spars tiles ropes scientific/technical equipment maths/drawing equipment carbon paper chalk substitutes map rollers measures pencils pens printing agents rulers set squares histological stains entomological mounts entomological labels sports equipment balls billiard balls footballs sports bats/racquets cricket bats golf club shafts tennis racquets ski stocks sports nets sports sticks/clubs/cues hockey sticks snooker/billiard cues sports tables snooker/billiard tables tools agricultural tools awls blocks/slabs (for butchers etc.) blocks (for hats) blocks (for rice paper) blocks and pulleys blocks (for pulleys) pulleys

[1] instrument itself makes the sound
[2] e.g. jew's harp
[3] sound caused by vibration of a membrane
[4] e.g. kazoos
[5] sound caused by vibration of a string
[6] e.g. zithers
[7] e.g. lutes, guitars, violins, harps, harp lutes

Products Used In			Dye/Pigment Colour
tools (continued) bobbins/spools/reels bottle openers brushes/brooms carpet beaters carpentry tools chopsticks clothes pegs crushers/mills/presses mortars pestles digging sticks drinking straws forks graters hammers knives ladders ladder rungs levers mallets match sticks muzzles (for animals) needles crochet needles knitting needles sewing needles patterns pincushions planes (for carpentry) plant supports plugs rakes rollers scaffolding shoemaker's lasts shuttles sieves spoons surgical implements tatooing spines	tools (continued) tent pegs tool handles axe handles tongs torches weather forecasters weaver's beams weights standard gold weights whisks toys/games dice board games board game pieces chess pieces game boards dolls vehicles aeroplanes boats/ships boat/ship parts oars/sculls rowlocks punt poles rudders paddles sails masts/booms boat ribs boat keels buses canoes dugout canoes caravans cars gliders rafts sledges spacecraft trailers	vehicles (continued) train carriages wagons/carts walls coverings lattices panels decorative panels screens wattles/laths weather boards weapons arrows arrow shafts arrow tips blow pipes bows bow strings clubs daggers darts guns gun carriages gun stocks lures punishment aids[1] quivers sabres scabbards/sheaths shields spears spear shafts stinging crystals throwing sticks/boomerangs traps/snares birdlime whips wheels axles hubs rims spokes	black blue brown green purple red yellow

TABLE 19. States for the Stand Alone descriptor, Wood Properties.

Wood Properties			
weight – very heavy weight – heavy weight – medium weight – light hardness – very hard hardness – hard hardness – moderately hard hardness – soft colour – pale colour – medium colour – dark	colour – yellow colour – red colour – cream colour – striped grain – fine grain – medium grain – broad size availability – large size availability – small only shrinkage – tendency shrinkage – no tendency	splitting – tendency splitting – no tendency stability – stable stability – not stable durability – durable durability – not durable durable in marine environment durable in freshwater durable in soil durable underground durable on exposure to weather	workability – good workability – poor workability – can be sawn workability – can be planed workability – can be polished workability – takes nails workability – takes screws workability – takes glue workability – takes paint/varnish termite-resistant

[1] includes sticks, stinging nettle stems etc.

FUELS

Fuel uses could have been put within the list of Products Used In (Level 3) within **MATERIALS**, but they have deliberately been given **LEVEL 1** use status owing to their importance. Some users of this standard will be restricting themselves to **LEVEL 1** only, so it was deemed necessary to have **FUELS** available as a choice at this level.

Table 20 shows the **Level 2** and Level 3 structure for describing **FUELS**. At **Level 2**, fuel uses has been divided according to six fuel types. There are three Level 3 descriptors: Plant Parts Used, Uses Of Fuel and Fuel Quality. Table 21 lists the states for each of these. For Plant Parts Used only the more likely states are shown; more are given in the Master List of Plant Parts (Appendix A, Table 43). Any additions should be coordinated by the author. Stand-Alone descriptors particularly relevant to this use group include those that relate to the availability of chemical analyses for plant parts (see Table 39) and Chemical Compounds Present (Table 40) and Wood Properties (Table 19). The general *Notes Categories* (Table 5) are applicable.

TABLE 20. Matrix showing Level 3 descriptors for fuels and their relationship to the **Level 2** states. (The shaded elements in the matrix are redundant.)

	Plant Parts Used	Uses Of Fuel	Fuel Quality
FUELS — Unspecified Fuels			
FUELS — Miscellaneous Fuels			
FUELS — Fuelwood			
FUELS — Charcoal			
FUELS — Petroleum Substitutes/Alcohols etc.			
FUELS — Tinder			

TABLE 21. States for the Level 3 descriptors for fuels.

Plant Parts Used		Uses Of Fuel	Fuel Quality
entire plant *ex situ*	infructescences	smelting fuel	calorific value – high
unspecified aerial parts[1]	fruits	cooking fuel	calorific value – average
galls	entire immature fruits	heating fuel	calorific value – low
leaf galls	entire mature fruits	lighting fuel	smoky on combustion
root galls	deseeded fruits	incendiary	smokeless on combustion
stem galls	fruit pulp	vehicle fuel	
fruit galls	epicarp	fire starters	
stems	seeds		
leafy stems/branches	arils[5]		
defoliated stems/branches	entire seeds		
stolons	seeds without testa		
trunks	seed hairs		
wood	testa		
sapwood	kernels		
heartwood	seed oil		
thorns	seed cake		
bark	solid albumen		
stem bark[2]	liquid albumen		
inner bark	'roots'		
root bark	debarked 'roots'		
leaves[3]	bulbs/corms		
old leaves[4]	tubers/tubercles		
fallen leaves	roots		
leaflets	nodules		
leaf blades	aerial roots[6]		
leaf buds	pneumatophores		
inflorescences	rhizomes		
spathes	exudates		
spadices	sap		
flowers	latex		
flower buds	gum		
	resin		

[1] includes unspecified aquatic parts
[2] of stems, trunks or branches
[3] of unspecified age; includes cladodes and phyllodes
[4] at base of branches/stems
[5] includes arillodes, strophioles, caruncles
[6] includes rhizophores

SOCIAL USES

Table 22 shows the **Level 2** and Level 3 structure for describing **SOCIAL USES**. There are four **Level 2** states and two Level 3 descriptors: Plant Parts Used and Specific Social Use Types. Table 23 (see over) lists the states for each Level 3 descriptor. Stand-Alone descriptors particularly relevant to this use group include those that relate to the availability of chemical analyses for plant parts (Table 39) and Chemical Compounds Present (Table 40). In addition to the generally applicable *Notes Categories* (Table 5), those specific to social uses include *Occasions When Used* (Table 24, below).

Antifertility agents have been classed within **SOCIAL USES**, to prevent confusion between plants which are used for treatment of fertility disorders (a medicinal use) and those which are used for fertility control (a social use).

It is possible that users of this standard may wish to expand the states related to ritual/religion/magic uses. Adjanohoun *et al.* (1989) have detailed lists of terms which might be included under this category; please contact the author if any of these would be useful in a revised version of this standard.

TABLE 22. Matrix showing Level 3 descriptors for social uses and their relationship to **Level 2** states.

	Plant Parts Used	Specific Social Use Types
SOCIAL USES — Unspecified Social Uses		
SOCIAL USES — Smoking Materials/Drugs		
SOCIAL USES — Antifertility Agents		
SOCIAL USES — 'Religious' Uses		

TABLE 23. See overleaf.

TABLE 24. Some suggested keywords for describing *Occasions When Used* in *Notes* regarding social uses.

Occasions When Used
birth *death* *puberty* *supernatural* *weddings*

TABLE 23. States for the Level 3 descriptors for social uses.

Plant Parts Used		Specific Social Use Types[1]
live plant in situ entire plant *ex situ* unspecified aerial parts[2] seedlings/germinated seeds galls leaf galls root galls stem galls fruit galls stems plumules leafy stems/branches defoliated stems/branches stolons trunks wood sapwood heartwood tendrils thorns bark stem bark[3] inner bark root bark leaves[4] cotyledons young leaves [5] old leaves [6] fallen leaves leaflets stipules leaf blades leaf buds inflorescences bracts[7] spathes spadices flowers flower buds peduncles [8] receptacles	calyces corollas androecia stamens pollen gynoecia/pistils styles/stigmas infructescences fruits entire immature fruits entire mature fruits deseeded fruits fruit pulp fruit juice epicarp seeds arils [9] entire seeds seeds without testa seed hairs testa kernels seed oil seed cake solid albumen liquid albumen 'roots' debarked 'roots' bulbs/corms tubers/tubercles roots nodules aerial roots [10] pneumatophores rhizomes exudates sap latex leaf juice gum resin nectar	**(Smoking Materials/Drugs)** masticatories snuff snuff adulterants smoking materials tobacco adulterants narcotics hallucinogens psychoactives facilitants to drug effects drug adulterants intoxicants **(Antifertility Agents)** birth control contraceptives antifertility (female) anti-implantation antifertility (male) spermicides abortifacients **('Religious' Uses)** ritual/religion/magic sacred plant

[1]terms in brackets are **Level 2** not Level 3 states; they are included only to indicate the hierachical relationships
[2]includes unspecified aquatic parts
[3]of stems, trunks or branches
[4]of unspecified age, includes cladodes and phyllodes
[5]includes cataphylls
[6]at base of branches/stems
[7]includes bracteoles
[8]includes pedicels
[9]includes arillodes, strophioles, caruncles
[10]includes rhizophores

VERTEBRATE POISONS

Table 25 shows the **Level 2** and Level 3 structure for describing **VERTEBRATE POISONS**. **Level 2** states are groups of vertebrate organisms which are affected by poisonous plants (i.e. **Fish, Amphibians, Reptiles, Birds, Mammals** and **Unspecified Vertebrates**). There are five Level 3 descriptors whose states are listed in Tables 26 and 27: Poisonous Plant Parts, Specific Vertebrates Affected, Uses of Poisons (Table 26) Body Parts/*Processes* Affected (Table 27a), and Disorders Caused/*Harmful Effects* (Table 27b). Stand-Alone descriptors particularly relevant to this use group include those that relate to the availability of chemical analyses for plant parts (Table 39) and Chemical Compounds Present (Table 40). The general *Notes Categories* (Table 5) also apply.

The organism group affected by the poisons is of major interest; of secondary interest are the effects the poisons have, the specific organisms which can be affected, and finally any uses to which man puts these poisonous properties. This treatment allows information on plants which are poisonous, but which are not actually used as poisons, to be treated in the same section as those that are used as poisons. This is useful, as information on poisons has economic implications on the negative side as well as the positive. Dealing with both aspects in the same section (but clearly separating them) prevents unnecessary duplication of information in any database. This treatment also enables selection of taxa which have the potential to be used as vertebrate poisons. Within the Uses of Poisons descriptor is a state 'not used'; this enables those plants which are poisonous but **not** used to be distinguished from those that are actually **used** for the poisonous properties.

Body Parts/*Processes* Affected and Disorders Caused/*Harmful Effects* are included at Level 3 because of the important overlap between **VERTEBRATE POISONS** and **MEDICINES**. Plants are poisonous on account of active principles which stimulate a physiological response. Depending on the amount that an organism receives, and its state of health, such plants may also be therapeutic. This close link between poisonous and medicinal plants supports the case for including such detail within **VERTEBRATE POISONS**. Such details could provide leads to new medicines, in addition to being valuable poisonous plant data.

Only the most likely organisms to be encountered in relation to poisonous plants have been listed in Table 26 but reference can also be made to the Master List of Organisms (Appendix A, Table 45). Table 27b) lists the most likely Disorders Caused/*Harmful Effects* of Poisons (and an alphabetical list of these is provided in Appendix F, Table 51). If further terms are required these should be taken from the states listed for Disorders Treated/*Medicinal Effects* in Table 32 within **MEDICINES**. Addition of any totally new terms to the standard should be arranged via the author. Appendix E (Tables 49 and 50) provides the Master List of Body Parts/*Processes*, listed in grouped order and alphabetically respectively, and Appendix G (Table 52) provides an alphabetical list of the **Level 2** and most Level 3 medicinal terms used in this standard. Of course there may be terms which are not listed or are not synonymous with any terms that are listed; again any additions should be arranged via the author. Although there is an overlap between the states for Disorders Caused/*Harmful Effects* in **POISONS** and Disorders Treated/*Medicinal Effects* in **MEDICINES**, there are some terms which are relevant only to **POISONS** and not to **MEDICINES**. These are listed in Appendix G (Table 65).

TABLE 25. Matrix showing Level 3 descriptors for vertebrate poisons and their relationship to the **Level 2** states. (The shaded elements in the matrix represent redundant combinations.)

	Poisonous Plant Parts	Specific Vertebrates Affected	Body Parts/ *Processes* Affected	Disorders Caused/ *Harmful Effects*	Uses of Poisons
VERTEBRATE POISONS — Unspecified Vertebrates					
VERTEBRATE POISONS — Fish					
VERTEBRATE POISONS — Amphibians					
VERTEBRATE POISONS — Reptiles					
VERTEBRATE POISONS — Birds					
VERTEBRATE POISONS — Mammals					

TABLE 26. States for the Level 3 descriptors for vertebrate poisons (part 1).

Poisonous Plant Parts		Specific Vertebrates Affected[1]	Uses Of Poisons
live plant *in situ* entire plant *ex situ* unspecified aerial parts[2] seedlings/germinated seeds galls leaf galls root galls stem galls fruit galls stems plumules leafy stems/branches defoliated stems/branches stolons trunks wood sapwood heartwood tendrils thorns bark stem bark[3] inner bark root bark leaves[4] cotyledons young leaves[5] old leaves[6] fallen leaves leaflets stipules leaf blades leaf buds inflorescences bracts[7] spathes spadices flowers flower buds peduncles[8]	receptacles calyces corollas androecia stamens pollen gynoecia/pistils styles/stigmas infructescences fruits entire immature fruits entire mature fruits deseeded fruits fruit pulp fruit juice epicarp seeds arils[9] entire seeds seeds without testa seed hairs testa kernels seed oil seed cake solid albumen liquid albumen 'roots' debarked 'roots' bulbs/corms tubers/tubercles roots nodules aerial roots[10] pneumatophores rhizomes exudates sap latex leaf juice gum resin nectar	**(Fish)** **(Amphibians)** frogs salamanders **(Reptiles)** turtles crocodilians lizards snakes **(Birds)** chickens turkeys game birds[11] **(Mammals)** bats primates humans lagomorphs rabbits hares rodents squirrels rats mice cavies Equidae horses asses donkeys mules Suiformes pigs Camelidae camels llamas ruminants bovines cattle yak buffalo bison caprines sheep goats game mammals[12]	ordeal trials hunting arrows/spears fishing plant pest control livestock pest control vermin control house pest control disease vector control stored products protection timber protection homicide infanticide suicide warfare not used

[1] terms in brackets are **Level 2** not Level 3 states; they are included only to indicate the hierarchical relationships
[2] includes unspecifed aquatic parts
[3] of stems, trunks or branches
[4] of unspecified age, includes cladodes and phyllodes
[5] includes cataphylls
[6] at base of branches/stems
[7] includes bracteoles
[8] includes pedicels
[9] includes arillodes, strophioles, caruncles
[10] includes rhizophores
[11] actual bird species unspecified
[12] actual animal species unspecified

TABLE 27 a) and b). States for the Level 3 descriptors for vertebrate poisons (part 2). (Terms in italics in a) are processes and in b) are harmful effects.)

a) Body Parts/*Processes* Affected		
chromosomes DNA RNA Blood System *agglutination* blood bone marrow *coagulation* erythrocytes *fibrinolysis* leukocytes plasma *platelet aggregation* platelets spleen Circulatory System aorta arteries arterioles *blood pressure* blood vessels capillaries carotid *cerebrovascular circulation* endocardium epicardium heart *heart beat* myocardium pericardium *pulmonary circulation* valves of heart veins Digestive System abdomen anal canal anus appendix bile duct caecum colon duodenum gall bladder gums hard palate ileum intestine jejunum large intestine lips liver mesenteric glands mouth	oesophagus pancreas parotid peritoneum rectum rumen salivary glands small intestine soft palate stomach teeth tongue uvula Endocrine System adrenal gland glands *growth* hypothalamus islet cells of Langerhans parathyroid pineal gland pituitary *sexual development* thymus thyroid Genitourinary System areola Bartholin's gland bladder breasts cervix *climacterium* clitoris *copulation* corpus luteum eggs ejaculatory duct epididymis Fallopian tubes female breasts *female fertility* female genitals foreskin genital tract germ cells glans penis hymen *implantation* kidney cells kidneys labia *libido* male breasts *male fertility* male genitals	*menopause* *menstruation* nipples ovaries oviduct *ovulation* pelvic cellular tissue penis perineum placenta *post menopause* prostate scrotum semen seminal vesicles sperm spermatic chord testes ureter urethra urinary tract *urination* uterine ligament uterine mucosae uterus vagina vaginal mucosae vas deferens vulva Immune System lymph lymph glands lymph nodes lymph vessels lymphocytes Metabolic System *amino acid metabolism* *amino acid transport* *calcium metabolism* *carbohydrate metabolism* *carbohydrate transport* *copper metabolism* *energy metabolism* *enzyme activity* *fluid, electrolyte and acid balance* *iron metabolism* *lipoid metabolism* *magnesium metabolism* *mineral metabolism* *phosphorous metabolism* *plasma protein synthesis* *porphyria metabolism* *purine and pyrimidine metabolism* *sweating* *temperature regulation*

/continued over

a) Body Parts/*Processes* Affected

Muscular-Skeletal System
- ankles
- arms
- back
- body
- bones
- bursa
- cartilages
- chest
- clavicle
- coccyx
- connective tissues
- elbows
- extremities
- face
- fascia
- fatty tissue
- feet
- fingers
- hands
- head
- hips
- histiocytes
- intervertebral discs
- jaws
- joints
- knees
- legs
- ligaments
- limbs
- lower limbs
- lumbar region
- mandible
- mast cells
- maxilla
- muscles
- neck
- pelvis
- ribs
- sacroiliac region
- sacrum
- shoulders
- skeletal muscles
- skull
- smooth muscles
- soft tissues
- spine
- sternum
- synovia
- tendons
- thighs
- toes
- upper limbs
- vertebrae
- wrists

Nervous System
- autonomous nervous system
- brain
- brain stem
- central nervous system
- cerebral meninges
- cerebrum
- cranial nerves
- facial nerves
- frontal lobe of brain
- ganglia
- intercranial region
- meninges
- motor nerves
- nerve roots
- nerves
- neurotransmitters
- occipital lobe of brain
- parasympathetic nervous system
- parietal lobe of brain
- peripheral nerves
- peripheral nervous system
- sensory nerves
- spinal chord
- spinal meninges
- spinal plexus
- sympathetic nervous system
- temporal lobe of brain
- ventricles

Nutrition

Pregnancy/Birth/Puerperium
- *birth*
- *labour*
- *lactation*
- *post partum*
- *pregnancy*
- *puerperium*

Respiratory System
- adenoids
- alveoli
- bronchi
- bronchioles
- diaphragm
- epiglottis
- glottis
- hypopharynx
- large cells of lung
- larynx
- lungs
- mediastinum
- nasal tract
- nasopharynx
- nose
- oropharynx
- pharynx
- pleura
- respiratory mucosae
- sinuses
- small cells of lung
- subglottis
- supraglottis
- thorax
- throat
- tonsils
- trachea

Sensory System
- acoustic nerves
- auditory canals
- *balance*
- choroids
- ciliary bodies
- conjunctivae
- corneas
- eardrums
- ears
- Eustachian tubes
- *eye movements*
- eyelids
- eyes
- globes
- *hearing*
- inner ears
- irises
- lachrymal ducts
- lachrymal glands
- lachrymal system
- lenses
- mastoids
- middle ears
- optic nerves
- orbits of eyes
- ossicles
- outer ears
- pupils
- *refraction and accommodation*
- retinas
- sclerae
- *smell*
- *taste*
- *touch*
- tympanic membranes
- *vision*
- vitreous bodies

Skin/Subcutaneous Cellular Tissue
- beard
- eyebrows
- fur
- groin
- hair
- hair follicles
- hoofs
- *moulting*
- nails
- navel
- perianal area
- scalp
- sebaceous glands
- skin
- skin of specific areas
- subcutaneous cellular tissue
- sweat glands

b) Disorders Caused/*Harmful Effects*

Abnormalities
- agenesis
- atrophy
- congenital abnormalities
- cysts
- deformities
- degeneration
- deposits
- displacement
- dysfunction
- failure
- hypertrophy
- lesions
- *mitotic*
- *mutagenic*
- necrosis
- obstructions
- oedemas
- organ failure
- pigmentation
- polyps
- prolapse
- stricture
- *teratogenic*
- vascular anomalies

Blood System Disorders
- anaemia
- *anticoagulant*
- haemolysis
- hypocalcaemia
- hypoxaemia
- polycythemia

Circulatory System Disorders
- arrhythmia
- artherosclerosis
- bradycardia
- *cardiovascular stimulant*
- clots
- dysrhythmia
- heart disease
- hypertension
- hypotension
- ischaemia
- vasoconstriction
- vasodilation

Death

Digestive System Disorders
- allergic colitis
- allergic gastroenteritis
- biliousness
- bloat
- caries
- *choleretic*
- cholestasis
- *cholestatic*
- cirrhosis
- colic
- constipation
- diarrhoea
- duodenal ulcers
- *emetic*
- flatulence
- gallstones
- gastric ulcers
- gastro-jejunal ulcers
- hypercholia
- indigestion
- irritable bowel syndrome
- *laxative*
- nausea
- peptic ulcers
- *purgative*
- sialaporia
- sialism
- vomiting

Endocrine System Disorders
- *anabolic*
- *androgenic*
- *antioestrogenic*
- diabetes mellitus
- diabetes insipidus
- goitre
- hyperglycaemia
- hyperoestrogenism
- hyperparathyroidism
- hypoglycaemia
- hypoparathyroidism
- hypothyroidism
- *oestrogenic*
- polyglandular dysfunction
- *steroidal*

Genitourinary System Disorders
- albuminuria
- amenorrhoea
- *anaphrodisiac*
- anuria
- *aphrodisiac*
- azoospermy
- blennorhagia
- *cervical dilator*
- *diuretic*
- dysmennorhoea
- dyspareunia
- dysuria
- *emmenagogue*
- female infertility
- female sterility
- haematuria
- impotence
- kidney stones
- leukorrhoea
- male infertility
- male sterility
- menorrhagia
- metrorrhagia
- *natriuretic*
- oligomennorhoea
- oligospermy
- oligurea
- organic impotence
- pollakiuria
- polyuria
- pre-menstrual syndrome
- premature ejaculation
- urethral leakage
- urinary incontinence
- urinary retention
- *uterine relaxant*
- *uterine stimulant*

Ill-Defined Symptoms
- adenopathy
- comas
- dizziness[1]
- fainting
- malaise/fatigue[2]

Immune System Disorders
- autoimmune disease
- *immunostimulant*
- *immunosuppressant*

Inflammation[3]

Injuries
- abscesses
- blisters
- bruises
- burns
- burns (internal)
- cerebrovascular haemorrhages
- haemorrhages
- internal bleeding
- nerve injuries
- scars
- superficial injuries
- thorn/splinter injuries
- wounds

Mental Disorders
- amnesia
- anxiety
- behaviour disturbances
- cannabis dependence
- cocaine dependence
- confusion
- delirium
- delusion
- dementia
- *depressant*

/continued over

[1]non-Menières/vertiginous
[2]not due to heat, combat, pregnancy, neurasthenia, senile asthenia
[3]Appendix G (Table 54 and 55) shows specialist inflammation terms related to body parts affected, and Table 56 provides a list of the most likely body parts to be affected by inflammation

b) Disorders Caused/*Harmful Effects*

drug dependence
drug psychoses
emotional disturbances
euphoriant
hallucinogen dependence
hallucinogenic
hallucinosis
hypersomnia
hypnotic
hyposomnia
insanity
intoxicant
mania
mental disability
narcolepsy
narcotic
nervous breakdowns
nervous excitement
nicotine dependence
nightmares
non-dependent drug abuse
opioid dependence
panic
paranoia
relaxant
sedative
shock
tranquilliser
trauma (psychic)

Metabolic System Disorders
antiperspirant
dehydration
diaphoretic
enzyme inhibitor
fluid overload
glucosidase inhibitor
gout
hypercholesterolaemia
hyperthermia
hypothermia
oxidase inhibitor
proteinase inhibitor
refrigerant
trypsin inhibitor

Muscular-Skeletal System Disorders
allergic arthritis
ankylosis
asthenia
contractions
cramp
fibrillation
muscle relaxant
muscle stimulant
myopathy
osteoporosis
spasms
sprains
trembling

Neoplasms[1]
benign neoplasms
cytotoxic
malignant neoplasms
primary malignant neoplasms[2]
leukaemias[3]
secondary malignant neoplasms[4]
carcinomas *in situ*
neoplasms of uncertain behaviour
unspecified neoplasms

Nervous System Disorders
Alzheimer's disease
amyotrophic lateral sclerosis
ataxia
brain damage (anoxic)
choreas
convulsions
depressant
epilepsy
lathyrism
migraines
motor neurone disease
palsy
paralysis
Parkinson's disease
stimulant

Nutritional Disorders
antifeedant
antioxidant
appetite stimulant
appetite suppressant
free radical scavenger
weight loss

Pain[5]
anaesthetic
analgesic
anodyne

Poisonings
allergic reactions
anaphylactic shock
intoxication
intoxication due to drugs
medicine poisoning
noxious foods
stings

Pregnancy/Birth/Puerperium Disorders
abortifacient
early or threatened labour
foetal growth retardation
galactorrhoea
haemorrhages of pregnancy
hypertension of pregnancy
labour induction
lactation stimulant
miscarriages
pre-eclampsia

Repellent

Respiratory System Disorders
allergic asthma
allergic rhinitis (non-pollen)
asphyxia
asthma
breathlessness
bronchodilator
congestion
coughs
emphysema
extrinsic allergic alveolitis
hay fever
hiccoughs
pneumonia
respiratory stimulant
snoring
voice loss

Sensory System Disorders
amblyopia
blindness
cataracts
deafness
diplopia
glaucoma
low vision
miotic
mydriatic
mystagmus
retina vascular changes
retinopathy
squints
tinnitus
visual disturbance

Skin/Subcutaneous Cellular Tissue Disorders
achromatrichia
allergic contact dermatitis
allergic urticaria
astringent
baldness
boils
calluses
carbuncles
contact dermatitis[6]
dandruff
depilatory[7]
dermatitis
dermatitis due to internally taken substances
eczema
erythema
hair loss
hirsutism
irritation
itching
lichen
lupus erythrematosus
photosensitivity
pustules
rashes
sores
ulcers
urticaria
vitiligo
warts
whitlows

[1]see Appendix G (Table 53) for details of types of neoplasms and the body parts which are implied
[2]of specific sites
[3]primary malignant neoplasms of lymphatic and haematopoietic tissue
[4]of specific sites
[5]Appendix G, Table 57, lists the most likely body parts to be affected by **Pain**
[6]due to detergents, oils and grease, solvents, drugs and medicines, chemical products, food contact, plants etc.
[7]also see **MATERIALS** for cosmetic depilatories

NON-VERTEBRATE POISONS

Table 28 shows the **Level 2** and Level 3 structure for describing **NON-VERTEBRATE POISONS**. **Level 2** states are groups of non-vertebrates affected by poisonous plants. There are four Level 3 descriptors: Poisonous Plant Parts, Specific Non-Vertebrates Affected, Effects of Poisons and Uses of Poisons. Their states are shown in Table 29. The list of states for the Effects of Poisons descriptor is briefer for **NON-VERTEBRATE POISONS** than the equivalent (Disorders Caused/*Harmful Effects*) for **VERTEBRATE POISONS**. (The fuller treatment in the **VERTEBRATE POISONS** was pursued due to their close relationship to medicinal plants.) Stand-Alone descriptors particularly relevant to this use group include those that relate to the availability of chemical analyses for plant parts (Table 39) and Chemical Compounds Present (Table 40). The general *Notes Categories* (see Table 5) also apply. Appendices A and B include Master Lists of Plant Parts and Organisms, respectively. Appendix B (Table 46) helps to locate various organisms and organism groups within the accepted classification; some genera of Protozoa, Arthropoda and other Eumetazoa are included. Additionally, Appendix G (Tables 61 and 62) lists medicinally important organisms which cause infections or infestations, in alphabetical and grouped order, respectively. These can also help to assign organisms to their broad taxonomic group and are especially useful for Fungi, Bacteria and Viruses. If additional terms are to be added to the Specific Non-Vertebrates Affected descriptor, then the classification of Parker (1982) should be followed.

Examples are given below to clarify how non-vertebrate poisons are recorded.

1) Antibacterial agents are assigned to the **Level 2** state **NON-VERTEBRATE POISONS — Bacteria**.

2) Insect repellents are assigned to the **Level 2** state **NON-VERTEBRATE POISONS — Arthropoda,** with the Level 3 descriptors, Specific Organism Affected - Insecta and Effects of Poisons - repellent. Where it is known why the insect repellent is used, this is recorded in the Uses of Poisons descriptor, e.g. plant disease control.

3) Molluscicides used in the control of schistosomiasis are assigned to the **Level 2** state **NON-VERTEBRATE POISONS — Mollusca,** with the Level 3 descriptor, Uses of Poisons - disease vector control.

In the case of **NON-VERTEBRATE POISONS — Protozoa** and **NON-VERTEBRATE POISONS — Other Eumetazoa** (e.g. Platyhelminthes, Nemertea, Nemata, Annelida) there is some overlap between **NON-VERTEBRATE POISONS** and **MEDICINES**. For instance, nematode infections can be coded within **MEDICINES** to indicate that a plant is used in the medicinal treatment of them. Plants which are toxic to nematodes can also be coded within **NON-VERTEBRATE POISONS**. This overlap is permitted because, in some cases, medicinal treatment of nematode infections may only be useful in treating symptoms of the disease. On the other hand, an entry in **NON-VERTEBRATE POISONS** of plants which are toxic to nematodes means that the plant has a deleterious effect on the organism itself. During searches on a database with both medicines and poisons data, it will often be necessary to query both sections for complete retrieval of relevant data relating to poisons of medicinally important organisms.

Within the Uses of Poisons descriptor is a state 'not used'. This is to enable those plants, which have been shown to have the poisonous property but are **not** used, to be distinguished from those that are actually **used** for their poisonous properties.

TABLE 28. Matrix showing Level 3 descriptors for non-vertebrate poisons and their relationship to the **Level 2** states. (The shaded elements in the matrix are redundant combinations.)

	Poisonous Plant Parts	Specific Non-Vertebrates Affected	Effects of Poison	Uses of Poisons
NON-VERTEBRATE POISONS — Unspecified Non-Vertebrates				
NON-VERTEBRATE POISONS — Unspecified Microbes				
NON-VERTEBRATE POISONS — Viruses				
NON-VERTEBRATE POISONS — Bacteria				
NON-VERTEBRATE POISONS — Fungi				
NON-VERTEBRATE POISONS — Plants				
NON-VERTEBRATE POISONS — Protozoa				
NON-VERTEBRATE POISONS — Mollusca				
NON-VERTEBRATE POISONS — Arthropoda				
NON-VERTEBRATE POISONS — Other Eumetazoa[1]				

[1] i.e. non Mollusca/Arthropoda; includes Platyhelminthes, Nemertea, Nemata, Annelida

TABLE 29. States for the Level 3 descriptors for non-vertebrate poisons.

Poisonous Plant Parts		Specific Non-Vertebrates Affected[1]	Effects of Poisons	Uses of Poisons
live plant *in situ* entire plant *ex situ* unspecified aerial parts[2] seedlings/germinated seeds galls leaf galls root galls stem galls fruit galls stems plumules leafy stems/branches defoliated stems/branches stolons trunk wood sapwood heartwood tendrils thorns bark stem bark[3] inner bark root bark leaves[4] cotyledons young leaves[5] old leaves[6] fallen leaves leaflets stipules leaf blades leaf buds inflorescences bracts[7] spathes spadices flowers flower buds peduncles[8]	receptacles calyces corollas androecia stamens pollen gynoecia/pistils styles/stigmas infructescences fruits entire immature fruits entire mature fruits deseeded fruits fruit pulp fruit juice epicarp seeds arils[9] entire seeds seeds without testa seed hairs testa kernels seed oil seed cake solid albumen liquid albumen 'roots' debarked 'roots' bulbs/corms tubers/tubercles roots nodules aerial roots[10] pneumatophores rhizomes exudates sap latex leaf juice gum resin nectar	**(Unspecified Microbes)** **(Viruses)** **(Bacteria)** Gram negative bacteria Gram positive bacteria **(Fungi)** **(Plants)** Algae Pteridophyta Bryophyta Gymnospermae Angiospermae **(Protozoa)** Sarcomastigophora Mastigophora Opalinata Sarcodina Labyrinthulata Apicomplexa Microspora Myxozoa Ascetospora Ciliophora **(Mollusca)** **(Arthropoda)** Arachnida Scorpiones Araneae Pseudoscorpionida Acari Crustacea Insecta Blattaria Isoptera Orthoptera Phasmatoptera Anoplura Diptera Culicidae Psychodidae Glossinidae Siphonaptera Hemiptera Homoptera Lepidoptera Hymenoptera **(Other Eumetazoa)** Platyhelminthes Turbellaria Trematoda Cestoda Nemertea Nemata Adenophora Trichocephalida Secernentea Rhabditida Strongylida Ascarida Spirurida Camallanida Annelida Hirudinea	death repellent mutagenic antifeedant reproduction inhibitor moulting inhibitor germination inhibitor growth inhibitor	weed control plant disease control plant pest control livestock pest control vermin control house pest control disease vector control stored products protection timber protection medicines not used

[1] terms in brackets are **Level 2** not Level 3 states; they are included only to indicate the hierarchical relationships
[2] includes unspecified aquatic parts
[3] of stems, trunks or branches
[4] of unspecified age, includes cladodes and phyllodes
[5] includes cataphylls
[6] at base of branches/stems
[7] includes bracteoles
[8] includes pedicels
[9] includes arilodes, strophioles, caruncles
[10] includes rhizophores

MEDICINES

Of all plant uses, medicinal ones are perhaps the most complex and varied. A plant may be used to treat unspecified disorders of a system of the body (e.g. digestive system disorders) or of a specific part of the body (e.g. ear disorders) or of a specific process (e.g. birth complications). Alternatively the medicine may be used to treat specified disorders (e.g. cramp, colds, neoplasms) or to produce a specified effect (e.g. laxative, choleretic). Specific disorders and effects may be linked directly to body systems, body parts or processes. Some only ever relate to one specific body part or one specific body process (e.g. indigestion relates to digestive system; dandruff to scalp; hepatoprotective to liver) whilst others may relate to several body parts or processes within one system (e.g. ankylosis can relate to the neck, spine or other parts of the muscular-skeletal system) or to several body parts within different body systems (e.g. neoplasms to blood, intestine, skin; pain to nerves, teeth, head; inflammation to bronchi, gall bladder, extremities). Other disorders or effects cannot be specifically linked to body parts or systems at all. These include diseases which may affect many body parts and processes, such as those caused by infectious agents (e.g. malaria, schistosomiasis), and other disorders or effects of a more general nature where a link to body parts or processes is inappropriate. Descriptions of medicines need also to account for the type of medicine (e.g. antidotes or placebo etc.) and how the medicine is administered (e.g. in tablets or injection form etc.).

A workable system which takes all these details into account is described below.

Table 30 shows the **Level 2** and Level 3 structure for describing **MEDICINES**. The **Level 2** division of **MEDICINES** is based on a classification of major medicinal disorders. Most of these are based on systems of the body (such as **Circulatory System Disorders, Digestive System Disorders**) whilst the others are important medicinal problems which are not limited to just one body system (e.g. **Abnormalities, Infections/Infestations, Inflammation, Injuries, Neoplasms, Pain**). There are six Level 3 descriptors: Plant Parts Used, Vertebrates Treated, Body Parts/*Processes* Treated, Disorders Treated/*Medicinal Effects*, Medicine Types and Medicinal Applications.

Table 31 lists the states for the Level 3 descriptors, Plant Parts Used and Vertebrates Treated. Appendices A and B, respectively, provide the Master Lists (Tables 43 and 45), and alphabetical lists (Tables 44 and 46) of these.

Table 32 lists the character states for the Level 3 descriptors, Body Parts/*Processes* Treated and Disorders Treated/*Medicinal Effects*. Note that in these tables Body Parts are given in Roman letters, *Processes* in italics; similarly, Disorders are in Roman letters whilst *Medicinal Effects* are in italics. The relationship of the Disorders/*Medicinal Effects* to the Body Parts/*Processes* is shown by their position in the tables. Within **Circulatory System Disorders** (Table 32c), for example, thrombosis is a Disorder of the Body Part - veins. However, the Disorders Treated/*Medicinal Effects* which are listed adjacent to the top level of the Body Parts/*Processes* (e.g in Table 32c, angina, *cardiovascular stimulant*, clots, embolism, gangrene and strokes are listed adjacent to Circulatory System) can either be linked to the body system (in the example, Circulatory System) or to any other Body Part/*Process* within the particular **Level 2** group (in the example, this would include arteries, veins, heart etc. within **Circulatory System Disorders**). Here is another example, within **Digestive System Disorders** (Table 32d): sialporia is a Disorder of the salivary glands and *choleretic* is a *Medicinal Effect* affecting the Body Part gall bladder;

carminative, on the other hand, works on the Digestive System as a whole or may affect one part only, stomach, intestine, etc.

Table 33 lists the Body Parts which might be relevant to those **Level 2** states (i.e. **Abnormalities, Infections/Infestations, Inflammation, Injuries, Neoplasms, and Pain)** where relevant body parts cross several major body systems. Appendix E (Tables 49 and 50) provides Master Lists of Body Parts/*Processes*, in grouped order and alphabetically, respectively.

Appendix G (Table 52) lists alphabetically all states concerning Disorders Treated/ *Medicinal Effects*, and Body Parts/*Processes* Treated together with the **Level 2** state to which each of these Level 3 states relates. Those terms marked with an asterisk (e.g. *hypotensive**) are not accepted states but are frequently encountered in medicinal plant data; translations into the accepted states with respect to this standard are provided (in this case, a medicine having a *hypotensive* effect is described as being used to treat hypertension). The lists of terms in this standard try to enable the description of medicinal uses of plants to be made without duplications. The list of Body Parts/ *Processes* Treated endeavours to be comprehensive, whilst in the list of Disorders Treated/*Medicinal Effects* preference has usually been given to terms for Disorders Treated rather than to *Medicinal Effects*. For instance, the term *anti-inflammatory* is not an accepted state for *Medicinal Effects*. This use should rather be described in Disorders Treated as inflammation (and linked to the relevant Body Parts as appropriate, or if known). Terms for *Medicinal Effects* are permitted if translation into Disorders Treated would involve too much supposition regarding the disorder that is being treated (e.g. *diuretic*) or if the *Medicinal Effects* term provides additional information that a translation into one of the Disorders Treated term might not provide. Both the *Medicinal Effects* terms *laxative* and *purgative* might translate into the Disorders Treated term constipation but to do this would lose information regarding strength of the effect; in this instance, therefore, the *Medicinal Effects* terms are used in preference to the Disorders Treated term. That the terms *purgative* and *laxative* are also frequently used in the literature was an additional factor when deciding on the preferred terms.

Other tables in Appendix G help to translate specialised and synonymous terms for Disorders and Body Parts Treated into terms accepted in this standard. Table 53 does this for **Neoplasms,** Tables 54-56 for **Inflammation,** Table 57 for **Pain,** Table 58 for allergies and Table 59 for ulcers. Other tables aid the location of terms within the hierarchy of the standard. Table 60 lists terms for **Infections/Infestations** alphabetically and links them with the relevant causal organism and organism group. Table 61 lists causal organisms alphabetically and indicates the Level 3 Disorders they cause. Table 62 is similar but lists the Organism Groups (Annelida, Arthropoda, etc) alphabetically and Table 63 lists the Gram reaction for various infective bacteria.

It must be noted that some items which might be expected to occur in **MEDICINES** do not. For instance, in order to distinguish clearly plants which are used as medicines to treat fertility problems from those which are used socially to control fertility, **Birth Control Agents** have been placed in **SOCIAL USES** rather than **MEDICINES.**

Table 34 lists the states for the Level 3 descriptors Medicine Types and Medicinal Applications. Stand-Alone descriptors particularly relevant to this use group include those that relate to the availability of chemical analyses for plant parts (Table 39) and Chemical Compounds Present (Table 40). As well as the generally applicable *Notes Categories* (Table 5), *Processing Techniques for Medicines* which describe how to prepare medicines should be recorded.

There have been several modifications to the details regarding medicines in this version compared to that presented at TDWG8. These relate largely to ensuring that the classification here fits in with the International Classification of Diseases (ICD.9.CM) (US Department of Health and Human Services, 1991). The ICD.9.CM is a very useful standard, but it includes many diseases or specific diagnoses which are not encountered in economic botany literature. There is compatibility between this standard and ICD.9.CM in the **LEVEL 1** categories and the classification of Level 3 Disorders within the **Level 2** groups. The ICD.9.CM has very useful indices in volume 2 which help relate Level 3 states to **Level 2** states. Obviously this must be used when any new terms are added to this standard.

Appendix G (Table 64) shows how the **Level 2** states in this standard relate to the ICD.9.CM system. Every disease in the ICD.9.CM system is given a numerical code and ranges of these codes correspond to the **Level 2** groups given here. No ICD.9.CM numbers correspond to the **Level 2** groups **Pain** and **Inflammation** because, in the ICD.9.CM, disorders relating to these are classed with the relevant Body System Disorders. The treatment in this standard is not too much of a deviation as, within each of **Pain** and **Inflammation**, the Body Parts Treated are given at Level 3. Indeed, it is the separation out of Body Parts/*Processes* Treated at Level 3 that enables the medicinal uses in this system to be of a much more manageable size than the ICD.9.CM, hence justifying this approach.

TABLE 30. Matrix showing Level 3 descriptors for medicines and their relationship to the **Level 2** states. (The shaded elements are redundant combinations.)

	Plant Parts Used	Vertebrates Treated	Body Parts/ *Processes* Treated	Disorders Treated/ *Medicinal Effects*	Medicine Types	Medicinal Applications
MEDICINES — Unspecified Medicinal Disorders						
MEDICINES — Abnormalities						
MEDICINES — Blood System Disorders						
MEDICINES — Circulatory System Disorders						
MEDICINES — Digestive System Disorders						
MEDICINES — Endocrine System Disorders						
MEDICINES — Genitourinary System Disorders						
MEDICINES — Ill-Defined Symptoms						
MEDICINES — Immune System Disorders						
MEDICINES — Infections/Infestations						
MEDICINES — Inflammation						
MEDICINES — Injuries						
MEDICINES — Mental Disorders						
MEDICINES — Metabolic System Disorders						
MEDICINES — Muscular-Skeletal System Disorders						
MEDICINES — Neoplasms						
MEDICINES — Nervous System Disorders						
MEDICINES — Nutritional Disorders						
MEDICINES — Pain						
MEDICINES — Poisonings						
MEDICINES — Pregnancy/Birth/Puerperium Disorders						
MEDICINES — Respiratory System Disorders						
MEDICINES — Sensory System Disorders						
MEDICINES — Skin/Subcutaneous Cellular Tissue Disorders						

TABLE 31. States for the Level 3 descriptors for medicines, Plant Parts Used and Vertebrates Treated.

Plant Parts Used		Vertebrates Treated
entire plant *ex situ* unspecified aerial parts[1] seedlings/germinated seeds galls leaf galls root galls stem galls fruit galls stems plumules leafy stems/branches defoliated stems/branches stolons trunks wood sapwood heartwood tendrils thorns bark stem bark[2] inner bark root bark leaves [3] cotyledons young leaves [4] old leaves [5] fallen leaves leaflets stipules leaf blades leaf buds inflorescences bracts [6] spathes spadices flowers flower buds peduncles [7]	receptacles calyces corollas androecia stamens pollen gynoecia/pistils styles/stigmas infructescences fruits entire immature fruits entire mature fruits deseeded fruits fruit pulp fruit juice epicarp seeds arils [8] entire seeds seeds without testa seed hairs testa kernels seed oil seed cake solid albumen liquid albumen 'roots' debarked 'roots' bulbs/corms tubers/tubercles roots nodules aerial roots [9] pneumatophores rhizomes exudates sap latex leaf juice gum resin nectar	Fish Amphibians frogs salamanders Reptiles turtles crocodilians lizards snakes Birds chickens turkeys game birds[10] Mammals bats primates humans lagomorphs rabbits hares rodents squirrels rats mice cavies Equidae horses asses donkeys mules Suiformes pigs Camelidae camels llamas ruminants bovines cattle yak buffalo bison caprines sheep goats game mammals[11]

[1] includes unspecified aquatic parts
[2] of stems, trunks or branches
[3] of unspecified ages, includes cladodes and phyllodes
[4] includes cataphylls
[5] at base of branches/stems
[6] includes bracteoles
[7] includes pedicels
[8] includes arillodes, strophioles, caruncles
[9] includes rhizophores
[10] bird species unspecified
[11] mammal species unspecified

TABLE 32. States for the Level 3 descriptors for medicines (Body Parts/*Processes* Treated and Disorders Treated/*Medicinal Effects*) in relation to the **Level 2** states: a) **Abnormalites**, b) **Blood System Disorders**, c) **Circulatory System Disorders**, d) **Digestive System Disorders**, e) **Endocrine System Disorders**, f) **Genitourinary System Disorders**, g) **Ill-Defined Symptoms**, h) **Immune System Disorders**, i) **Infections/Infestations**, j) **Inflammation**, k) **Injuries**, l) **Mental Disorders**, m) **Metabolic System Disorders**, n) **Muscular-Skeletal System Disorders**, o) **Neoplasms**, p) **Nervous System Disorders**, q) **Nutritional Disorders**, r) **Pain**, s) **Poisonings**, t) **Pregnancy/Birth/Puerperium Disorders**, u) **Respiratory System Disorders**, v) **Sensory System Disorders**, w) **Skin/Subcutaneous Cellular Tissue Disorders.**

(The left hand side of the tables lists the body parts (Roman letters) and processes treated (italics) and the right hand side lists the specific disorders that are treated (Roman letters) and the medicinal effects (italics). The Level 3 descriptor name has been abbreviated when relevant, e.g., in **Abnormalities**, Body Parts/*Processes* Treated is labelled Body Parts Treated, as there are no states corresponding to *Processes* Treated. For some **Level 2** states the Level 3 descriptor Body Parts/*Processes* Treated is redundant which is shown by an empty column in the table (e.g. Table 32g **Ill-Defined Symptoms**. Similarly Disorders Treated/*Medicinal Effects* is redundant in the case of Table 32j **Inflammation**. The relationship of the disorders or medicinal effects to body part or process is shown by the position in the table. The terms in square brackets are non-preferred synonyms; they are included only to aid users and are not accepted terms in the standard. Appendix G (Table 52) provides alphabetical listings of medicinal terms related to these two descriptors and shows their relationship to the accepted system of coding.)

a) MEDICINES — Abnormalities

Body Parts Treated	Disorders Treated/*Medicinal Effects*
see Table 33	agenesis atrophy congenital abnormalities [anomalies] cysts deformities degeneration *deobstruent* deposits displacement dysfunction dystrophy failure fistula hypertrophy [enlargement/hyperplasia] lesions necrosis obstructions oedemas [swelling] organ failure pigmentation polyps prolapse sclerosis spina bifida stricture vascular anomalies

b) MEDICINES — Blood System Disorders

Body Parts/*Processes* Treated	Disorders Treated/*Medicinal Effects*
blood	anaemia iron deficiency anaemia pernicious anaemia haemolytic anaemia sickle cell anaemia haemolysis hypocalcaemia hypoxaemia purpura
erythrocytes [red blood cells]	
leukocytes [white blood cells]	
plasma	
platelets	
bone marrow	polycythemia
spleen	
agglutination	
coagulation	*anticoagulant* clotting factor deficiency
fibrinolysis	
platelet aggregation	

c) MEDICINES — Circulatory System Disorders[1]

Body Parts/*Processes* Treated	Disorders Treated/*Medicinal Effects*
Circulatory System	angina *cardiovascular stimulant* clots embolism gangrene strokes
blood vessels	
arteries arterioles capillaries	artherosclerosis ischaemia vasoconstriction vasodilation
aorta	
carotid	
veins	thrombosis varicose veins haemorrhoids
epicardium	
pericardium	
endocardium	
myocardium [heart muscle]	
heart	heart disease
valves of heart	
pulmonary circulation	
cerebrovascular circulation	
heart beat	arrhythmia dysrhythmia bradycardia
blood pressure	hypertension hypotension

[1] see also diuretic in f) **Genitourinary System Disorders**

d) MEDICINES — Digestive System Disorders

Body Parts Treated	Disorders Treated/*Medicinal Effects*
Digestive System	allergic gastroenteritis allergic colitis biliousness bloat *carminative* colic *emetic* flatulence hernia *hydragogue* indigestion *laxative* nausea *purgative* strangulated hernia *stomachic* motion sickness mountain sickness peptic ulcers gastro-jejunal ulcers vomiting
lips	
gums	
teeth	caries teething
mouth [oral cavity]	
hard palate	
soft palate	
uvula	
tongue	
salivary glands parotid	sialaporia sialism
oesophagus	
peritoneum	
mesenteric glands	
abdomen	
stomach	gastric ulcers
intestine	constipation diarrhoea
small intestine duodenum jejunum ileum	duodenal ulcers
large intestine appendix caecum colon	irritable bowel syndrome
rectum	
anal canal	
anus	anal fissures
liver	cirrhosis *hepatoprotective* *hepatic stimulant* hypercholia
gall bladder	*choleretic* *cholestatic* gallstones
bile duct	cholestasis
pancreas	
rumen	

e) MEDICINES — Endocrine System Disorders

Body Parts/*Processes* Treated	Disorders Treated/*Medicinal Effects*
Endocrine System	diabetes mellitus hyperglycaemia hypoglycaemia *steroidal* polyglandular dysfunction
islet cells of Langerhans	
glands	
pineal gland	
pituitary *growth*	diabetes insipidus dwarfism slow growth gigantism
thyroid	hypothyroidism goitre
hypothalamus	
parathyroid	hyperparathyroidism hypoparathyroidism
adrenal gland	
thymus	
sexual development	*anabolic* *androgenic* *oestrogenic* *antioestrogenic* hyperoestrogenism delayed puberty sexual precocity

f) MEDICINES — Genitourinary System Disorders[1]

Body Parts/*Processes* Treated	Disorders Treated/*Medicinal Effects*
Genitourinary System	blennorhagia
kidneys	kidney stones [calculus]
kidney cells	
bladder	
urinary tract	
urethra	urethral leakage urethral stones
ureter	
urination	albuminuria anuria *diuretic*[2] dysuria haematuria *natriuretic* oligurea pollakiuria polyuria urinary incontinence urinary retention

/continued over

[1] see also e) **Endocrine System Disorders**
[2] usually relates to c) **Circulatory System Disorders**

Body Parts/*Processes* Treated	Disorders Treated/*Medicinal Effects*
male genitals	
testes	hydrocoele
scrotum	
prostate	
penis	priapism small penis
foreskin [prepuce]	phimosis
glans penis	
epididymis	
vas deferens	
seminal vesicles	
spermatic chord	
ejaculatory duct	
semen	
sperm	
germ cells	
copulation	dyspareunia impotence organic impotence psychic impotence premature ejaculation
libido	*anaphrodisiac* *aphrodisiac*
male fertility	azoospermy oligospermy male infertility male sterility
breasts female breasts nipples areola male breasts	gynecomastia
female genitals	
perineum	
eggs	
placenta	
pelvic cellular tissue	
Fallopian tubes	
ovaries	
oviduct	
uterus	*uterine relaxant* *uterine stimulant*
uterine mucosae [endometrium]	
corpus luteum	
genital tract	
uterine ligament [broad ligament]	
vagina	
vaginal mucosae	leukorrhoea
cervix	*cervical dilator*
vulva	
labia	
clitoris	
hymen	
Bartholin's gland	

/continued over

Body Parts/*Processes* Treated	Disorders Treated/*Medicinal Effects*
menstruation	amenorrhoea dysmennorhoea *emmenagogue* menorrhagia metrorrhagia oligomennorhoea pre-menstrual syndrome
ovulation	ovulatory pain
implantation	
female fertility	female infertility female sterility
menopause	premature menopause
climacterium	
post menopause	

g) MEDICINES — Ill-Defined Symptoms

	Disorders Treated
	adenopathy [enlarged lymph glands] comas [stupour] fainting [collapse/syncope] dizziness [non-Menières/vertiginous] malaise/fatigue[1] hyperhydrosis growing pains

h) MEDICINES — Immune System Disorders

Body Parts Treated	Disorders Treated/*Medicinal Effects*
Immune System	autoimmune disease *immunosuppressant* *immunostimulant*
lymphocytes	
lymph	
lymph glands	
lymph vessels	
lymph nodes	

[1] not due to heat, combat, pregnancy, neurasthenia, senile asthenia

i) MEDICINES — Infections/Infestations[1]

Body Parts Treated	See Table 33

Disorders Treated/*Medicinal Effects*		
INFECTIONS	chromoblastomycosis	Chagas' disease
fever	cladosporiosis	coccidiosis
periodic fever	coccidiodomycosis	cryptosporidiosis
chills	cryptococcosis	dientamoebiasis
toxaemia	favus	flagellate protozoa infections[4]
	histoplasmosis	giardiasis
MICROBIAL INFECTIONS	lobomycosis	leishmaniasis
antimicrobial[2]	maduromycosis	malaria
	mycotic mycetomas	pneumonia (protozoal)
bacterial infections	paracoccidiomycosis	Rhodesian trypanosomiasis
antibacterial	pityriasis nigra	toxoplasmosis
actinomycosis	rhinosporidiosis	trichomoniasis[5]
anthrax	ringworm [tinea]	trypanosomiasis
botulism	sporotrichosis	
brucellosis	zygomycosis	
cholera		**helminth worm infections**[6]
diphtheria	**viral infections**	*anthelmintic*
erysipelas	***antiviral***	**fluke infections**
food poisoning (bacterial)	adenoviral infections	schistosomiasis
gas gangrene	AIDS	trematode infections[7]
glanders	arboviral infections	
gonorrhoea	chicken pox	**tapeworm infections**
impetigo	colds	hydatid disease
leprosy	cold sores	
leptospirosis	cowpox	**nematode infections**
listeriosis	coxsackie infection	capillariasis
lyme disease	Creutzfeldt Jakob disease	creeping eruption [cutaneous *larvae migrans*]
melioidosis	dengue	dipetalonemiasis
meningitis (bacterial)	encephalitis (viral)	filariasis
Mycobacterium infection (non-leprosy)	enteroviral infections	gnathostomiasis
nocardiosis	foot and mouth	guinea worm infection [dracontiasis]
pasturellosis	haemorrhagic fever	hair-worm infection [Yangste oedema]
pinta	hepatitis (viral)	herring worm disease
plague	hepatitis A	hookworm infection (New World)
pneumonia (bacterial)	hepatitis B	hookworm infection (Old World)
psittacosis	hepatitis non-A, non-B	iloaisis
Q fever	herpes (Herpes simplex)	onchocerciasis
rat bite fever	HIV infections	pin worm infection
relapsing fever	influenza	roundworm infection
salmonellosis	kuru	thread worm infection
scarlet fever/scarletina	measles	toxocariasis
septicaemia	meningitis (viral)	trichinosis
shigellosis [bacillary dysentery]	mumps	whipworm infection
syphilis	pneumonia (viral)	
tetanus	polio	**INFESTATIONS**
trachoma	rabies	**arthropod infestations**
tuberculosis	rubella	**insect infestations**
tularemia	shingles (Herpes zoster)	flea infestations
typhoid/paratyphoid	slow virus infections	myiasis [fly infestations]
typhus	smallpox	lice infestations[8]
venereal diseases (non-specified)[3]	viral warts	tungiasis[9]
Vincent's angina	yellow fever	
whooping cough/pertussis		**arachnid infestations**
yaws	PARASITIC INFECTIONS	chiggers
	protozoal infections	scabies
fungal infections	***antiprotozoal***	
antifungal		**annelid worm infestations**
allescheriosis	amoebiasis	leech infestations
aspergillosis	amoebic dysentery	
blastomycosis	balantidiasis	
candidiasis	cerebral malaria	

[1] Appendix G (Table 60) provides an alphabetical list of infections and infestations and links them to the causal organism; Tables 61 and 62 list causal organisms and organism groups alphabetically and link them to infections/infestations; Appendix B helps to assign infective genera to taxonomic groups
[2] see also antiseptic and disinfectant in w) **Skin/Subcutaneous Cellular Tissue Disorders**
[3] see also gonorrhoea and syphilis
[4] includes Chagas' disease, giardiasis, leishmaniasis, Rhodesian trypanosomiasis, trichomoniasis, trypanosomiasis
[5] of vagina, urethra or prostate
[6] helminthiasis
[7] non-schistosomiasis
[8] includes pediculosis (head lice) and phthiriasis (crab lice)
[9] chigoe/sandfleas/jiggers

j) MEDICINES — Inflammation

Body Parts Treated	
see Table 33	

Appendix G (Table 54) lists specialist inflammation terms for each Body System and shows Body Parts Treated. Table 55 is an alphabetical version of this. The specialist terms are not accepted in this standard, rather **Inflammation** is linked to Body Parts Treated.

k) MEDICINES — Injuries

Body Parts Treated	Disorders Treated/*Medicinal Effects*
see Table 33	abscesses bites (non-venomous) blisters bruises [contusion] burns burns (internal) cerebrovascular haemorrhages foreign bodies haemorrhages *haemostatic* injuries internal bleeding nerve injuries scars superficial injuries [abrasions] wounds

Disorders Treated/*Medicinal Effects*		
adaptogenic	depression	obsessive [compulsive] disorders
euphoriant	behaviour disturbances	neurotic depression
insanity	emotional disturbances	hypochondria
mania	emotional disturbances of adolescence	jealousy
nervous breakdowns	emotional disturbances of childhood	confusion
nervous excitement		
shock	psychogenic physical symptoms	alcohol dependence
trauma (psychic)	psychogenic pain	
dementia	palpitations	drug dependence
delusion		cannabis dependence
delirium	personality disorders	hallucinogen dependence
hallucinosis		barbiturate dependence
paranoia	sexual deviations and disorders	opioid[2] dependence
		cocaine dependence
depressant	psychoses	amphetamine dependence
hallucinogenic	senility psychoses	antidepressant dependence
intoxicant	senile dementia	
narcotic	arteriosclerotic dementia	nicotine dependence
relaxant	alcoholic psychoses	
sedative	drug psychoses	non-dependent drug abuse
tranquilliser	schizophrenia	
	defective psychoses	mental disability [retardation]
amnesia	paranoid states	paraphrenia
	childhood psychoses	
stammering [stuttering]	autism	sleep disorders
anorexia nervosa		*hypnotic*
tics	neuroses	hyposomnia [insomnia]
bulimia	anxiety	hypersomnia
pica [geophagy]	panic	nightmares
	hysteria	narcolepsy
stress[1]	phobias	jet lag
		somnambulism

[1] acute reaction to stress
[2] includes opiates

m) MEDICINES — Metabolic System Disorders

Body Parts/*Processes* Treated	Disorders Treated/*Medicinal Effects*
Metabolic System	cystic fibrosis amyloidosis
energy metabolism	
enzyme activity	*enzyme inhibitor* *glucosidase inhibitor* *oxidase inhibitor* *proteinase inhibitor* *trypsin inhibitor*
mineral metabolism *iron metabolism* *copper metabolism* *magnesium metabolism* *phosphorous metabolism* *calcium metabolism*	
amino acid transport *amino acid metabolism*	
carbohydrate transport *carbohydrate metabolism*	
lipoid metabolism	hypercholesterolaemia [cholesterolaemia] hyperglyceridaemia hyperlipidaemia [lipidaemia] hyperchylomicronaemia lipoprotein deficiency lipodystrophy lipidoses
plasma protein synthesis	
porphyria metabolism	
purine and pyrimidine metabolism	gout
fluid, electrolyte and acid balance	hypernatraemia [hyperosmolality] hyponatraemia [hyposmolality] acidosis alkalosis dehydration [volume depletion] fluid overload hyperpotasaemia hypopotasaemia
sweating	*antiperspirant* *diaphoretic*
temperature regulation	hyperthermia hypothermia *refrigerant*

n) MEDICINES — Muscular-Skeletal System Disorders

Body Parts Treated	Disorders Treated/*Medicinal Effects*
Muscular-Skeletal System	acquired deformities ankylosis arthopathy arthritis allergic arthritis asthenia *cryopreservative* gouty arthritis *muscle relaxant* *muscle stimulant* osteoarthritis osteopathy rheumatism rheumatoid arthritis spasticity spondylosis
connective tissues fatty tissue mast cells histiocytes	
muscles	contractions cramp fibrillation myopathy spasms sprains [strains] trembling
smooth muscles	
skeletal muscles	
synovia	
tendons	
fascia	
soft tissues	
bones	crushing injuries fractures open fractures simple fractures osteoporosis
cartilages	
joints	dislocations
spine [vertebral column]	
vertebrae	
ribs	
intervertebral discs	
sternum	
clavicle	
pelvis	
sacrum	
coccyx	
face	
head	
skull	
neck	
body [trunk]	
back	lumbago sciatica

/continued over

Body Parts Treated	Disorders Treated/*Medicinal Effects*
lumbar region	
chest	
extremities	chilblains frostbite
limbs upper limbs lower limbs	
thighs	
arms	
legs	
hands	
fingers	
feet	flat feet
toes	
ligaments	
jaws	
maxilla	
mandible	
shoulders	
elbows	
wrists	
hips	
knees	
ankles	
sacroiliac region	
bursa	

o) MEDICINES — Neoplasms

Body Parts Treated	Disorders Treated/*Medicinal Effects*
see Table 33	malignant neoplasms primary malignant neoplasms[1] leukaemias[2] secondary malignant neoplasms[3] carcinomas in situ benign neoplasms neoplasms of uncertain behaviour unspecified neoplasms *cytotoxic*

Appendix G (Table 53) lists non-accepted specialist terms for neoplasms, showing the Level 3 states for Disorders Treated and Body Parts Treated according to this system. The ICD.9.CM (U.S. Department of Health and Human Services, 1991) provides a 37 page list of anatomical sites affected by neoplasms.

[1] of specific sites
[2] primary malignant neoplasm of lymphatic and haematopoietic tissue
[3] of specific sites

p) MEDICINES — Nervous System Disorders[1]

Body Parts Treated	Disorders Treated/*Medicinal Effects*
Nervous System	ataxia spinal muscular atrophy anterior horn cell disease motor neurone disease amyotrophic lateral sclerosis Alzheimer's disease convulsions lathyrism epilepsy migraines palsy paralysis Parkinson's disease *stimulant* *depressant* choreas multiple sclerosis multiple dystrophy
central nervous system	
peripheral nervous system	
autonomous nervous system	
sympathetic nervous system	
parasympathetic nervous system	
neurotransmitters	
brain	brain damage (anoxic) encephalopathy brain compression
cranial nerves	
intercranial region	
facial nerves	
cerebrum	
meninges	
cerebral meninges	
spinal meninges	
frontal lobe of brain	
temporal lobe of brain	
parietal lobe of brain	
occipital lobe of brain	
ventricles	
brain stem	
spinal chord	myelopathy
spinal plexus	
nerves	
nerve roots	
peripheral nerves	
ganglia	
motor nerves	
sensory nerves	

[1] see also r) Pain

q) MEDICINES — Nutritional Disorders

	Disorders Treated/*Medicinal Effects*
	antioxidant *appetite stimulant* *appetite suppressant* *free radical scavenger* kwashiorkor malnutrition marasmus mineral deficiency calcium deficiency (dietary) iodine deficiency[1] nutritional deficiency obesity protein deficiency *restorative* *slimming aids* *tonic* vitamin deficiency vitamin A deficiency thiamin deficiency niacin deficiency beri beri pellagra vitamin B deficiency vitamin C deficiency [scurvy] vitamin D deficiency rickets osteomalacia vitamin E deficiency vitamin K deficiency vitamin P deficiency weight loss

r) MEDICINES — Pain [2 3]

Body Parts Treated[4]	*Medicinal Effects*
see Table 33	*anaesthetic* *analgesic* *anodyne*

[1] see also **m) Metabolic Disorders**
[2] see also **f) Genitourinary System** for menstrual pain, ovulatory pain; **t) Pregnancy/Birth/Puerperium** for labour pains; **l) Mental Disorders** for psychogenic pain
[3] earache, headache, toothache, myalgia, neuralgia are coded using Body Part Treated (i.e. ear, head, tooth, muscles, nerves, respectively)
[4] Appendix G (Table 57) lists the body parts most likely to be affected by pain

s) MEDICINES — Poisonings[1]

	Disorders Treated/*Medicinal Effects*
	anaphylactic shock allergic reactions *antihistaminic* *detoxicant* intoxication intoxication due to drugs intoxication due to alcohol *purifier* poisonings due to: bites and stings stings insect stings bee stings scorpion stings venomous bites snake bites alcohol poisoning carbon monoxide poisoning corrosives poisoning excessive air pressure excessive light lead poisoning medicine poisoning metal poisoning noxious foods[2] petroleum products poisoning radiation poisoning solvent poisoning vaccine poisoning

t) MEDICINES — Pregnancy/Birth/Puerperium Disorders

Processes Treated	Disorders Treated/*Medicinal Effects*
pregnancy	early or threatened labour miscarriages [abortion] haemorrhages of pregnancy hypertension of pregnancy pre-eclampsia morning sickness [vomiting of pregnancy] prolonged pregnancy
birth	
labour	*labour induction* labour pain obstructed labour long labour
post partum	post partum bleeding
puerperium	
lactation	galactorrhoea *lactation stimulant*

[1] for septicaemia/blood poisoning see **b) Blood System Disorders**; for food poisoning see **i) Infections/Infestations**
[2] i.e. poisonous, not related to food poisoning by infective agents

u) MEDICINES — Respiratory System Disorders

Body Parts Treated	Disorders Treated/*Medicinal Effects*
Respiratory System	allergic rhinitis (non-pollen) hay fever extrinsic allergic alveolitis[1] allergic asthma asphyxia asthma breathlessness congestion coughs *expectorant* hiccoughs pneumoconioses *respiratory stimulant* snoring
respiratory mucosae	
nose	
nasal tract	
sinus	
epiglottis	
throat	
pharynx	
oropharynx	
tonsils	
nasopharynx	
adenoids	
hypopharynx	
larynx	voice loss
glottis	
supraglottis	
subglottis	
trachea	
alveoli	
bronchi bronchioles	*bronchodilator*
lungs	emphysema pneumonia
small cells of lung	
large cells of lung	
mediastinum	
pleura	
thorax	
diaphragm	

[1] due to dust, fungi including actinomycetes etc.

v) MEDICINES — Sensory System Disorders

Body Parts/*Processes* Treated	Disorders Treated/*Medicinal Effects*
ears	tinnitus Menière's disease otosclerosis
eardrums	
middle ears	
outer ears	cerumen
inner ears	
auditory canals	
Eustachian tubes	
mastoids	
tympanic membranes	
ossicles	
acoustic nerves	
balance	
hearing	deafness
eyes	cataracts glaucoma squints
globes [eyeballs]	
choroids [coat of retina]	
irises	
ciliary bodies	
lachrymal systems	
orbits of eyes	
optic nerves	
sclerae	
vitreous bodies	
lenses	
lachrymal glands	
lachrymal ducts	
eyelids	
retinas	retinopathy detachment of retina retina vascular changes
corneas	
conjunctivae	
pupils	*mydriatic* *miotic*
vision	blindness low vision visual disturbance amblyopia diplopia binocular vision colour vision deficiency night blindness
refraction and accommodation	long sight [hypermetropia] short sight [myopia] colour blindness astigmatism
eye movements	mystagmus [irregular eye movements]
smell	
taste	
touch	

w) MEDICINES — Skin/Subcutaneous Cellular Tissue Disorders

Body Parts/*Processes* Treated	Disorders Treated/*Medicinal Effects*[1]
skin skin of specific areas	acne *antiseptic*[2] *astringent* bed sores boils calluses [corns] carbuncles [furuncles] cellulitis *demulcent* dermatitis dermatitis due to internally taken substances contact dermatitis[3] allergic contact dermatitis *detergent* *disinfectant*[4] eczema *emollient* erythema irritation itching [pruritus] lichen lupus erythrematosus nappy rash photosensitivity pilonidial cysts psoriasis pustules rashes sores sunburn *sunscreen* ulcers urticaria allergic urticaria vitiligo warts whitlows
subcutaneous cellular tissue	
navel	
beard	
eyebrows	
groin	
perianal area	
scalp	dandruff
hair	achromatrichia baldness *depilatory* [5] hair loss [alopecia] hirsutism
hair follicles	
sweat glands	
sebaceous glands	
fur	
nails	
hoofs	
moulting	

[1] see **k) Injuries** for abscesses, blisters, bruises, scars and wounds
[2] for antimicrobial see also **i) Infections/Infestations**
[3] due to detergents, oils and grease, solvents drugs and medicines, chemical products, food contact, plants etc.
[4] see footnote 2
[5] also see **VERTEBRATE POISONS** and **MATERIALS** (Products Used In) cosmetic depilatories

TABLE 33. Master List of Body Parts (in group order).

Body Parts		
chromosomes	large intestine	female genitals
DNA	lips	foreskin
RNA	liver	genital tract
	mesenteric glands	germ cells
BLOOD SYSTEM	mouth	glans penis
blood	oesophagus	hymen
bone marrow	pancreas	kidney cells
erythrocytes	parotid	kidneys
leukocytes	peritoneum	labia
plasma	rectum	male breasts
platelets	rumen	male genitals
spleen	salivary glands	nipples
	small intestine	ovaries
CIRCULATORY SYSTEM	soft palate	oviduct
aorta	stomach	pelvic cellular tissue
arteries	teeth	penis
arterioles	tongue	perineum
blood vessels	uvula	placenta
capillaries		prostate
carotid	ENDOCRINE SYSTEM	scrotum
endocardium	adrenal gland	semen
epicardium	glands	seminal vesicles
heart	hypothalamus	sperm
myocardium	islet cells of Langerhans	spermatic chord
pericardium	parathyroid	testes
valves of heart	pineal gland	ureter
veins	pituitary	urethra
	thymus	urinary tract
DIGESTIVE SYSTEM	thyroid	uterine ligament
abdomen		uterine mucosae
anal canal	GENITOURINARY SYSTEM	uterus
anus	areola	vagina
appendix	Bartholin's gland	vaginal mucosae
bile duct	bladder	vas deferens
caecum	breasts	vulva
colon	cervix	
duodenum	clitoris	IMMUNE SYSTEM
gall bladder	corpus luteum	lymph
gums	eggs	lymph glands
hard palate	ejaculatory duct	lymph nodes
ileum	epididymis	lymph vessels
intestine	Fallopian tubes	lymphocytes
jejunum	female breasts	

/continued over

Body Parts		
METABOLIC SYSTEM	vertebrae	subglottis
	wrists	supraglottis
MUSCULAR-SKELETAL SYSTEM		thorax
ankles	NERVOUS SYSTEM	throat
arms	autonomous nervous system	tonsils
back	brain	trachea
body	brain stem	
bones	central nervous system	SENSORY SYSTEM
bursa	cerebral meninges	acoustic nerves
cartilages	cerebrum	auditory canals
chest	cranial nerves	choroids
clavicles	facial nerves	ciliary bodies
coccyx	frontal lobe of brain	conjunctivae
connective tissues	ganglia	corneas
elbows	intercranial region	eardrums
extremities	meninges	ears
face	motor nerves	Eustachian tubes
fascia	nerve roots	eyelids
fatty tissue	nerves	eyes
feet	neurotransmitters	globes [eyeballs]
fingers	occipital lobe of brain	inner ears
hands	parasympathetic nervous system	irises
head	parietal lobe of brain	lachrymal ducts
hips	peripheral nerves	lachrymal glands
histiocytes	peripheral nervous system	lachrymal system
intervertebral discs	sensory nerves	lenses
jaws	spinal chord	mastoids
joints	spinal meninges	middle ears
knees	spinal plexus	optic nerves
legs	sympathetic nervous system	orbits of eyes
ligaments	temporal lobe of brain	ossicles (of ears)
limbs	ventricles	outer ears
lower limbs		pupils
lumbar region	RESPIRATORY SYSTEM	retinas
mandible	adenoids	sclerae
mast cells	alveoli	tympanic membranes
maxilla	bronchi	vitreous bodies
muscles	bronchioles	
neck	diaphragm	SKIN/SUBCUTANEOUS CELLULAR TISSUE
pelvis	epiglottis	
ribs	glottis	beard
sacroiliac region	hypopharynx	eyebrows
sacrum	large cells of lung	fur
shoulders	larynx	groin
skeletal muscles	lungs	hair
skull	mediastinum	hair follicles
smooth muscles	nasal tract	hoofs
soft tissues	nasopharynx	nails
spine	nose	navel
sternum	oropharynx	perianal area
synovia	pharynx	scalp
tendons	pleura	sebaceous glands
thighs	respiratory mucosae	skin
toes	sinuses	skin of specific areas
upper limbs	small cells of lung	subcutaneous cellular tissue
		sweat glands

TABLE 34. States for the Level 3 descriptors for medicines, Medicine Types and Medicinal Applications. (The terms in square brackets are non-preferred synonyms; they are included only to aid users and are not accepted terms in the Standard.)

Medicine Types
antidote
adulterant
placebo
prophylactic [preventative]
palliative
vaccine

Medicinal Applications
external applications
[embrocation] liniment
dressings
drops
eye drops
nose drops
nasal sprays
ear drops
fumigants
liniment
lotions
medicinal soaps
ointments
balms
plasters
poultices
[salve] ointments
[unction] ointments
[uncture] ointments
[unguent] ointments
washes
baths
[gargle] mouth washes
mouth washes
charms [amulets]
bracelets
headbands
neck bands
waistbands
internal applications
douches
enemas
inhalers
cigarettes
snuff
[steam baths] vapour baths
vapour baths
injections
intramuscular injections
intravenous injections
subcutaneous injections
oral ingestion
potions [liquid medicine]
syrup
tablets
buccal tablets
capsules
sublingual tablets
teas
wines
scarification
suppositories
rectal suppositories
urethral suppositories
vaginal pessary

TABLE 35. Some suggested keywords or phrases for describing *Processing Techniques for Medicines* in *Notes* regarding medicines.

Processing Techniques for Medicines
collected
collected at dawn
collected during evening
collected in winter
dried
macerated
pulverised/powdered
pulped
grated
milled
burned
burned on embers
mixed with ..... [names]
mixed with plants
mixed with animal parts
mixed with minerals
mixed with alcohol (tincture[1])
mixed with oil
mixed with water (decoction, apozem)
infused
boiled (decoction, apozem)
mixed with sugar
mixed with milk
mixed with lemon juice
mixed with wine
calcinated (ashed)
fermented

[1]tincture is mixed with alcohol, or alcohol and water

ENVIRONMENTAL USES

The **Level 2** division of **ENVIRONMENTAL USES** is based on the major kinds of environmental uses that have been identified. There are four Level 3 descriptors: Specific Environmental Uses, Materials Used, Plant Parts Used and Environments Where Used.

Table 37 lists the states available for the Level 3 descriptors. The list for Plant Parts Used is abbreviated to include only the most likely plant parts for environmental uses. The most likely of all is live plant *in situ*. Any necessary additions to the plant parts list should, in the first instance, be taken from the Master List of Plant Parts in Appendix A (Table 43).

Materials Used describes the form in which a plant is used e.g. everlasting flowers as **Ornamentals**, and mulches for **Soil Improvers**. Environments Where Used describes the environments in which a plant is used, e.g. **Revegetators** can be linked to dunes, **Ornamentals** to towns, and boundary markers to crop lands.

TABLE 36. Matrix showing Level 3 descriptors for environmental uses and their relationship to the **Level 2** states. (The shaded elements are redundant combinations.)

	Specific Environmental Uses	Materials Used	Plant Parts Used	Environments Where Used
ENVIRONMENTAL USES — Unspecified Environmental Uses				
ENVIRONMENTAL USES — Erosion Control				
ENVIRONMENTAL USES — Shade/Shelter				
ENVIRONMENTAL USES — Revegetators				
ENVIRONMENTAL USES — Indicators				
ENVIRONMENTAL USES — Soil Improvers				
ENVIRONMENTAL USES — Ornamentals[1]				
ENVIRONMENTAL USES — Boundaries/Barriers/Supports				
ENVIRONMENTAL USES — Agroforestry				
ENVIRONMENTAL USES — Firebreaks				
ENVIRONMENTAL USES — Pollution Control				

[1] includes sports turfs

TABLE 37. States for the Level 3 descriptors for environmental uses.

Specific Environmental Uses[1]	Materials Used	Plant Parts Used[2]	Environments Where Used

(Agroforestry)
intercrops/alley crops
nursery crops
 	
(Boundaries/Barriers/Supports)
boundary markers
animal barriers
plant/agricultural supports
fence supports
 	
(Soil Improvers)
fertility improvers
nitrogen fixers
soil moisture conservers
soil structure improvers
salinity improvers
 	
(Pollution Controllers)
waste water purifiers
air purifiers/air pollution regulators
sewage treatment
	hedges
	live fences
	live stakes
	brushwood
	contour strips/ridge/bund plants
	ground covers
	lawns
	turfs
	mulches
	green manures
	fertilisers
	nodulated plants
	potted plants
	cut flowers
	everlasting 'flowers'
	dispersed trees
	shelterbelts
	  multilayer shelterbelts
	  single layer shelterbelts
		live plant *in situ*
		entire plant *ex situ*
		unspecified aerial parts
		leaves
		seeds
		seed cake
		leaves
		roots
		fruits
		inflorescences
		wood
			landscapes
			towns
			roads/streets/highways
			parks
			sports grounds
			  golf courses
			  football pitches
			gardens
			homesteads
			greenbelts
			croplands/orchards
			rangelands
			forested land
			industrial
			wastes/dumps
			mined land
			waterholes
			degraded land
			eroded land
			burnt land
			clays
			sands
			dunes
			rocky soils
			gravels
			acid soils
			alkaline soils
			brackish soils
			saline soils
			waterlogged soils
			mineral soils
			heavy metal soils
			copper-rich soils
			lead-rich soils
			tin-rich soils
			zinc-rich soils
			selenium-rich soils
			chromium-rich soils
			aluminium-rich soils
			magnesium-rich soils
			mercury-rich soils
			molybdenum-rich soils
			nickel-rich soils
			antimony-rich soils
			arsenic-rich soils
			
			coastlines
			coastland
			intertidal zones
			slopes
			gullies
			watercourses
			groundwater
			underground water
			
			uplands
			wetlands
			sea
			lakes
			moors/heathland
			deserts

[1]the terms in brackets are **Level 2** not Level 3 character states; they are included only to indicate the hierarchical relationships
[2]refer to Appendix A (Table 43) if additional plant parts are needed

GENE SOURCES

No **Level 2** divisions of **GENE SOURCES** have been defined as this is already a narrow group compared to other **LEVEL 1** uses. At Level 3 is the descriptor Beneficial Genetic Traits for wild relatives of crops. Table 38 lists a few states for this which could be beneficial in plant breeding programmes. This list is likely to be enlarged. Please contact the author for any required additions.

TABLE 38. Level 3 descriptor for gene sources.

Beneficial Genetic Traits
disease resistance pest resistance drought resistance high yields cold tolerance waterlogging tolerance salt tolerance

Stand-Alone USE DESCRIPTORS

Stand-Alone descriptors should be viewed as an adjunct to the main three level system. They are used to record data on factors which help to evaluate the individual uses or the overall value of a plant. Table 4 lists these descriptors and the **LEVEL 1** uses for which they are relevant. It is likely that further Stand-Alone descriptors will need to be defined for different users' needs and, as these are not linked directly into the main scheme, they can be tailored to individual requirements.

Descriptors relevant to availability of chemical analyses for plant parts (Table 39) and Chemical Compounds Present (Table 40) are important to all food, poisons and medicinal uses. The states for Chemical Compounds Present are adapted from Harborne & Baxter (1993). States for Stand-Alone descriptors relevant to a single use type have been listed within the relevant use section (e.g. Wood Properties relevant to **MATERIALS - Wood** is in Table 19 within **MATERIALS**).

TABLE 39. List of Stand-Alone descriptors relevant to availability of chemical analyses of plant parts and their states (Plant Parts).

Stand-Alone descriptors relevant to the availability of chemical analyses for plant parts	Plant Parts	
Unspecified Analyses Nutritional Analyses Antinutritional Analyses Poisonous Compounds Analyses Biologically Active Compounds (Laboratory . Tests) Biologically Active Compounds (Clinical Trials) Essential Oil Analyses	live plant *in situ* entire plant *ex situ* unspecified aerial parts[1] seedlings/germinated seeds galls leaf galls root galls stem galls fruit galls stems plumules leafy stems/branches defoliated stems/branches stolons trunks wood sapwood heartwood tendrils thorns bark stem bark[2] inner bark root bark leaves[3] cotyledons young leaves [4] old leaves [5] fallen leaves leaflets stipules leaf blades leaf buds inflorescences bracts[6] spathes spadices flowers flower buds peduncles [7] receptacles calyces	corollas androecia stamens pollen gynoecia/pistils styles/stigmas infructescences fruits entire immature fruits entire mature fruits deseeded fruits fruit pulp fruit juice epicarp seeds arils [8] entire seeds seeds without testa seed hairs testa kernels seed oil seed cake solid albumen liquid albumen 'roots' debarked 'roots' bulbs/corms tubers/tubercles roots nodules aerial roots[9] pneumatophores rhizomes exudates sap latex leaf juice gum resin nectar

[1] includes unspecified aquatic parts
[2] of stems, trunks or branches
[3] of unspecified age, includes cladodes and phyllodes
[4] includes cataphylls
[5] at base of branches/stems
[6] includes bracteoles
[7] includes pedicels
[8] includes arillodes, strophioles, caruncles
[9] includes rhizophores

TABLE 40. States for the Stand-Alone descriptor, Chemical Compounds Present.

Chemical Compounds Present	
carbohydrates	dihydroflavonols
sugars	anthocyanins
monosaccharides	chalcones
oligosaccharides	dihydrochalcones
polysaccharides	aurones
sugar alcohols	isoflavonoids
fatty acids	flavanones
lipids	coumarins
triglycerides	hydroxycoumarins
phospholipids	furanocoumarins
glycolipids	pyranocoumarins
nitrogenous compounds	isocoumarins
alkaloids	quinones
betalain alkaloids	benzoquinones
diterpenoid alkaloids	anthroquinones
indole alkaloids	napthoquinones
isoquinoline alkaloids	hydroxyquinones
monoterpene alkaloids	tannins
sesquiterpene alkaloids	lignans
peptide alkaloids	phenols
pyrrolidine alkaloids	phenolic acids
piperidine alkaloids	phenylpropanoids
pyrrolizidine alkaloids	xanthones
quinoline alkaloids	terpenoids
quinolizidine alkaloids	monoterpenoids[1]
steroidal alkaloids	sesquiterpenoids
tropane alkaloids	diterpenoids
amino acids	triterpenoids
proteins	limonoids
lectins	quassinoids
peptides	steroids
nonprotein amino acids	cardenolides
amines	iridoids
cyanogenic glycosides	saponins
glucosinolates	phytosterols
purines	dammaranes
pyrimidines	tetraterpenoids
phenolics	carotenoids
flavonoids	organic acids
flavones	aromatic acids
flavonols	

The Stand-Alone descriptors Weeds and Harmful Organisms Hosted are descriptors relevant to the value of a plant as a whole, rather than to its individual uses. Their states are listed in Tables 41 and 42, respectively. Weeds may cause severe losses to crops and to livestock production and have economic repercussions. Some plants are hosts to disease vectors or to pests and diseases of major crops, which similarly have negative economic effects on agricultural production.

[1] monoterpenoids and sesquiterpenoids include most essential oils

TABLE 41. States for the Stand-Alone descriptor, Weeds.

Weeds
weed of cultivated land weed of urban area weed of rangelands or pasture aquatic weed weed of forested areas

TABLE 42. States for the Stand-Alone descriptor, Harmful Organisms Hosted.

Harmful Organisms Hosted
major crop pests major crop diseases

NOTES RELEVANT TO ALL USE TYPES

Notes are additional to use descriptors and states; they are fields for free text. They are useful for storage of information that is not required for selection of taxa with particular attributes. Information which helps to place uses in their cultural context and evaluate their importance, rating, popularity and properties is included here, along with means of production, trade, industrial use and development contstraints relating to future potential.

Listed below are *Notes Categories* with suggestions for the types of data that should be included in each, as well as lists of terms or phrases which may be used as keywords. It is emphasised that these are not lists of states.

USER GROUPS
ethnic group (tribe/caste/sect)
language/dialect
locality

VERNACULAR NAMES OF PLANT PRODUCT [1]
Qualify the name with language/dialect, ethnic group, and area/location; and distinguish between product names at different stages of processing.

AREAS WHERE USED
used in ... [and occurs in (including both native and introduced areas)]
produced in ...
raw material produced in ...
manufactured in ...
imported into ...
raw material imported into ...
product imported into ...
introduced into ... [for the purpose]
experimented with in ... [for the purpose]
not used in ... [but occurs in]

(Area names attached to any of these notes should follow the TDWG geography standard of Hollis & Brummitt (1992).)

USE TYPE(S)
[actual use]
  historical use
  traditional use
  modern use
trialled use
possible use
not used (e.g. for poisons)

(It is most practicable to describe use type only when conditions other than actual use apply. The majority of cases will be actual uses.)

USER EVALUATION
very high user rating
high user rating
medium user rating
low user rating
very low user rating

[1] not names of the plant or plant parts

USE FREQUENCY
used very frequently
used frequently
used sometimes
used rarely
used very rarely

(This is not a duplication of the user evaluation note, as a plant may be highly valued for a purpose and hence receive a high rating score, but still be used infrequently (e.g. it may be rare) and score a low value in the frequency of use field.)

PRODUCTION TYPES
['natural' vegetation utilised (by animal/man)]
  locally
  via long distance expeditions
plants protected for the use
cultivation trials
cultivated
  cultivated in agriculture
  cultivated in forestry
  cultivated in agroforestry
  cultivated in horticulture
produced biotechnologically (e.g. in tissue culture)

TRADE IN RAW PLANT PART/RAW MATERIAL
raw material not traded
raw material traded
  raw material traded locally
  raw material traded regionally
  raw material traded within a country
  raw material traded internationally
  raw material traded intercontinentally

TRADE IN MANUFACTURED PRODUCTS
product not traded
product traded
  product traded locally
  product traded regionally
  product traded within a country
  product trades internationally
  product traded intercontinentally

TRADE IN SEED/PLANTING MATERIAL
planting material not traded
planting material traded
  planting material traded locally
  planting material traded regionally
  planting material traded within a country
  planting material trades internationally
  planting material traded intercontinentally

INDUSTRIAL USAGE ('used in' or 'made in')
food and brewing industry
pharmaceutical industry
chemical industry
manufacturing industry
construction industry
tourist/handicraft industry
animal food industry
cosmetics industry
not used industrially

POTENTIAL
potential for increased area where used
potential for increased popularity
potential for increased trade/commercial use
potential for use/greater use in industry
potential for production by cultivation
potential for increased production by cultivation
potential for increased yields

DEVELOPMENT CONSTRAINTS
insufficient knowledge
accessibility
limited availability
rarity
resource degradation
irregular availability
low demand
conflicting uses
competing alternative sources
low quality
cultivation techniques little known
cultivation difficult
high environmental demands (water/fertilisers)
pests and diseases
long time to maturation
harvesting problems
spoilage
storage
processing
marketing
weediness

USER RATING(S) OF THE PLANT FOR THE NEGATIVE VALUES
very serious problem
serious problem
sometimes problematical
minor problem
very minor problem

REFERENCE CITATIONS/INFORMATION SOURCES

Sources of information should be included. They may be an indicator of reliability and include books, periodical articles (which should be cited to publication standard) and herbarium specimens (with herbarium, collector's name and number). If data have come from an informant, the informant's name, gender, approximate age, occupation, ethnic identity (tribe/caste/sect) and language/dialect spoken should be recorded.

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APPENDIX A: PLANT PARTS

Table 43 is the Master List of Plant Parts in hierarchically grouped order. Table 44 is a rearrangement of the Master List, with the accepted plant part terms ordered alphabetically and placed alongside the broadest plant part term to which they relate. The Master List is a modified version of a list in Adjanohoun *et al.* (1989).

Several Level 3 descriptors (e.g. Specific Plant Parts Used, Poisonous Plant Parts, Plant Parts Used etc., see Table 6) are derived from the Master List of Plant Parts. The most likely states for them are listed in the sections on each **LEVEL 1** use. They are working aids (i.e. to prevent the need for searching through redundant terms) but the Master List of Plant Parts includes all the available states and can be used to supplement those lists within the **LEVEL 1** use sections. Any required additions to the Master List of Plant Parts should be directed to the author.

Top level terms within the hierarchy (e.g. seeds, leaves) are used when either i) the whole part is utilised or ii) the information source did not indicate a more specific part of the plant part. In most cases, when more specific details are not provided, then the whole plant part is implied. To include the distinction between whole plant part and specific plant part unspecified for each top level plant part would be impracticable and unduly complex and would provide little added value.

For ease of use, the hierarchy has been limited to two levels. In some cases it seems as if extra levels should be included (e.g. wood, heartwood and sapwood are listed at the same level) but, as the number of choices in each category is low and as exclusivity is not a feature of all the terms at the lower level, a true hierarchy would be impossible to achieve. This list is designed to be practicable, enabling the most appropriate plant part to be chosen to match the level of detail available. An example of where practicality has ruled over the true hierarchy is in the separation of seeds from infructescences at the top level. Seeds are frequently used parts of plants and merit a position at the top level despite their more natural position as a subdivision of infructescences.

It must be noted that strict botanical definitions are not always followed; for instance 'roots' is a loose term for underground parts, and 'seeds' can include caryopses.

TABLE 43. Master List of Plant Parts in grouped order.

Plant Parts	
live plant *in situ*	receptacles
entire plant *ex situ*	calyces
unspecified aerial parts[1]	corollas
seedlings/germinated seeds	androecia
galls	stamens
leaf galls	pollen
root galls	gynoecia/pistils
stem galls	styles/stigmas
fruit galls	infructescences
stems	fruits
plumules	entire immature fruits
leafy stems/branches	entire mature fruits
defoliated stems/branches	deseeded fruits
stolons	fruit pulp
trunks	fruit juice
wood	epicarp
sapwood	seeds
heartwood	arils[8]
tendrils	entire seeds
thorns	seeds without testa
bark	seed hairs
stem bark[2]	testa
inner bark	kernels
root bark	seed oil
leaves[3]	seed cake
cotyledons	solid albumen
young leaves[4]	liquid albumen
old leaves[5]	'roots'
fallen leaves	debarked 'roots'
leaflets	bulbs/corms
stipules	tubers/tubercles
leaf blades	roots
leaf buds	nodules
inflorescences	aerial roots[9]
bracts[6]	pneumatophores
spathes	rhizomes
spadices	exudates
flowers	sap
flower buds	latex
peduncles[7]	leaf juice
	gum
	resin
	nectar

[1] includes unspecified aquatic parts
[2] of stems, trunks or branches
[3] of unspecified age; includes cladodes and phyllodes
[4] includes cataphylls
[5] at base of branches/stems
[6] includes bracteoles
[7] includes pedicels
[8] includes arillodes, strophioles, caruncles
[9] includes rhizophores

TABLE 44. Alphabetical lists of Plant Parts, with broader terms to which those parts belong.

Alphabetical List of All Accepted Plant Part Terms	Broad Terms to which Plant Part Belongs
unspecified aerial parts	unspecified aerial parts[1]
aerial roots [2]	'roots'
androecia	inflorescences
arils [3]	seeds
bark	bark
bracts [4]	inflorescences
bulbs/corms	'roots'
calyces	inflorescences
corollas	inflorescences
cotyledons	leaves
debarked 'roots'	'roots'
defoliated stems/branches	stems
deseeded fruits	infructescences
entire immature fruits	infructescences
entire mature fruits	infructescences
entire plant *ex situ*	entire plant *ex situ*
entire seeds	seeds
epicarp	infructescences
exudates	exudates
fallen leaves	leaves
flower buds	inflorescences
flowers	inflorescences
fruit juice	infructescences
fruit galls	galls
fruit pulp	infructescences
fruits	infructescences
galls	galls
gum	exudates
gynoecia/pistils	inflorescences
heartwood	stems
inflorescences[5]	inflorescences
infructescences	infructescences
inner bark	bark
kernels	seeds
latex	exudates
leaf blades	leaves
leaf buds	leaves
leaf galls	galls
leaf juice	exudates
leaflets	leaves
leafy stems/branches	stems
leaves[6]	leaves

Alphabetical List of All Accepted Plant Part Terms	Broad Terms to which Plant Part Belongs
liquid albumen	seeds
live plant *in situ*	live plant *in situ*
nectar	exudates
nodules	'roots'
old leaves [7]	leaves
peduncles[8]	inflorescences
plumules	stems
pneumatophores	'roots'
pollen	inflorescences
receptacles	inflorescences
resin	exudates
rhizomes	'roots'
root bark	bark
root galls	galls
'roots'	'roots'
roots	'roots'
sap	exudates
sapwood	stems
seed cake	seeds
seed hairs	seeds
seed oil	seeds
seedlings/germinated seeds	seedlings/germinated seeds
seeds	seeds
seeds without testa	seeds
solid albumen	seeds
spadices	inflorescences
spathes	inflorescences
stamens	inflorescences
stem bark[9]	bark
stem galls	galls
stems	stems
stipules	leaves
stolons	stems
styles/stigmas	inflorescences
tendrils	stems
testa	seeds
thorns	stems
trunks	stems
tubers/tubercles	'roots'
wood	stems
young leaves[10]	leaves

[1] includes unspecified aquatic parts
[2] includes rhizophores
[3] includes arillodes, strophioles, caruncles
[4] includes bracteoles
[5] flowering shoots generally without leaves, with bracts, axes of inflorescences and flowers; includes spadices
[6] of unspecified age; includes cladodes and phyllodes
[7] at base of branches/stems
[8] includes pedicels
[9] of stems, trunks or branches
[10] includes cataphylls

APPENDIX B: ORGANISMS

Table 45 is the Master List of Organisms in hierachically grouped order. Table 46 is an alphabetical list of organisms (with both accepted and non-accepted terms) showing their relationship to terms in the Master List and their position in the hierarchy. The Master List of Organisms is not complete but hopefully includes most of the commonly encountered organisms with regards to plant use. As classifications can vary, Parker (1982) has been followed here and any additions will refer to it too. Please contact the author if any are required.

Organism descriptors are required so that direct beneficiaries of a particular use can be described. In those cases where humans benefit directly (e.g. from **FOOD**, **SOCIAL USES**, and **MATERIALS**), user organism as a Level 3 descriptor has been omitted. In cases where another organism benefits from the plant (e.g. the animal which uses the plant part for animal food; the animal which is treated in veterinary medicine), or where an organism affected by the poisonous properties of the plant needs to be described, a Level 3 descriptor for User Organism or Affected Organism has been provided. Table 6 lists these Level 3 descriptors that are derived from the Master List of Organisms.

The hierarchy of the Master List of Organisms is more or less true. One deviation from this is unavoidable because many information sources specify that a plant has antimicrobial properties, without specifying the type of organism involved (virus, bacterium or fungus); hence the term **Unspecified Microbes** has been included, despite its non-specific nature. Similarly, in the list of vertebrate organisms, game mammals and game birds are listed as accepted terms. This is to allow for coding of reports of the use of plants by game, where the actual organism type is not known. Game animals are wild animals which are hunted for food or sport.

Several levels to this hierarchy are included since sources of information on economic botany provide different levels of details; for example, some authors may describe a plant as a rodenticide whilst others may describe one lethal to mice. It is useful to be able to record the level of detail as appropriate. The alternative would be to lose the detail of the lower levels of the hierarchy. In some cases this would be particularly problematical; for instance, with regard to animal food, sheep and goats have very different diets, but they are grouped together (as caprines) at the higher level in the organism hierarchy.

Within Appendix G there are tables relating to **MEDICINES** that are also relevant to Organisms. Tables 61 and 62 list medicinally important organisms in alphabetical and grouped order. They are particularly useful for names and classification of fungi, bacteria and viruses. Additionally, Table 63 lists Gram status for various infective bacterial genera.

TABLE 45. Master List of Organisms in grouped order.

NON-VERTEBRATE ORGANISMS

Unspecified Microbes
Viruses[1]
Bacteria[2]
Gram negative bacteria
Gram positive bacteria
Fungi[3]
Plants
Algae
Pteridophyta
Bryophyta
Gymnospermae
Angiospermae
Protozoa
Sarcomastigophora (flagellate protozoa *s.l.*)
Mastigophora (flagellate protozoa)
Opalinata
Sarcodina
Labyrinthulata
Apicomplexa
Microspora
Myxozoa
Ascetospora
Ciliophora
Mollusca
Arthropoda
Arachnida
Scorpiones (scorpions)
Araneae (spiders)
Pseudoscorpionida (false scorpions)
Acari (mites/ticks)
Crustacea
Insecta
Blattaria (cockroaches)
Isoptera (termites)
Orthoptera (grasshoppers/locusts/crickets)
Phasmatoptera (stick insects)
Anoplura (lice)
Diptera (flies)
Culicidae (mosquitoes)
Psychodidae (sand flies)
Glossinidae (Tsetse flies)
Siphonaptera (fleas)
Hemiptera (bugs)
assassin bugs
bed bugs
Homoptera (aphids etc.)
Coleoptera
Bruchidae
Lepidoptera (butterflies/moths)
Hymenoptera (sawflies/wasps/bees/ants)
Other Eumetazoa[4]
Platyhelminthes (flatworms)
Turbellaria
Trematoda (flukes)
Cestoda (tapeworms)
Nemertea (ribbon worms)
Nemata (nematodes/roundworms/eelworms)
Adenophora
Trichocephalida
Secernentea
Rhabditida
Strongylida (includes hookworms)
Ascarida (ascarid worms)
Spirurida (includes filarial nematodes)
Camallanida
Annelida (annelid worms)
Hirudinea (leeches)

VERTEBRATE ORGANISMS

Fish

Amphibians
frogs
salamanders

Reptiles
turtles
crocodilians
lizards
snakes

Birds
chickens
turkeys
game birds[5]

Mammals
bats
primates
humans
lagomorphs
rabbits
hares
rodents
squirrels
rats
mice
cavies
Equidae
horses
asses
donkeys
mules
Suiformes
pigs
Camelidae
camels
llamas
ruminants
bovines
cattle
yak
buffalo
bison
caprines
sheep
goats
game mammals[6]

[1] see lists of genera in Tables 61 and 62
[2] see above footnote
[3] see above footnote
[4] i.e non-Mollusca/non-Arthropoda
[5] bird species unspecified
[6] mammal species unspecified

TABLE 46. Alphabetical list of Organisms with their taxonomic groups indicated. (* indicates non-accepted terms or terms external to the classification in Table 45.)

Alphabetical List of Organisms	Relationship between Broad and Narrow Terms for Organism Type (Narrowest Terms on the Left Hand Side and Broadest on the Right)			
Algae	-	-	Algae	**Plants**
*Acanthochylonema**	Spirurida	Secernentea	Nemata	**Other Eumatozoa**
Acari	-	Acari	Arachnida	**Arthropoda**
Adenophora	-	Adenophora	Nemata	**Other Eumetazoa**
*Amoeba**	-	Sarcodina	Sarcomastigophora	**Protozoa**
Amoebida*	-	Sarcodina	Sarcomastigophora	**Protozoa**
Amphibians	-	-	-	**Amphibians**
*Ancylostoma**	Strongylida	Secernentea	Nemata	**Other Eumetazoa**
Angiospermae	-	-	Angiospermae	**Plants**
*Anisakia**	Ascarida	Secernentea	Nemata	**Other Eumetazoa**
annelid worms*	-	-	Annelida	**Other Eumetazoa**
Annelida	-	-	Annelida	**Other Eumetazoa**
Anoplura	-	Anoplura	Insecta	**Arthropoda**
ants*	-	Hymenoptera	Insecta	**Arthropoda**
aphids*	-	Homoptera	Insecta	**Arthropoda**
Apicomplexa	-	-	Apicomplexa	**Protozoa**
Arachnida	-	-	Arachnida	**Arthropoda**
Araneae	-	Araneae	Arachnida	**Arthropoda**
Arthropoda	-	-	-	**Arthropoda**
ascarid worms*	Ascarida	Secernentea	Nemata	**Other Eumetazoa**
Ascarida	Ascarida	Secernentea	Nemata	**Other Eumatazoa**
*Ascaris**	Ascarida	Secernentea	Nemata	**Other Eumetazoa**
Ascetospora	-	-	Ascetospora	**Protozoa**
assassin bugs	assassin bugs	Hemiptera	Insecta	**Arthropoda**
asses	-	asses	Equidae	**Mammals**
Bacteria	-	-	-	**Bacteria**
*Balantidium**	-	-	Ciliophora	**Protozoa**
bats	-	-	bats	**Mammals**
bed bugs	bed bugs	Hemiptera	Insecta	**Arthropoda**
bees*	-	Hymenoptera	Insecta	**Arthropoda**
Birds	-	-	-	**Birds**
bison	bison	bovines	ruminants	**Mammals**
Blattaria	-	Blattaria	Insecta	**Arthropoda**
bovines	-	bovines	ruminants	**Mammals**
Bruchidae	-	Bruchidae	Coleoptera	**Arthropoda**
*Brugia**	Spirurida	Secernentea	Nemata	**Other Eumetazoa**
Bryophyta	-	-	Bryophyta	**Plants**
buffalo	buffalo	bovines	ruminants	**Mammals**
bugs*	-	Hemiptera	Insecta	**Arthropoda**
butterflies*	-	Lepidoptera	Insecta	**Arthropoda**
Camallanida	Camallanida	Secernentea	Nemata	**Other Eumetazoa**
Camelidae	-	-	Camelidae	**Mammals**
camels	-	camels	Camelidae	**Mammals**
*Capillaria**	Trichocephalida	Adenophora	Nemata	**Other Eumetazoa**
caprines	-	caprines	ruminants	**Mammals**
cattle	cattle	bovines	ruminants	**Mammals**
cavies	-	cavies	rodents	**Mammals**
Cestoda	-	Cestoda	Platyhelminthes	**Other Eumetazoa**
chickens	-	-	chickens	**Birds**
Ciliophora	-	-	Ciliophora	**Protozoa**
*Clonorchis**	-	Trematoda	Platyhelminthes	**Other Eumetazoa**
cockroaches*	-	Blattaria	Insecta	**Arthropoda**
Coleoptera	-	-	Coleoptera	**Arthropoda**
crickets*	-	Orthoptera	Insecta	**Arthropoda**
crocodilians	-	-	crocodilians	**Reptiles**
Crustacea	-	-	Crustacea	**Arthropoda**
*Cryptosporidium**	-	-	Apicomplexa	**Protozoa**
*Ctenocephalides**	Siphonaptera	Diptera	Insecta	**Arthropoda**
Culicidae	Culicidae	Diptera	Insecta	**Arthropoda**
*Cysticercus**	-	Cestoda	Platyhelminthes	**Other Eumetazoa**
*Desmodes**	-	Acari	Arachnida	**Arthropoda**
*Dicrocoelium**	-	Trematoda	Platyhelminthes	**Other Eumetazoa**
*Dientamoeba**	-	Sarcodina	Sarcomastigophora	**Protozoa**
*Dipetalonema**	Spirurida	Secernentea	Nemata	**Other Eumetazoa**
*Diphyllobothrium**	-	Cestoda	Platyhelminthes	**Other Eumetazoa**

/continued over

Alphabetical List of Organisms	Relationship between Broad and Narrow Terms for Organism Type (Narrowest Terms on the Left Hand Side and Broadest on the Right)			
*Diplidium**	-	Cestoda	Platyhelminthes	**Other Eumetazoa**
*Diplogonoporus**	-	Cestoda	Platyhelminthes	**Other Eumetazoa**
Diptera	-	Diptera	Insecta	**Arthropoda**
donkeys	-	donkeys	Equidae	**Mammals**
*Dracunculus**	Camallanida	Secernentea	Nemata	**Other Eumetazoa**
*Echinococcus**	-	Cestoda	Platyhelminthes	**Other Eumetazoa**
*Echinostoma**	-	Trematoda	Platyhelminthes	**Other Eumetazoa**
*Entamoeba**	-	Sarcodina	Sarcomastigophora	**Protozoa**
*Enterobius**	Ascarida	Secernentea	Nemata	**Other Eumetazoa**
Equidae	-	-	Equidae	**Mammals**
false scorpions*	-	Pseudoscorpiones	Arachnida	**Arthropoda**
*Fasciola**	-	Trematoda	Platyhelminthes	**Other Eumetazoa**
*Fasciolopsis**	-	Trematoda	Platyhelminthes	**Other Eumetazoa**
filarial nematodes*	Spirurida	Secernentea	Nemata	**Other Eumetazoa**
Fish	-	-	-	**Fish**
flagellate protozoa *s.l.**	-	-	Sarcomastigophora	**Protozoa**
flagellate protozoa*	-	Mastigophora	Sarcomastigophora	**Protozoa**
flatworms*	-	-	Platyhelminthes	**Other Eumetazoa**
fleas*	Siphonaptera	Diptera	Insecta	**Arthropoda**
flies*	-	Diptera	Insecta	**Arthropoda**
flukes*	-	Trematoda	Platyhelminthes	**Other Eumetazoa**
frogs	-	-	frogs	**Amphibians**
Fungi	-	-	-	**Fungi**
game birds	-	-	game birds	**Birds**
game mammals	-	-	game mammals	**Mammals**
*Gastrodiscoides**	-	Trematoda	Platyhelminthes	**Other Eumetazoa**
*Giardia**	-	Mastigophora	Sarcomastigophora	**Protozoa**
Glossinidae	Glossinidae	Diptera	Insecta	**Arthropoda**
*Gnathostoma**	Spirurida	Secernentea	Nemata	**Other Eumetazoa**
goats	goats	caprines	ruminants	**Mammals**
Gram negative bacteria	-	-	Gram negative bacteria	**Bacteria**
Gram positive bacteria	-	-	Gram positive bacteria	**Bacteria**
grasshoppers*	-	Orthoptera	Insecta	**Arthropoda**
Gymnospermae	-	-	Gymnospermae	**Plants**
hares	-	hares	lagomorphs	**Mammals**
Hemiptera	-	Hemiptera	Insecta	**Arthropoda**
*Heterophyes**	-	Trematoda	Platyhelminthes	**Other Eumetazoa**
Hirudinea	-	Hirudinea	Annelida	**Other Eumetazoa**
Homoptera	-	Homoptera	Insecta	**Arthropoda**
hookworms*	Strongylida	Secernentea	Secernentea	**Other Eumetazoa**
horses	-	horses	Equidae	**Mammals**
humans	-	humans	primates	**Mammals**
*Hymenolepis**	-	Cestoda	Platyhelminthes	**Other Eumetazoa**
Hymenoptera	-	Hymenoptera	Insecta	**Arthropoda**
Insecta	-	-	Insecta	**Arthropoda**
Isoptera	-	Isoptera	Insecta	**Arthropoda**
*Isospora**	-	-	Apicomplexa	**Protozoa**
Labyrinthulata	-	-	Labyrinthulata	**Protozoa**
lagomorphs	-	-	lagomorphs	**Mammals**
leeches	-	Hirudinea	Annelida	**Other Eumetazoa**
*Leishmania**	-	Mastigophora	Sarcomastigophora	**Protozoa**
Lepidoptera	-	Lepidoptera	Insecta	**Arthropoda**
lice*	-	Anoplura	Insecta	**Arthropoda**
lizards	-	-	lizards	**Reptiles**
llamas	-	llamas	Camelidae	**Mammals**
*Loa**	Spirurida	Secernentea	Nemata	**Other Eumetazoa**
locusts*	-	Orthoptera	Insecta	**Arthropoda**
Mammals	-	-	-	**Mammals**
*Masorella**	Spirurida	Secernentea	Nemata	**Other Eumetazoa**
Mastigophora	-	Mastigophora	Sarcomastigophora	**Protozoa**
*Metagonimus**	-	Trematoda	Platyhelminthes	**Other Eumetazoa**
mice	-	mice	rodents	**Mammals**
Unspecified Microbes	-	-	-	**Unspecified Microbes**
Microspora	-	-	Microspora	**Protozoa**
mites*	-	Acari	Arachnida	**Arthropoda**
Mollusca	-	-	-	**Mollusca**

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Alphabetical List of Organisms	Relationship between Broad and Narrow Terms for Organism Type (Narrowest Terms on the Left Hand Side and Broadest on the Right)			
mosquitoes*	Culicidae	Diptera	Insecta	**Arthropoda**
moths*	-	Lepidoptera	Insecta	**Arthropoda**
mules	-	mules	Equidae	**Mammals**
Myxozoa	-	-	Myxozoa	**Protozoa**
*Necator**	Strongylida	Secernentea	Nemata	**Other Eumetazoa**
Nemata	-	-	Nemata	**Other Eumetazoa**
nematodes*	-	-	Nemata	**Other Eumetazoa**
Nemertea	-	Nemertea	Platyhelminthes	**Other Eumetazoa**
*Onchocerca**	Spirurida	Secernentea	Nemata	**Other Eumetazoa**
Opalinata	-	Opalinata	Sarcomastigophora	**Protozoa**
*Opisthorchis**	-	Trematoda	Platyhelminthes	**Other Eumetazoa**
Orthoptera	-	Orthoptera	Insecta	**Arthropoda**
Other Eumetazoa	-	-	-	**Other Eumetazoa**
*Pediculus**	-	Anoplura	Insecta	**Arthropoda**
Phasmatoptera	-	Phasmatoptera	Insecta	**Arthropoda**
*Phlebotomus**	Psychodidae	Diptera	Insecta	**Arthropoda**
pigs*	-	pigs	Suiformes	**Mammals**
Plants	-	-	-	**Plants**
*Plasmodium**	-	-	Apicomplexa	**Protozoa**
Platyhelminthes	-	-	Platyhelminthes	**Other Eumetazoa**
primates	-	-	primates	**Mammals**
Protozoa	-	-	-	**Protozoa**
Pseudoscorpionida	-	Pseudoscorpionida	Arachnida	**Arthropoda**
*Psoroptes**	-	Acari	Arachnida	**Arthropoda**
Psychodidae	Psychodidae	Diptera	Insecta	**Arthropoda**
Pteridophyta	-	-	Pteridophyta	**Plants**
*Pulex**	Siphonaptera	Diptera	Insecta	**Arthropoda**
rabbits	-	rabbits	lagomorphs	**Mammals**
rats	-	rats	rodents	**Mammals**
Reptiles	-	-	-	**Reptiles**
Rhabditida	Rhabditida	Secernentea	Nemata	**Other Eumetazoa**
ribbon worms*	-	-	Nemertea	**Other Eumetazoa**
rodents	-	-	rodents	**Mammals**
roundworms*	-	-	Nemata	**Other Eumetazoa**
ruminants	-	-	ruminants	**Mammals**
salamanders	-	-	salamanders	**Amphibians**
sand flies*	Psychodidae	Diptera	Insecta	**Arthropoda**
Sarcodina	-	Sarcodina	Sarcomastigophora	**Protozoa**
Sarcomastigophora	-	-	Sarcomastigophora	**Protozoa**
*Sarcoptes**	-	Acari	Arachnida	**Arthropoda**
sawflies*	-	Hymenoptera	Insects	**Arthropods**
*Schistosoma**	-	Trematoda	Platyhelminthes	**Other Eumatozoa**
Scorpiones	-	Scorpiones	Arachnida	**Arthropoda**
scorpions*	-	Scorpiones	Arachnida	**Arthropods**
Secernentea	-	Secernentea	Nemata	**Other Eumetazoa**
sheep	sheep	caprines	ruminants	**Mammals**
Siphonaptera	Siphonaptera	Diptera	Insecta	**Arthropoda**
snakes	-	-	snakes	**Reptiles**
*Sparganum**	-	Cestoda	Platyhelminthes	**Other Eumetazoa**
spiders*	-	Araneae	Arachnida	**Arthropoda**
Spirurida	Spirurida	Secernentea	Nemata	**Other Eumetazoa**
squirrels	-	squirrels	rodents	**Mammals**
*Stellantochasmus**	-	Trematoda	Platyhelminthes	**Other Eumetazoa**
stick insects*	-	Phasmatoptera	Insecta	**Arthropoda**
Strongylida	Strongylida	Secernentea	Nemata	**Other Eumetazoa**
*Strongyloides**	Rhabditida	Secernentea	Nemata	**Other Eumetazoa**
Suiformes	-	-	Suiformes	**Mammals**
swine*	-	pigs	Suiformes	**Mammals**
*Taenia**	-	Cestoda	Platyhelminthes	**Other Eumatozoa**
tapeworms*	-	Cestoda	Platyhelminthes	**Other Eumetazoa**
termites*	-	Isoptera	Insecta	**Arthropoda**
ticks*	-	Acari	Arachnida	**Arthropoda**
*Toxocara**	Ascarida	Secernentea	Nemata	**Other Eumetazoa**
*Toxoplasma**	-	-	Apicomplexa	**Protozoa**
Trematoda	-	Trematoda	Platyhelminthes	**Other Eumetazoa**
*Trichinella**	Trichocephalida	Adenophora	Nemata	**Other Eumetazoa**
Trichocephalida	Trichocephalida	Adenophora	Nemata	**Other Eumetazoa**
*Trombicula**	-	Acari	Arachnida	**Arthropoda**

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Alphabetical List of Organisms	Relationship between Broad and Narrow Terms for Organism Type (Narrowest Terms on the Left Hand Side and Broadest on the Right)			
Trypanosoma *	-	Mastigophora	Sarcomastigophora	**Protozoa**
Trichomonas *	-	Mastigophora	Sarcomastigophora	**Protozoa**
Trichostrongyloides *	Strongylida	Secernentea	Nemata	**Other Eumetazoa**
Trichuris *	Trichocephalida	Adenophora	Nemata	**Other Eumetazoa**
Tsetse flies *	Glossinidae	Diptera	Insecta	**Arthropoda**
Tunga *	Siphonaptera	Diptera	Insecta	**Arthropoda**
Turbellaria	-	Turbellaria	Platyhelminthes	**Other Eumetazoa**
turkeys	-	-	turkeys	**Birds**
turtles	-	-	turtles	**Reptiles**
Viruses	-	-	-	**Viruses**
wasps *	-	Hymenoptera	Insecta	**Arthropoda**
Wucheria *	Spirurida	Secernentea	Nemata	**Other Eumetazoa**
yak	yak	bovines	ruminants	**Mammals**

APPENDIX C: MATERIALS

TABLE 47. Alphabetical list of accepted terms for material types with hierarchical relationships. (**Level 2** states are indicated in **bold**, whilst non-bold refers to states of the Level 3 descriptor, Specific Material Types.)

Alphabetical List of Material Types	Hierarchical Relationship between Terms Pertaining to Material Types			
Alcohols	-	-	-	**Alcohols**
rayon	rayon	cellulose derivatives	pulp	**Fibres**
basketry (from cane etc.)	-	-	basketry (from cane etc.)	**Cane etc.**
basketry (from fibre)	-	-	basketry (from fibre)	**Fibres**
beads	-	-	beads	**Other Materials/ Chemicals**
beams/scantlings	-	beams/scantlings	timber	**Wood**
board (non-wood)	-	board (non-wood)	pulp	**Fibres**
brushwood	-	-	brushwood	**Wood**
Cane etc.	-	-	-	**Cane etc.**
cardboard	-	cardboard	pulp	**Fibres**
carved materials (non-wood)	-	-	carved materials (non-wood)	**Other Materials/ Chemicals**
carved wood	-	-	carved wood	**Wood**
cellophane	cellophane	cellulose derivatives	pulp	**Fibres**
cellulose acetates	cellulose acetates	cellulose derivatives	pulp	**Fibres**
cellulose derivatives	-	cellulose derivatives	pulp	**Fibres**
cloth	-	cloth	woven material	**Fibres**
columns	-	columns	timber	**Wood**
cord/string/twine	-	-	cord/string/twine	**Fibres**
Cork/Cork Substitutes	-	-	-	**Cork/Cork Substitutes**
drying oils	-	drying oils	oils	**Lipids**
dyes	-	-	dyes	**Tannins/Dyestuffs**
Essential Oils	-	-	-	**Essential Oils**
fats	-	-	fats	**Lipids**
fibreboard	-	fibreboard	pulp	**Fibres**
Fibres	-	-	-	**Fibres**
girders	-	girders	timber	**Wood**
gums	-	-	gums	**Gums/Resins**
Gums/Resins	-	-	-	**Gums/Resins**
industrial alcohols	-	-	industrial alcohols	**Alcohols**
inks	-	-	inks	**Tannins/Dyestuffs**
laminated wood	-	-	laminated wood	**Wood**
Latex/Rubber	-	-	-	**Latex/Rubber**
Lipids	-	-	-	**Lipids**
marquetry wood	-	-	marquetry wood	**Wood**
matting	-	-	matting	**Fibres**
mucilages	-	-	mucilages	**Gums/Resins**
netting	-	-	netting	**Fibres**
non-drying oils	-	non-drying oils	oils	**Lipids**
oils	-	-	oils	**Lipids**
oleoresins	-	-	oleoresins	**Gums/Resins**
Other Materials/Chemicals	-	-	-	**Other Materials/ Chemicals**
packing/stuffing/filling	-	-	packing/stuffing/filling	**Fibres**
paper	-	paper	pulp	**Fibres**
paper substitutes	-	-	paper substitutes	**Fibres**
particle board/chipboard	-	-	particle board/chip board	**Wood**
pilings	-	pilings	timber	**Wood**
plaiting	-	-	plaiting	**Fibres**
planks	-	planks	timber	**Wood**
plastics	plastics	cellulose derivatives	pulp	**Fibres**
plywood	-	-	plywood	**Wood**
poles (from cane etc.)	-	-	poles (from cane etc.)	**Cane etc.**
poles (from wood)	-	poles (from wood)	timber	**Wood**

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Alphabetical List of Material Types	Hierarchical Relationship between Terms Pertaining to Material Types			
props	-	props	timber	**Wood**
pulp	-	-	pulp	**Fibres**
resins	-	-	resins	**Gums/Resins**
sacking	-	sacking	woven material	**Fibres**
sawdust	-	-	sawdust	**Wood**
semi-drying oils	-	semi-drying oils	oils	**Lipids**
stains	-	-	stains	**Tannins/Dyestuffs**
stakes/pales/rails	-	stakes/pales/rails	timber	**Wood**
staves	-	staves	timber	**Wood**
struts	-	struts	timber	**Wood**
tannins	-	-	tannins	**Tannins/Dyestuffs**
Tannins/Dyestuffs	-	-	-	**Tannins/Dyestuffs**
thatch	-	-	thatch	**Fibres**
thread/yarn	-	-	thread/yarn	**Fibres**
timber	-	-	timber	**Wood**
tow	tow	cellulose derivatives	pulp	**Fibres**
turned wood	-	-	turned wood	**Wood**
Unspecified Materials	-	-	-	**Unspecified Materials**
veneer	-	-	veneer	**Wood**
Waxes	-	-	-	**Waxes**
Wood	-	-	-	**Wood**
wood board	-	-	wood board	**Wood**
wood chips	-	-	wood chips	**Wood**
wood wool	-	-	wood wool	**Wood**
woven material	-	-	woven material	**Fibres**

APPENDIX D: PRODUCTS

TABLE 48. Alphabetical list of accepted terms for the Level 3 descriptor, Products Used In, showing the hierachical relationships.

Products Used In	Narrow Term	Broader Term	Broadest Term
abrasives	-	-	abrasives
adhesives	-	-	adhesives
aeroplanes	-	aeroplanes	vehicles
agricultural tools	-	agricultural tools	tools
antioxidants	-	antioxidants	preservatives
architraves	-	architraves	joinery
arrow shafts	arrow shafts	arrows	weapons
arrow tips	arrow tips	arrows	weapons
arrows	-	arrows	weapons
artificial limbs	-	artificial limbs	medical accessories
awls	-	awls	tools
axe handles	axe handles	tool handles	tools
axles	-	axles	wheels
baby carriers	-	baby carriers	containers/holders
bags	-	bags	containers/holders
balconies	-	balconies	joinery
balls	-	balls	sports equipment
bandages	-	bandages	medical accessories
barns	barns	outbuildings	buildings
barrels/casks/tubs	-	barrels/casks/tubs	containers/holders
baskets	-	baskets	containers/holders
bathroom/toilet fitments	-	bathroom/toilet fitments	joinery
bearings	-	bearings	machine parts
bed frames	bed frames	beds	furniture
beds	-	beds	furniture
beehives	beehives	outbuildings	buildings
billiard balls	billiard balls	balls	sports equipment
bird cages	-	bird cages	containers/holders
birdlime	birdlime	traps/snares	weapons
blankets	-	blankets	furnishings
blocks (for hats)	-	blocks (for hats)	tools
blocks (for pulleys)	blocks	blocks and pulleys	tools
blocks (for rice paper)	-	blocks (for rice paper)	tools
blocks and pulleys	-	blocks and pulleys	tools
blocks/slabs (for butchers etc.)	-	blocks/slabs (for butchers etc.)	tools
blow pipes	-	blow pipes	weapons
blown idiophones	blown idiophones	idiophones	musical instruments
board game pieces	board game pieces	board games	toys/games
board games	-	board games	toys/games
boat keels	boat keels	boat/ship parts	vehicles
boat ribs	boat ribs	boat/ship parts	vehicles
boat/ship parts	-	boat/ship parts	vehicles
boats/ships	-	boats/ships	vehicles
bobbins/spools/reels	-	bobbins/spools/reels	tools
body deodorants	-	body deodorants	deodorants
body paints	body paints	skin cosmetics	cosmetics
books	-	books	printed material
bottle openers	-	bottle openers	tools
bottle stoppers	-	bottle stoppers	fasteners/closures
bow strings (weapons)	bow strings (weapons)	bows (weapons)	weapons
bows (for musical instruments)	bows (for musical instruments)	composite chordophones	musical instruments
bows (weapons)	-	bows (weapons)	weapons
boxes	-	boxes	containers/holders
bracelets	bracelets	'jewellery'/personal adornment	personal items
brake blocks	brake blocks	brakes	machine parts
brakes	-	brakes	machine parts
breath fresheners	-	breath fresheners	cleansers
bridges	-	bridges	constructions
brooches	brooches	'jewellery'/personal adornment	personal items
brushes/brooms	-	brushes/brooms	tools
buckets/pails	-	buckets/pails	containers/holders
buildings	-	-	buildings
buses	-	buses	vehicles
buttons	-	buttons	fasteners/closures
cabinets	-	cabinets	furniture
candles	-	candles	illuminants
candlesticks	-	candlesticks	containers/holders
canoes	-	canoes	vehicles
caravans	-	caravans	vehicles
carbon paper	carbon paper	maths/drawing equipment	scientific/technical equipment
carpentry tools	-	carpentry tools	tools

Products Used In	Narrow Term	Broader Term	Broadest Term
carpet beaters	-	carpet beaters	tools
carpets/rugs	-	carpets/rugs	furnishings
carrier poles	-	carrier poles	containers/holders
cars	-	cars	vehicles
caulking	caulking	waterproofers	coatings
cement	-	cement	adhesives
chairs	chairs	seating	furniture
chalk substitutes	chalk substitutes	maths/drawing equipment	scientific/technical equipment
chaplets	chaplets	'jewellery'/personal adornment	personal items
chess pieces	chess pieces	board games	toys/games
chew sticks	chew sticks	tooth cleaners	personal items
chopsticks	-	chopsticks	tools
chordophones	-	chordophones	musical instruments
cicatrices	cicatrices	skin cosmetics	cosmetics
cigar cases	cigar cases	smoker's equipment	personal items
cigarette holders	cigarette holders	smoker's equipment	personal items
cigarette wrappers	cigarette wrappers	smoker's equipment	personal items
clarifiers (not for water/food)	-	-	clarifiers (not for water/food)
cleansers	-	-	cleansers
clogs	clogs	footwear	clothing
clothes	-	clothes	clothing
clothes pegs	-	clothes pegs	tools
clothing	-	-	clothing
clubs	-	clubs	weapons
coagulants	-	-	coagulants
coasters/table mats	-	coasters/table mats	containers/holders
coat hangers	-	coat hangers	containers/holders
coatings	-	-	coatings
coffins	-	coffins	containers/holders
cogs	-	cogs	machine parts
coins/tallies	-	coins/tallies	personal items
comb	-	comb	personal items
composite chordophones	composite chordophones	chordophones	musical instruments
computer output	-	computer output	printed material
constructions	-	-	constructions
containers/holders	-	-	containers/holders
cosmetics	-	-	cosmetics
couches	couches	seating	furniture
coverings	-	coverings	walls
cradles	-	cradles	furniture
crates	-	crates	containers/holders
cricket bats	cricket bats	sports bats/racquets	sports equipment
crochet needles	crochet needles	needles	tools
crushers/mills/presses	-	crushers/mills/presses	tools
crutches	-	crutches	medical accessories
culverts	-	culverts	constructions
cupboards	-	cupboards	joinery
cups	-	cups	containers/holders
curtains	-	curtains	furnishings
cushions	-	cushions	furnishings
daggers	-	daggers	weapons
darts	-	darts	weapons
decks	-	decks	floors
decorative panels	decorative panels	panels	walls
deodorants	-	-	deodorants
depilatories	-	-	depilatories
descalers	-	-	descalers
detergents	-	detergents	cleansers
dice	-	dice	toys/games
digging sticks	-	digging sticks	tools
docks/harbours	-	docks/harbours	constructions
dolls	-	dolls	toys/games
door frames	-	door frames	joinery
door handles	-	door handles	joinery
doors	-	doors	joinery
drinking straws	-	drinking straws	tools
dugout canoes	dugout canoes	canoes	vehicles
earrings	earrings	'jewellery'/personal adornment	personal items
electric light blocks	-	electric light blocks	joinery
emulsifiers	-	-	emulsifiers
entomological labels	-	entomological labels	scientific/technical equipment
entomological mounts	-	entomological mounts	scientific/technical equipment
explosives	-	-	explosives
false hair	-	false hair	personal items
false teeth	-	false teeth	medical accessories
fans	-	fans	personal items
fasteners/closures	-	-	fasteners/closures
fences	-	fences	constructions
fermentation agents (non-food)	-	-	fermentation agents (non-food)
fermentation retarders (non-food)	-	-	fermentation retarders (non-food)

Products Used In	Narrow Term	Broader Term	Broadest Term
fire controllers	-	-	fire controllers
fire extinguishers	-	fire extinguishers	fire controllers
fire retarders	-	fire retarders	fire controllers
fireplaces	-	fireplaces	joinery
fish bait	-	fish bait	fishing equipment
fish hooks	-	fish hooks	fishing equipment
fish traps	-	fish traps	fishing equipment
fishing equipment	-	-	fishing equipment
fishing floats	-	fishing floats	fishing equipment
fishing lines	-	fishing lines	fishing equipment
fishing lures	-	fishing lures	fishing equipment
fishing nets	-	fishing nets	fishing equipment
fishing reels	-	fishing reels	fishing equipment
fishing rods	-	fishing rods	fishing equipment
flagpoles	-	flagpoles	constructions
floorboards	-	floorboards	floors
floors	-	-	floors
flutes	flutes	blown idiophones	musical instruments
food wrappers	food wrappers	wrappers	containers/holders
footballs	footballs	balls	sports equipment
footwear	-	footwear	clothing
forks	-	forks	tools
foundations	-	-	foundations
friction drums	friction drums	membranophones	musical instruments
furnishings	-	-	furnishings
furniture	-	-	furniture
furniture legs	-	furniture legs	furniture
game boards	game boards	board games	toys/games
gates	-	gates	joinery
gelling agents	-	-	gelling agents
gliders	-	gliders	vehicles
golf club shafts	golf club shafts	sports bats/racquets	sports equipment
grain stores	grain stores	outbuildings	buildings
graters	-	graters	tools
gun carriages	gun carriages	guns	weapons
gun stocks	gun stocks	guns	weapons
gunpowder	-	gun powder	explosives
guns	-	guns	weapons
hair conditioners	-	hair conditioners	cosmetics
hair dressings	-	hair dressings	personal items
hair dyes	-	hair dyes	cosmetics
hair oil/lacquer	-	hair oil/lacquer	cosmetics
hairbrushes	-	hairbrushes	personal items
hammers	-	hammers	tools
hammocks	-	hammocks	furniture
handles (of containers/holders)	-	handles	containers/holders
handrails	-	handrails	joinery
harnesses	-	harnesses	harnesses/tack
harnesses/tack	-	-	harnesses/tack
hat pins	-	hat pins	personal items
hats	hats	headgear	clothing
headgear	-	headgear	clothing
helmets	helmets	headgear	clothing
hen coops	hen coops	outbuildings	buildings
histological stains	-	histological stains	scientific/technical equipment
hockey sticks	hockey sticks	sports sticks/clubs/cues	sports equipment
hoops	-	-	hoops
house waterproofing	house waterproofing	waterproofers	coatings
household deodorants	-	household deodorants	deodorants
houses	-	houses	buildings
hubs	-	hubs	wheels
huts	-	huts	buildings
idiophones	-	idiophones	musical instruments
illuminants	-	-	illuminants
incense	-	-	incense
'jewellery'/personal adornment	-	'jewellery'/personal adornment	personal items
joinery	-	-	joinery
kitchen fitments	-	kitchen fitments	joinery
knitting needles	knitting needles	needles	tools
knives	-	knives	tools
lacquer	lacquer	paints/varnishes/thinners	coatings
ladder rungs	ladder rungs	ladders	tools
ladders	-	ladders	tools
lampshades	-	lampshades	furnishings
large buildings	-	large buildings	buildings
latex coagulants	-	latex coagulants	coagulants
lathe chucks	-	lathe chucks	machine parts
lattices	-	lattices	walls
levers	-	levers	tools
light fitments	-	light fitments	joinery

Products Used In	Narrow Term	Broader Term	Broadest Term
lipsticks	lipsticks	skin cosmetics	cosmetics
locks/weirs	-	locks/weirs	constructions
lubricants	-	-	lubricants
lures	-	lures	weapons
machine frames	-	machine frames	machine parts
machine keys	-	machine keys	machine parts
machine parts	-	-	machine parts
machines	-	-	machines
mallets	-	mallets	tools
manicure sticks	-	manicure sticks	personal items
map rollers	map rollers	maths/drawing equipment	scientific/technical equipment
masts/booms	masts/booms	boat/ship parts	vehicles
match sticks	-	match sticks	tools
maths/drawing equipment	-	maths/drawing equipment	scientific/technical equipment
mats	-	mats	furnishings
mattresses	-	mattresses	furniture
measures	measures	maths/drawing equipment	scientific/technical equipment
medical accessories	-	-	medical accessories
membranophones	-	membranophones	musical instruments
mines	-	mines	constructions
models	-	-	models
mordants	-	-	mordants
mortars	mortars	crushers/mills/presses	tools
mouldings	-	mouldings	joinery
mouthpieces (for musical instruments)	mouthpieces	blown idiophones	musical instruments
musical instruments	-	-	musical instruments
muzzles (for animals)	-	muzzles (for animals)	tools
nails	-	nails	fasteners/closures
necklaces	necklaces	'jewellery'/personal adornment	personal items
needles	-	needles	tools
newspapers	-	newspapers	printed material
oars/sculls	oars/sculls	boat/ship parts	vehicles
oil wells	-	oil wells	constructions
ornaments	-	ornaments	furnishings
outbuildings	-	outbuildings	buildings
paddles	paddles	boat/ship parts	vehicles
paints	paints	paints/varnishes/thinners	coatings
paints/varnishes/thinners	-	paints/varnishes/thinners	coatings
panels	-	panels	walls
parquet floors	-	parquet floors	floors
patterns	-	patterns	tools
paving blocks	paving blocks	roads	constructions
pegs	-	pegs	fasteners/closures
pencils	pencils	maths/drawing equipment	scientific/technical equipment
pens	pens	maths/drawing equipment	scientific/technical equipment
perfumes	-	-	perfumes
periodicals	-	periodicals	printed material
personal items	-	-	personal items
pestles	pestles	crushers/mills/presses	tools
picture frames	-	picture frames	furnishings
picture rails	-	picture rails	joinery
piers/jetties	-	piers/jetties	constructions
pillows	-	pillows	furnishings
pincushions	-	pincushions	tools
pipes (musical instruments)	pipes	blown idiophones	musical instruments
pipes (smoker's)	pipes (smoker's)	smoker's equipment	personal items
planes (for carpentry)	-	planes (for carpentry)	tools
plant pots	-	plant pots	containers/holders
plant supports	-	plant supports	tools
plastic extenders	-	-	plastic extenders
plasticisers	-	-	plasticisers
plastics	-	-	plastics
plates/bowls	-	plates/bowls	containers/holders
plucked idiophones	plucked idiophones	idiophones	musical instruments
plugs	-	plugs	fasteners/closures
plugs	-	plugs	tools
polishers	-	polishers	abrasives
porches	-	porches	joinery
pot plant holders	-	pot plant holders	furnishings
pot pourri		pot pourri	furnishings
pottery	-	pottery	containers/holders
preservatives	-	-	preservatives
printed material	-	-	printed material
printing agents	printing agents	maths/drawing equipment	scientific/technical equipment
propellers	-	propellers	machine parts
protective colloids	-	protective colloids	coatings
protective skin creams	protective skin creams	skin cosmetics	cosmetics
pulleys	pulleys	blocks and pulleys	tools

Products Used In	Narrow Term	Broader Term	Broadest Term
punishment aids	-	punishment aids	weapons
punt poles	punt poles	boat/ship parts	vehicles
purifiers (non-water)	-	-	purifiers (non-water)
purses	-	purses	containers/holders
quivers	-	quivers	weapons
rafts	-	rafts	vehicles
railway sleepers	railway sleepers	railways	constructions
railways	-	railways	constructions
rakes	-	rakes	tools
razor strops	-	razor strops	personal items
rims	-	rims	wheels
rivets	-	rivets	fasteners/closures
road grit	road grit	roads	constructions
roads	-	roads	constructions
rollers	-	rollers	tools
roofs	-	-	roofs
ropes	-	-	ropes
rosaries	rosaries	'jewellery'/personal adornment	personal items
rowlocks	rowlocks	boat/ship parts	vehicles
rubbed idiophones	rubbed idiophones	idiophones	musical instruments
rudders	rudders	boat/ship parts	vehicles
rulers	rulers	maths/drawing equipment	scientific/technical equipment
sabres	-	sabres	weapons
sacks	-	sacks	containers/holders
saddles	-	saddles	harnesses/tack
sails	sails	boat/ship parts	vehicles
sandals	sandals	footwear	clothing
sandpaper substitutes	-	sandpaper substitutes	abrasives
sashes/blinds	-	sashes/blinds	furnishings
sawdust-magnesite floors	-	sawdust-magnesite floors	floors
scabbards/sheaths	-	scabbards/sheaths	weapons
scaffolding	-	scaffolding	tools
scientific/technical equipment	-	-	scientific/technical equipment
screens	-	screens	walls
screws	-	screws	fasteners/closures
seating	-	seating	furniture
set squares	set squares	maths/drawing equipment	scientific/technical equipment
sewage deodorants	-	sewage deodorants	deodorants
sewing needles	sewing needles	needles	tools
shampoo	-	shampoo	cleansers
shaving creams	-	shaving creams	cosmetics
sheds	sheds	outbuildings	buildings
shelves	-	shelves	joinery
shields	-	shields	weapons
shingles	-	shingles	roofs
shoe trees	-	shoe trees	containers/holders
shoemaker's lasts	-	shoemaker's lasts	tools
shoes	shoes	footwear	clothing
shutters	-	shutters	joinery
shuttles	-	shuttles	tools
sieves	-	sieves	tools
simple chordophones	simple chordophones	chordophones	musical instruments
singing membranes	singing membranes	membranophones	musical instruments
sizing agents	-	sizing agents	coatings
ski stocks	-	ski stocks	sports equipment
skin cosmetics	-	skin cosmetics	cosmetics
skin darkeners/tans	skin darkeners/tans	skin cosmetics	cosmetics
skin lighteners	skin lighteners	skin cosmetics	cosmetics
skin lotions/creams	skin lotions/creams	skin cosmetics	cosmetics
skirtings	-	skirtings	joinery
sledges	-	sledges	vehicles
slings	-	slings	medical accessories
slippers	slippers	footwear	clothing
smoker's equipment	-	smoker's equipment	personal items
snooker/billiard cues	snooker/billiard cues	sports sticks/clubs/cues	sports equipment
snooker/billiard tables	-	snooker/billiard tables	sports equipment
snuff boxes	-	snuff boxes	personal items
soap	-	soap	cleansers
soap substitutes	-	soap substitutes	cleansers
spacecraft	-	spacecraft	vehicles
spear shafts	spear shafts	spears	weapons
spears	-	spears	weapons
spectacle cases	-	spectacle cases	personal items
splints	-	splints	medical accessories
spokes	-	spokes	wheels
sponge substitutes	-	sponge substitutes	personal items
spoons	-	spoons	tools
sports bats/racquets	-	sports bats/racquets	sports equipment
sports equipment	-	-	sports equipment
sports nets	-	sports nets	sports equipment

Products Used In	Narrow Term	Broader Term	Broadest Term
sports sticks/clubs/cues	-	sports sticks/clubs/cues	sports equipment
sports tables	-	sports tables	sports equipment
stables	stables	outbuildings	buildings
stairs/fixed steps	-	stairs/fixed steps	joinery
standard gold weights	standard gold weights	weights	tools
stiffeners (for clothes)	-	stiffeners (for clothes)	coatings
stinging crystals	-	stinging crystals	weapons
stools	stools	seating	furniture
straps	-	straps	containers/holders
stretchers	-	stretchers	medical accessories
strings (for musical instruments)	strings (for musical instruments)	composite chordophones	musical instruments
struck drums	struck drums	membranophones	musical instruments
struck idiophones	struck idiophones	idiophones	musical instruments
surgical implements	-	surgical implements	tools
surgical powder	-	surgical powder	medical accessories
table tops	table tops	tables	furniture
tables	-	tables	furniture
tatooing spines	-	tatooing spines	tools
tattoos	tattoos	skin cosmetics	cosmetics
telegraph poles	-	telegraph poles	constructions
temporary shelters	-	temporary shelters	buildings
tennis racquets	tennis racquets	sports bats/racquets	sports equipment
tent frames	tent frames	tents	buildings
tent pegs	-	tent pegs	tools
tents	-	tents	buildings
textile waterproofing	textile waterproofing	waterproofers	coatings
thatching spars	-	thatching spars	roofs
thinners	thinners	paints/varnishes/thinners	coatings
throwing sticks/boomerangs	-	throwing sticks/boomerangs	weapons
tiles	-	tiles	roofs
toilet 'paper'	-	toilet 'paper'	personal items
tongs	-	tongs	tools
tool handles	-	tool handles	tools
tools	-	-	tools
tooth blackeners	-	tooth blackeners	personal items
tooth cleaners	-	tooth cleaners	personal items
toothbrushes	toothbrushes	tooth cleaners	personal items
toothpaste/dentrifice	-	toothpaste/dentrifice	cleansers
torches	-	torches	illuminants
torches	-	torches	tools
toys/games	-	-	toys/games
trailers	-	trailers	vehicles
train carriages	-	train carriages	vehicles
traps/snares	-	traps/snares	weapons
trays	-	trays	containers/holders
troughs	-	troughs	containers/holders
trunks/cases	-	trunks/cases	containers/holders
tunnels/subways	-	tunnels/subways	constructions
umbrellas/parasols	-	umbrellas/parasols	personal items
varnishes	varnishes	paints/varnishes/thinners	coatings
vehicles	-	-	vehicles
vinyl resin emulsions	-	vinyl resin emulsions	coatings
wagons/carts	-	wagons/carts	vehicles
walking sticks	-	walking sticks	personal items
wall hangings	-	wall hangings	furnishings
walls	-	-	walls
wardrobes	-	wardrobes	furniture
water pipes	-	water pipes	joinery
waterproofers	-	waterproofers	coatings
wattles/laths	-	wattles/laths	walls
weapons	-	-	weapons
weather boards	-	weather boards	walls
weather forecasters	-	weather forecasters	tools
weaver's beams	-	weaver's beams	tools
weights	-	weights	tools
wells	-	wells	constructions
wheels	-	-	wheels
whipple trees	-	whipple trees	harnesses/tack
whips	-	whips	weapons
whisks	-	whisks	tools
windmills	windmills	outbuildings	buildings
window frames	-	window frames	joinery
wood adhesives	-	wood adhesives	adhesives
work surfaces	-	work surfaces	joinery
wrappers	-	wrappers	containers/holders
wreaths	-	wreaths	personal items
yokes		yokes	harnesses/tack

APPENDIX E: BODY PARTS AND *PROCESSES*

TABLE 49. Master List of Body Parts and *Processes*.

chromosomes
DNA
RNA

BLOOD SYSTEM
agglutination
blood
bone marrow
coagulation
erythrocytes
fibrinolysis
leukocytes
plasma
platelet aggregation
platelets
spleen

CIRCULATORY SYSTEM
aorta
arteries
arterioles
blood pressure
blood vessels
capillaries
carotid
cerebrovascular circulation
endocardium
epicardium
heart
heart beat
myocardium
pericardium
pulmonary circulation
valves of heart
veins

DIGESTIVE SYSTEM
abdomen
anal canal
anus
appendix
bile duct
caecum
colon
duodenum
gall bladder
gums
hard palate
ileum
intestine
jejunum
large intestine
lips
liver
mesenteric glands
mouth
oesophagus
pancreas
parotid
peritoneum
rectum
rumen
salivary glands
small intestine
soft palate
stomach
teeth
tongue
uvula

ENDOCRINE SYSTEM
adrenal gland
glands
growth
hypothalamus
islet cells of Langerhans
parathyroid
pineal gland
pituitary
sexual development
thymus
thyroid

GENITOURINARY SYSTEM
areola
Bartholin's gland
bladder
breasts
cervix
climacterium
clitoris
copulation
corpus luteum
eggs
ejaculatory duct
epididymis
Fallopian tubes
female breasts
female fertility
female genitals
foreskin
genital tract
germ cells
glans penis
hymen
implantation
kidney cells
kidneys
labia
libido
male breasts
male fertility
male genitals
menopause
menstruation
nipples
ovaries
oviduct
ovulation
pelvic cellular tissue
penis
perineum
placenta
post menopause
prostate
scrotum
semen
seminal vesicles
sperm
spermatic chord
testes
ureter
urethra
urinary tract
urination
uterine ligament
uterine mucosae
uterus
vagina
vaginal mucosae
vas deferens
vulva

IMMUNE SYSTEM
lymph
lymph glands
lymph nodes
lymph vessels
lymphocytes

METABOLIC SYSTEM
amino acid metabolism
amino acid transport
calcium metabolism
carbohydrate metabolism
carbohydrate transport
copper metabolism
energy metabolism
enzyme activity
fluid, electrolyte and acid balance
iron metabolism
lipoid metabolism
magnesium metabolism
mineral metabolism
phosphorous metabolism
plasma protein synthesis
porphyria metabolism
purine and pyrimidine metabolism
sweating
temperature regulation

/continued over

MUSCULAR-SKELETAL SYSTEM
ankles
arms
back
body
bones
bursa
cartilages
chest
clavicles
coccyx
connective tissues
elbows
extremities
face
fascia
fatty tissues
feet
fingers
hands
head
hips
histiocytes
intervertebral discs
jaws
joints
knees
legs
ligaments
limbs
lower limbs
lumbar region
mandible
mast cells
maxilla
muscles
neck
pelvis
ribs
sacroiliac region
sacrum
shoulders
skeletal muscles
skull
smooth muscles
soft tissues
spine
sternum
synovia
tendons
thighs
toes
upper limbs
vertebrae
wrists

NERVOUS SYSTEM
autonomous nervous system
brain
brain stem
central nervous system
cerebral meninges
cerebrum
cranial nerves
facial nerves
frontal lobe of brain
ganglia
intercranial region
meninges
motor nerves
nerve roots
nerves
neurotransmitters
occipital lobe of brain
parasympathetic nervous system
parietal lobe of brain
peripheral nerves
peripheral nervous system
sensory nerves
spinal chord
spinal meninges
spinal plexus
sympathetic nervous system
temporal lobe of brain
ventricles

NUTRITION

PREGNANCY/BIRTH/PUERPERIUM
birth
labour
lactation
post partum
pregnancy
puerperium

RESPIRATORY SYSTEM
adenoids
bronchi
bronchioles
diaphragm
epiglottis
glottis
hypopharynx
large cells of lung
larynx
lungs
mediastinum
nasal tract
nasopharynx
nose
oropharynx
pharynx
pleura
respiratory mucosae
sinuses
small cells of lung
subglottis
supraglottis
thorax
throat
tonsils
trachea
SENSORY SYSTEM
acoustic nerves
auditory canals
balance
choroids
ciliary bodies
conjunctivae
corneas
eardrums
ears
Eustachian tubes
eye movements
eyelids
eyes
globes
hearing
inner ears
irises
lachrymal ducts
lachrymal glands
lachrymal system
lenses
mastoids
middle ears
optic nerves
orbits of eyes
ossicles
outer ears
pupils
refraction and accommodation
retinas
sclerae
smell
taste
touch
tympanic membranes
vision
vitreous bodies

SKIN/SUBCUTANEOUS CELLULAR TISSUE
beard
eyebrows
fur
groin
hair
hair follicles
hoofs
moulting
nails
navel
perianal area
scalp
sebaceous glands
skin
skin of specific areas
subcutaneous cellular tissue
sweat glands

TABLE 50. Alphabetical list of Body Parts and *Processes*.

abdomen
acoustic nerves
adenoids
adrenal gland
agglutination
amino acid metabolism
amino acid transport
anal canal
ankles
anus
aorta
appendix
areola
arms
arteries
arterioles
auditory canals
autonomous nervous system
back
balance
Bartholin's gland
beard
bile duct
birth
bladder
blood
blood pressure
BLOOD SYSTEM
blood vessels
body
bone marrow
bones
brain
brain stem
breasts
bronchi
bronchioles
bursa
caecum
calcium metabolism
capillaries
carbohydrate metabolism
carbohydrate transport
carotid
cartilages
central nervous system
cerebral meninges
cerebrovascular circulation
cerebrum
cervix
chest
choroids
chromosomes
ciliary bodies
CIRCULATORY SYSTEM
clavicles
climacterium
clitoris
coagulation
coccyx
colon
conjunctivae
connective tissues
copper metabolism
copulation
corneas
corpus luteum
cranial nerves
diaphragm
DIGESTIVE SYSTEM
DNA
duodenum
eardrums
ears
eggs
ejaculatory duct
elbows
endocardium
ENDOCRINE SYSTEM
energy metabolism
enzyme activity
epicardium
epididymis
epiglottis
erythrocytes
Eustachian tubes
extremities
eye movements
eyebrows
eyelids
eyes
face
facial nerves
Fallopian tubes
fascia
fatty tissue
feet
female breasts
female fertility
female genitals
fibrinolysis
fingers
fluid, electrolyte and acid balance
foreskin
frontal lobe of brain
fur
gall bladder
ganglia
genital tract
GENITOURINARY SYSTEM
germ cells
glands
glans penis
globes
glottis
groin
growth
gums
hair
hair follicles
hands
hard palate
head
hearing
heart
heart beat
hips
histiocytes
hoofs
hymen
hypopharynx
hypothalamus
ileum
IMMUNE SYSTEM
implantation
inner ears
intercranial region
intervertebral discs
intestine
irises
iron metabolism
islet cells of Langerhans
jaws
jejunum
joints
kidney cells
kidneys
knees
labia
labour
lachrymal ducts
lachrymal glands
lachrymal system
lactation
large cells of lung
large intestine
larynx
legs
lenses
leukocytes
libido
ligaments
limbs
lipoid metabolism
lips
liver
lower limbs
lumbar region
lungs
lymph
lymph glands
lymph nodes
lymph vessels
lymphocytes
magnesium metabolism
male breasts
male fertility
male genitals
mandibles
mast cells
mastoid
maxilla
mediastinum
meninges
menopause
menstruation
mesenteric glands
METABOLIC SYSTEM
middle ears

/continued over

mineral metabolism
motor nerves
moulting
mouth
muscles
MUSCULAR-SKELETAL SYSTEM
myocardium
nails
nasal tract
nasopharynx
navel
neck
nerve roots
nerves
NERVOUS SYSTEM
neurotransmitters
nipples
nose
NUTRITION
occipital lobe of brain
oesophagus
optic nerves
orbits of eyes
oropharynx
ossicles
outer ears
ovaries
oviduct
ovulation
pancreas
parasympathetic nervous system
parathyroid
parietal lobe of brain
parotid
pelvic cellular tissue
pelvis
penis
perianal area
pericardium
perineum
peripheral nerves
peripheral nervous system
peritoneum
pharynx
phosphorous metabolism
pineal gland
pituitary
placenta
plasma
plasma protein synthesis
platelet aggregation
platelets
pleura
porphyria metabolism
post menopause
post partum
pregnancy
PREGNANCY/BIRTH/PUERPERIUM
prostate
puerperium
pulmonary circulation
pupils
purine and pyrimidine metabolism
rectum
refraction and accommodation
respiratory mucosae
RESPIRATORY SYSTEM
retinas
ribs
RNA
rumen
sacroiliac region
sacrum
salivary glands
scalp
sclerae
scrotum
sebaceous glands
semen
seminal vesicles
sensory nerves
SENSORY SYSTEM
sexual development
shoulders
sinus
skeletal muscles
SKIN/SUBCUTANEOUS CELLULAR TISSUE
skin
skin of specific areas
skull
small cells of lung
small intestine
smell
smooth muscles
soft palate
soft tissues
sperm
spermatic chord
spinal chord
spinal meninges
spinal plexus
spine
spleen
sternum
stomach
subcutaneous cellular tissue
subglottis
supraglottis
sweat glands
sweating
sympathetic nervous system
synovia
taste
teeth
temperature regulation
temporal lobe of brain
tendons
testes
thighs
thorax
throat
thymus
thyroid
toes
tongue
tonsils
touch
trachea
tympanic membranes
upper limbs
ureter
urethra
urinary tract
urination
uterine ligament
uterine mucosae
uterus
uvula
vagina
vaginal mucosae
valves of heart
vas deferens
veins
ventricles
vertebrae
vision
vitreous bodies
vulva
wrists

APPENDIX F: VERTEBRATE POISONS

TABLE 51. Alphabetical list of Disorders Caused/*Harmful Effects* of Vertebrate Poisons.

abnormalities
abortifacient[1]
abscesses
achromatrichia
adenopathy
agenesis
albuminuria
allergic arthritis
allergic asthma
allergic colitis
allergic contact dermatitis
allergic gastroenteritis
allergic reactions
allergic rhinitis (non-pollen)
allergic urticaria
alzheimers disease
amblyopia
amenorrhoea
amnesia
amyotrophic lateral sclerosis
anabolic
anaemia
anaesthetic
analgesic
anaphrodisiac
anaphylactic shock
androgenic
ankylosis
anodyne
anticoagulant
antioestrogenic
antioxidant
antiperspirant
anuria
anxiety
aphrodisiac
appetite stimulant
appetite suppressant
arrhythmia
artherosclerosis
asphyxia
asthenia
asthma
astringent
ataxia
atrophy
autoimmune disease
azoospermy
baldness
behaviour disturbances
benign neoplasms
biliousness
blennorhagia
blindness
blisters
bloat
blood system disorders
boils
bradycardia
brain damage (anoxic)
breathlessness
bronchodilator
bruises
burns
burns (internal)
calluses
cannabis dependence
carbuncle
carcinomas *in situ*
cardiovascular stimulant
caries
cataracts
cerebrovascular haemorrhages
cervical dilator
chills
choleretic
cholestasis
cholestatic
choreas
circulatory system disorders
cirrhosis
clots
cocaine dependence
colic
comas
confusion
congenital abnormalities
congestion
constipation
contact dermatitis
contractions
convulsions
coughs
cramp
cysts
cytotoxic
dandruff
deafness
death
deformities
degeneration
dehydration
delirium
delusion
dementia
depilatory[2]
deposits
depressant
dermatitis
dermatitis due to internally taken substances
diabetes mellitus
diabetes insipidus
diaphoretic
diarrhoea
digestive system disorders
diplopia
displacement
diuretic
dizziness
drug dependence
drug psychoses
duodenal ulcers
dysfunction
dysmennorhoea
dyspareunia
dysrhythmia
dysuria
early or threatened labour
eczema
emetic
emmenagogue
emotional disturbances
emphysema
endocrine system disorders
enzyme inhibitor
epilepsy
erythema
euphoriant
extrinsic allergic alveolitis
failure
fainting
female infertility
female sterility
fever
fibrillation
flatulence
fluid overload
foetal growth retardation
free radical scavenger
galactorrhoea
gallstones
gastric ulcers
gastro-jejunal ulcers
genitourinary system disorders
glaucoma
glucosidase inhibitor
goitre
gout
gynecomastia
haematuria
haemolysis
haemorrhages
haemorrhages of pregnancy
hair loss
hallucinogen dependence
hallucinogenic
hallucinosis
hay fever
heart disease
hepatic stimulant
hiccoughs
hirsutism
hydragogue
hypercholesterolaemia
hypercholia
hyperglycaemia
hyperoestrogenism
hyperparathyroidism
hypersomnia
hypertension
hypertension of pregnancy
hyperthermia
hypertrophy
hypnotic
hypocalcaemia
hypoglycaemia
hypoparathyroidism
hyposomnia
hypotension
hypothermia
hypothyroidism
hypoxaemia
ill-defined symptoms
immunostimulant
immunosuppressant
impotence
indigestion
inflammation
injuries
insanity
internal bleeding
intoxicant
intoxication
intoxication (due to drugs)
irritable bowel syndrome
irritation
ischaemia
itching
kidney stones

/continued over

[1]use for accidental poisonings only; for active use as an abortifacient see **SOCIAL USES**
[2]see **MATERIALS** for cosmetic depilatories

labour induction
lactation stimulant
lathyrism
laxative
lesions
leukaemias
leukorrhoea
lichen
low vision
lupus erythrematosus
malaise/fatigue
male infertility
male sterility
malignant neoplasms
mania
medicine poisoning
menorrhagia
mental disability
metabolic system disorders
mental disorders
metrorrhagia
migraines
miotic
miscarriages
mitotic
muscle relaxant
muscle stimulant
muscular-skeletal system disorders
mutagenic
mydriatic
myopathy
mystagmus
narcolepsy
narcotic
natriuretic
nausea
necrosis
neoplasms of uncertain behaviour
neoplasms
nerve injury
nervous breakdowns
nervous excitement
nervous system disorders
nicotine dependence
nightmares
non-dependent drug abuse
noxious foods
nutritional disorders
obstructions
oedema
oestrogenic
oligomennorhoea
oligospermy
oligurea
organ failure
organic impotence
osteoporosis
oxidase inhibitor
pain
palsy
panic
paralysis
paranoia
Parkinson's disease
peptic ulcers
photosensitivity
pigmentation
pneumonia
poisonings
pollakiuria
polycythemia
polyps
polyuria
pregnancy/birth/puerperium disorders
pre-menstrual syndrome
premature ejaculation
primary malignant neoplasms
prolapse
proteinase inhibitor
purgative
pustules
rashes
refrigerant
relaxant
repellent
respiratory system disorders
respiratory stimulant
retina vascular changes
retinopathy
scars
secondary malignant neoplasms
sedative
sensory system disorders
shock
sialaporia
sialism
skin/subcutaneous cellular tissue disorders
snoring
sores
spasms
sprains
squints
steroidal
stimulant
stings
stricture
superficial injuries
teratogenic
thorn/splinter injuries
tinnitus
tranquilliser
trauma (psychic)
trembling
trypsin inhibitor
ulcers
unspecified neoplasms
urethral leakage
urinary incontinence
urinary retention
urticaria
uterine relaxant
uterine stimulant
varicose veins
vascular anomalies
vasoconstriction
vasodilation
visual disturbance
vitiligo
voice loss
vomiting
warts
weight loss
whitlows
wounds

APPENDIX G: MEDICINES

TABLE 52. Alphabetical list of medicinal terms showing the accepted states for Level 3 (Disorders Treated/*Medicinal Effects* or Body Parts/*Processes* Treated) and related **Level 2** states.

KEY TO TABLE 52

Column 1: Terms with * are non-accepted terms (the adjacent columns show how these terms should be coded). Terms with no asterisk are accepted states. Terms in bold are **Level 2** states.

Column 3: Interpretation of numbers in Body Parts/*Processes* Treated.
1. Select relevant Body Part state from Table 33 if necessary.
2. Select relevant states from Body Parts/*Processes* within **Circulatory System Disorders** if this adds information.
3. Select relevant states from Body Parts within **Digestive System Disorders** if this adds information.
4. No Level 3 Body Parts/*Processes* need to be specified.
5. Select relevant states from Body Parts within **Muscular-Skeletal System Disorders** if this adds information.
6. Select relevant states from from Body Parts within **Nervous System Disorders** if this adds information.
7. Select relevant states from Body Parts/*Processes* within **Respiratory System Disorders** if this adds information.
8. Select relevant states from Body Parts/*Processes* within **Skin/Subcutaneous Cellular Tissue Disorders.**

Column 3: Interpretation of abbreviations of Body Parts/*Processes* Treated.
BS - Blood System, CS - Circulatory System, DS - Digestive System, ES - Endocrine System, GS - Genitourinary System, IS - Immune System, MSS - Muscular-Skeletal System, NS - Nervous System, RS - Respiratory System, SS - Sensory System, SST - Skin/Subcutaneous Cellular Tissue.

Medicinal Terms (both accepted and non-accepted)	Level 3 — Disorders Treated/*Medicinal Effects*[1]	Level 3 — Body Parts/*Processes* Treated[2]	Level 2 states
abdomen	-	abdomen	**Digestive System Disorders**
Abnormalities[3]	-	-	**Abnormalities**
abortions*	miscarriages	*pregnancy*	**Pregnancy/Birth/Puerperium Disorders**
abrasions*	superficial injuries	1	**Injuries**
abscesses	abscesses	1	**Injuries**
acariasis*	chiggers	1	**Infections/Infestations**
acariasis*	scabies	1	**Infections/Infestations**
achromatrichia	achromatrichia	hair	**Skin/Subcutaneous Cellular Tissue Disorders**
acidosis	acidosis	*fluid, electrolyte and acid balance*	**Metabolic System Disorders**
acne	acne	8, 1	**Skin/Subcutaneous Cellular Tissue Disorders**
acoustic nerves	-	acoustic nerves	**Sensory System Disorders**
acquired deformities	acquired deformities	5	**Muscular-Skeletal System Disorders**
actinomycosis	actinomycosis	1	**Infections/Infestations**
adaptogenic	*adaptogenic*	4	**Mental Disorders**
adenoids	-	adenoids	**Respiratory System Disorders**
adenoma*	benign neoplasms	1	**Neoplasms**
adenopathy	adenopathy	4	**Ill-Defined Symptoms**
adenoviral infections	adenoviral infections	1	**Infections/Infestations**
adrenal gland	-	adrenal gland	**Endocrine System Disorders**
agenesis	agenesis	1	**Abnormalities**
agglutination	-	*agglutination*	**Blood System Disorders**
AIDS	AIDS	1	**Infections/Infestations**
air pressure (excessive)*	excessive air pressure	4	**Poisonings**
albuminuria	albuminuria	*urination*	**Genitourinary System Disorders**
alcohol dependence	alcohol dependence	4	**Mental Disorders**
alcohol intoxication*	intoxication due to alcohol	4	**Poisonings**
alcohol poisoning	alcohol poisoning	4	**Poisonings**
alcoholic psychoses	alcoholic psychoses	4	**Mental Disorders**

[1] words in italics correspond to effects of medicines, words in Roman refer to disorders that are treated
[2] words in italics correspond to processes that are treated, words in Roman correspond to body parts that are treated
[3] where type of abnormality is not specified, the use is coded under the relevant **Level 2** state (e.g. **Muscular-Skeletal System Disorders**), not under **Abnormalities**

Medicinal Terms (both accepted and non-accepted)	Level 3 — Disorders Treated/*Medicinal Effects*[1]	Level 3 — Body Parts/*Processes* Treated[2]	Level 2 states
alkalosis	alkalosis	*fluid, electrolyte and acid balance*	Metabolic System Disorders
allergic arthritis	allergic arthritis	5	Muscular-Skeletal System Disorders
allergic asthma	allergic asthma	-	Respiratory System Disorders
allergic colitis	allergic colitis	3	Digestive System Disorders
allergic contact dermatitis	allergic contact dermatitis	8, 1	Skin/Subcutaneous Cellular Tissue Disorders
allergic gastroenteritis	allergic gastroenteritis	3	Digestive System Disorders
allergic reactions	allergic reactions	4	Poisonings
allergic rhinitis (non-pollen)	allergic rhinitis (non-pollen)	-	Respiratory System Disorders
allergic urticaria	allergic urticaria	8, 1	Skin/Subcutaneous Cellular Tissue Disorders
allescheriosis	allescheriosis	1	Infections/Infestations
alopecia*	hair loss	hair	Skin/Subcutaneous Cellular Tissue Disorders
alveoli	-	alveoli	Respiratory System Disorders
alveolitis*	inflammation	alveoli, RS	Inflammation
Alzheimer's disease	Alzheimer's disease	6	Nervous System Disorders
amblyopia	amblyopia	*vision*	Sensory System Disorders
amenorrhoea	amenorrhoea	*menstruation*	Genitourinary System Disorders
amino acid metabolism	-	*amino acid metabolism*	Metabolic System Disorders
amino acid transport	-	*amino acid transport*	Metabolic System Disorders
amnesia	amnesia	4	Mental Disorders
amoebiasis	amoebiasis	1	Infections/Infestations
amoebic dysentery	amoebic dysentery	1	Infections/Infestations
amoebic dysentery	amoebic dysentery	1	Infections/Infestations
amphetamine dependence	amphetamine dependence	4	Mental Disorders
amyloidosis	amyloidosis	4	Metabolic System Disorders
amyotrophic lateral sclerosis	amyotrophic lateral sclerosis	6	Nervous System Disorders
anabolic	*anabolic*	*sexual development*	Endocrine System Disorders
anaemia	anaemia	blood	Blood System Disorders
anaesthetic	*anaesthetic*	1	Pain
anal canal	-	anal canal	Digestive System Disorders
anal fissures	anal fissures	anus	Digestive System Disorders
analgesic	*analgesic*	1	Pain
annelid worm infestations	analid worms infestations	1	Infections/Infestations
anaphrodisiac	*anaphrodisiac*	*libido*	Genitourinary System Disorders
anaphylactic shock	anaphylactic shock	4	Poisonings
androgenic	*androgenic*	*sexual development*	Endocrine System Disorders
angina	angina	2	Circulatory System Disorders
ankles	-	ankles	Muscular-Skeletal System Disorders
ankylosis	ankylosis	5	Muscular-Skeletal System Disorders
anodyne	*anodyne*	1	Pain
anomalies*	congenital abnormalities	1	Abnormalities
anorexia nervosa	anorexia nervosa	4	Mental Disorders
anoxic brain damage*	brain damage (anoxic)	brain	Nervous System Disorders
anterior horn cell disease	anterior horn cell disease	6	Nervous System Disorders
anthelmintic	*anthelmintic*	4	Infections/Infestations
anthrax	anthrax	1	Infections/Infestations
antibacterial	*antibacterial*	4	Infections/Infestations
*antibiotic**[4]	*antimicrobial*	4	Infections/Infestations
anticoagulant	*anticoagulant*	*coagulation*	Blood System Disorders
antidepressant dependence	antidepressant dependence	4	Mental Disorders
antifungal	*antifungal*	4	Infections/Infestations
antihistaminic	*antihistaminic*	4	Poisonings
antimicrobial	*antimicrobial*	4	Infections/Infestations
antioestrogenic	*antioestrogenic*	*sexual development*	Endocrine System Disorders
antioxidant	*antioxidant*	4	Nutritional Disorders
antiperspirant	*antiperspirant*	*sweating*	Metabolic System Disorders
antiprotozoal	*antiprotozoal*	4	Infections/Infestations
antiseptic[5]	*antiseptic*	8, 1	Skin/Subcutaneous Cellular Tissue Disorders
antiviral	*antiviral*	4	Infections/Infestations
anuria	anuria	*urination*	Genitourinary System Disorders
anus	-	anus	Digestive System Disorders
anxiety	anxiety	4	Mental Disorders
aorta	-	aorta	Circulatory System Disorders
aphrodisiac	*aphrodisiac*	*libido*	Genitourinary System Disorders

[4] see also antiseptic and disinfectant in **Skin/Subcutaneous Cellular Tissue Disorders**
[5] for antimicrobial see also **Infections/Infestations**

Medicinal Terms (both accepted and non-accepted)	Level 3 — Disorders Treated/*Medicinal Effects*[1]	Level 3 — Body Parts/*Processes* Treated[2]	Level 2 states
appendicitis*	inflammation	appendix, DS	**Inflammation**
appendix	-	appendix	**Digestive System Disorders**
appetite stimulant	*appetite stimulant*	4	**Nutritional Disorders**
appetite suppressant	*appetite suppressant*	4	**Nutritional Disorders**
arachnid infestations	arachnid infestations	1	**Infections/Infestations**
arboviral infections	arboviral infections	1	**Infections/Infestations**
areola	-	areola	**Genitourinary System Disorders**
arms	-	arms	**Muscular-Skeletal System Disorders**
arrhythmia	arrhythmia	*heart beat*	**Circulatory System Disorders**
arteries	-	arteries	**Circulatory System Disorders**
arterioles	-	arterioles	**Circulatory System Disorders**
arteriosclerotic dementia	ateriosclerotic dementia	4	**Mental Disorders**
arteritis*	inflammation	arteries, CS	**Inflammation**
artherosclerosis	artherosclerosis	arteries/arterioles/ capillaries	**Circulatory System Disorders**
arthopathy	arthopathy	5	**Muscular-Skeletal System Disorders**
arthritis	arthritis	5	**Muscular-Skeletal System Disorders**
arthropod infestations	arthropod infestations	1	**Infections/Infestations**
aspergillosis	aspergillosis	1	**Infections/Infestations**
asphyxia	asphyxia	-	**Respiratory System Disorders**
asthenia	asthenia	5	**Muscular-Skeletal System Disorders**
asthma	asthma	-	**Respiratory System Disorders**
astigmatism	astigmatism	*refraction and accommodation*	**Sensory System Disorders**
astringent	*astringent*	8, 1	**Skin/Subcutaneous Cellular Tissue Disorders**
ataxia	ataxia	6	**Nervous System Disorders**
atrophy	atrophy	1	**Abnormalities**
auditory canals	-	auditory canals	**Sensory System Disorders**
autism	autism	4	**Mental Disorders**
autoimmune disease	autoimmune disease	4	**Immune System**
autonomous nervous system	-	autonomous nervous system	**Nervous System Disorders**
azoospermy	azoospermy	*male fertility*	**Genitourinary System Disorders**
bacillary dysentery*	shigellosis	1	**Infections/Infestations**
back	-	back	**Muscular-Skeletal System Disorders**
bacterial food poisoning*	food poisoning (bacterial)	1	**Infections/Infestations**
bacterial infections	bacterial infections	1	**Infections/Infestations**
bacterial meningitis*	meningitis (bacterial)	1	**Infections/Infestations**
bacterial pneumonia*	pneumonia (bacterial)	1	**Infections/Infestations**
balance	-	*balance*	**Sensory System Disorders**
balantidiasis	balantidiasis	1	**Infections/Infestations**
baldness	baldness	hair	**Skin/Subcutaneous Cellular Tissue Disorders**
barbiturate dependence	barbiturate dependence	4	**Mental Disorders**
Bartholin's gland	-	Bartholin's gland	**Genitourinary System Disorders**
beard	-	beard	**Skin/Subcutaneous Cellular Tissue Disorders**
bed sores	bed sores	8, 1	**Skin/Subcutaneous Cellular Tissue Disorders**
bee stings	bee stings	4	**Poisonings**
behaviour disturbances	behaviour disturbances	4	**Mental Disorders**
benign neoplasms	benign neoplasms	1	**Neoplasms**
beri beri	beri beri	4	**Nutritional Disorders**
bile duct	-	bile duct	**Digestive System Disorders**
biliousness	biliousness	3	**Digestive System Disorders**
binocular vision	binocular vision	*vision*	**Sensory System Disorders**
birth	-	*birth*	**Pregnancy/Birth/Puerperium Disorders**
birth marks*	benign neoplasms	blood vessels, CS	**Neoplasms**
bites (non-venomous)	bites (non-venomous)	1	**Injuries**
bladder	-	bladder	**Genitourinary System Disorders**
blastomycosis	blastomycosis	1	**Infections/Infestations**
blennorhagia	blennorhagia	1	**Genitourinary System Disorders**
blindness	blindness	*vision*	**Sensory System Disorders**
blisters	blisters	1	**Injuries**
bloat	bloat	3	**Digestive System Disorders**
blood	-	blood	**Blood System Disorders**
blood pressure	-	*blood pressure*	**Circulatory System Disorders**
Blood System	-	-	**Blood System Disorders**
blood vessels	-	blood vessels	**Circulatory System Disorders**
body	-	body	**Muscular-Skeletal System Disorders**
boils	boils	8, 1	**Skin/Subcutaneous Cellular Tissue Disorders**
bone marrow	-	bone marrow	**Blood System Disorders**
bones	-	bones	**Muscular-Skeletal System Disorders**
botulism	botulism	1	**Infections/Infestations**
bradycardia	bradycardia	*heart beat*	**Circulatory System Disorders**
brain	-	brain	**Nervous System Disorders**
brain compression	brain compression	brain	**Nervous System Disorders**
brain damage (anoxic)	brain damage (anoxic)	brain	**Nervous System Disorders**

Medicinal Terms (both accepted and non-accepted)	Level 3 — Disorders Treated/*Medicinal Effects*[1]	Level 3 — Body Parts/*Processes* Treated[2]	Level 2 states
brain stem	-	brain stem	**Nervous System Disorders**
breasts	-	breasts	**Genitourinary System Disorders**
breathlessness	breathlessness	-	**Respiratory System Disorders**
broad ligament*	-	uterine ligament	**Genitourinary System Disorders**
bronchi	-	bronchi	**Respiratory System Disorders**
bronchioles	-	bronchioles	**Respiratory System Disorders**
bronchiolitis*	inflammation	bronchiole, RS	**Inflammation**
bronchitis*	inflammation	bronchi, RS	**Inflammation**
bronchodilator	*bronchodilator*	bronchi	**Respiratory System Disorders**
brucellosis	brucellosis	1	**Infections/Infestations**
bruises	bruises	1	**Injuries**
bulimia	bulimia	4	**Mental Disorders**
burns	burns	1	**Injuries**
burns (internal)	burns (internal)	1	**Injuries**
bursa	-	bursa	**Muscular-Skeletal System Disorders**
bursitis*	inflammation	bursa, synovia, MSS	**Inflammation**
caecum	-	caecum	**Digestive System Disorders**
calcium deficiency (dietary)	calcium deficiency (dietary)	4	**Nutritional Disorders**
calcium metabolism	-	*calcium metabolism*	**Metabolic System Disorders**
calculus*	gallstones	gall bladder	**Digestive System Disorders**
calculus*	kidney stones	kidneys	**Genitourinary System Disorders**
calculus*	urethral stones	urethra	**Genitourinary System Disorders**
calluses	calluses	8, 1	**Skin/Subcutaneous Cellular Tissue Disorders**
cancer*	malignant neoplasms		**Neoplasms**
candidiasis	candidiasis	1	**Infections/Infestations**
cannabis dependence	cannabis dependence	4	**Mental Disorders**
capillariasis	capillariasis	intestine, DS	**Infections/Infestations**
capillaries	-	capillaries	**Circulatory System Disorders**
carbohydrate metabolism	-	*carbohydrate metabolism*	**Metabolic System Disorders**
carbohydrate transport	-	*carbohydrate transport*	**Metabolic System Disorders**
carbon monoxide poisonings	carbon monoxide poisonings	4	**Poisonings**
carbuncle	carbuncle	8, 1	**Skin/Subcutaneous Cellular Tissue Disorders**
carcinomas *in situ*	carcinomas *in situ*	1	**Neoplasms**
carcinomas*	malignant neoplasms	1	**Neoplasms**
cardiovascular stimulant	*cardiovascular stimulant*	2	**Circulatory System Disorders**
carditis*	inflammation	heart, CS	**Inflammation**
caries	caries	teeth	**Digestive System Disorders**
carminative	*carminative*	3	**Digestive System Disorders**
carotid	-	carotid	**Circulatory System Disorders**
cartilages	-	cartilages	**Muscular-Skeletal System Disorders**
cataracts	cataracts	eyes	**Sensory System Disorders**
catarrh*	inflammation	respiratory mucosae, RS	**Inflammation**
cellulitis	cellulitis	8, 1	**Skin/Subcutaneous Cellular Tissue Disorders**
central nervous system	-	central nervous system	**Nervous System Disorders**
cerebral malaria	cerebral malaria	1	**Infections/Infestations**
cerebral meninges	-	cerebral meninges	**Nervous System Disorders**
cerebrovascular circulation	-	*cerebrovascular circulation*	**Circulatory System Disorders**
cerebrovascular haemorrhages	cerebrovascular haemorrhages	1	**Injuries**
cerebrum	-	cerebrum	**Nervous System Disorders**
cerumen	cerumen	outer ears	**Sensory System Disorders**
cervical dilator	*cervical dilator*	cervix	**Genitourinary System Disorders**
cervicitis*	inflammation	cervix, GS	**Inflammation**
cervix	-	cervix	**Genitourinary System Disorders**
Chagas' disease	Chagas' disease	1	**Infections/Infestations**
chest	-	chest	**Muscular-Skeletal System Disorders**
chicken pox	chicken pox	1	**Infections/Infestations**
chiggers	chiggers	1	**Infections/Infestations**
chigoe*	tungiasis	1	**Infections/Infestations**
chilblains	chilblains	extremities	**Muscular-Skeletal System Disorders**
childhood psychoses	childhood psychoses	4	**Mental Disorders**
chills	chills	4	**Infections/Infestations**
cholecystitis*	inflammation	gall bladder, DS	**Inflammation**
cholera	cholera	1	**Infections/Infestations**
choleretic	*choleretic*	gall bladder	**Digestive System Disorders**
cholestasis	cholestasis	bile duct	**Digestive System Disorders**
cholestatic	*cholestatic*	gall bladder	**Digestive System Disorders**
cholesterolaemia*	hypercholesterolaemia	lipid metabolism	**Metabolic System Disorders**
choreas	choreas	6	**Nervous System Disorders**

Medicinal Terms (both accepted and non-accepted)	Level 3 — Disorders Treated/*Medicinal Effects*[1]	Level 3 — Body Parts/*Processes* Treated[2]	Level 2 states
choroids	-	choroids	**Sensory System Disorders**
choroiditis*	inflammation	choroids, SS	**Inflammation**
chromoblastomycosis	chromoblastomycosis	1	**Infections/Infestations**
ciliary bodies	-	ciliary bodies	**Sensory System Disorders**
Circulatory System	-	-	**Circulatory System Disorders**
cirrhosis	cirrhosis	liver	**Digestive System Disorders**
cladosporiosis	cladosporiosis	1	**Infections/Infestations**
clavicles	-	clavicles	**Muscular-Skeletal System Disorders**
climacterium	-	*climacterium*	**Genitourinary System Disorders**
clitoris	-	clitoris	**Genitourinary System Disorders**
clots	clots	2	**Circulatory System Disorders**
clotting factor deficiency	clotting factor deficiency	*coagulation*	**Blood System Disorders**
coagulation	-	*coagulation*	**Blood System Disorders**
coat of retina*	-	choroids	**Sensory System Disorders**
cocaine dependence	cocaine dependence	4	**Mental Disorders**
coccidiodomycosis	coccidiodomycosis	1	**Infections/Infestations**
coccidiosis	coccidiosis	1	**Infections/Infestations**
coccyx	-	coccyx	**Muscular-Skeletal System Disorders**
colds	colds	1	**Infections/Infestations**
cold sores	cold sores	1	**Infections/Infestations**
colic	colic	3	**Digestive System Disorders**
colitis*	inflammation	colon, DS	**Inflammation**
collapse*	fainting	4	**Ill-Defined Symptoms**
colon	-	colon	**Digestive System Disorders**
colour blindness	colour blindness	*refraction and accommodation*	**Sensory System Disorders**
colour vision deficiency	colour vision deficiency	*vision*	**Sensory System Disorders**
comas	comas	4	**Ill-Defined Symptoms**
compulsive disorders*	obsessive disorders	4	**Mental Disorders**
confusion	confusion	4	**Mental Disorders**
congenital abnormalities	congenital abnormalities	1	**Abnormalities**
congestion	congestion	-	**Respiratory System Disorders**
conjunctivae	-	conjunctivae	**Sensory System Disorders**
conjunctivitis*	inflammation	conjunctivae, SS	**Inflammation**
connective tissues	-	connective tissues	**Muscular-Skeletal System Disorders**
constipation	constipation	intestine	**Digestive System Disorders**
contact dermatitis[6]	contact dermatitis	8, 1	**Skin/Subcutaneous Cellular Tissue Disorders**
contractions	contractions	muscles	**Muscular-Skeletal System Disorders**
contusion*	bruises	1	**Injuries**
convulsions	convulsions	6	**Nervous System Disorders**
copper metabolism	-	*copper metabolism*	**Metabolic System Disorders**
copulation	-	*copulation*	**Genitourinary System Disorders**
corneas	-	corneas	**Sensory System Disorders**
corns*	calluses	8, 1	**Skin/Subcutaneous Cellular Tissue Disorders**
corpus luteum	-	corpus luteum	**Genitourinary System Disorders**
corrosives poisonings	corrosives poisonings	4	**Poisonings**
coughs	coughs	-	**Respiratory System Disorders**
cowpox	cowpox	1	**Infections/Infestations**
coxsackie infection	coxsackie infection	1	**Infections/Infestations**
crab lice infestations*	lice infestations	pubic hair, SST	**Infections/Infestations**
cramp	cramp	muscles	**Muscular-Skeletal System Disorders**
cranial nerves	-	cranial nerves	**Nervous System Disorders**
creeping eruption	creeping eruption	intestine, DS	**Infections/Infestations**
Creutzfeldt Jakob disease	Creutzfeldt Jakob disease	1	**Infections/Infestations**
crushing injuries	crushing injuries	bones	**Muscular-Skeletal System Disorders**
cryopreservative	*cryopreservative*		**Muscular-Skeletal System Disorders**
cryptococcosis	cryptococcosis	1	**Infections/Infestations**
cryptosporidiosis	cryptosporidiosis	1	**Infections/Infestations**
cutaneous *larvae migrans**	creeping eruption	intestine, DS	**Infections/Infestations**
cystic fibrosis	cystic fibrosis	4	**Metabolic System Disorders**
cystitis*	inflammation	bladder, GS	**Inflammation**
cysts	cysts	1	**Abnormalities**
cytotoxic	*cytotoxic*	-	**Neoplasms**
dacryoadenitis*	inflammation	lachrymal glands, SS	**Inflammation**
dacryocystitis*	inflammation	lachrymal duct, SS	**Inflammation**
dandruff	dandruff	scalp	**Skin/Subcutaneous Cellular Tissue Disorders**
deafness	deafness	*hearing*	**Sensory System Disorders**
defective psychoses	defective psychoses	4	**Mental Disorders**
deformities	deformities	1	**Abnormalities**
degeneration	degeneration	1	**Abnormalities**

[6]due to detergents, oils and grease, solvents drugs and medicines, chemical products, food contact, plants etc.

Medicinal Terms (both accepted and non-accepted)	Level 3 — Disorders Treated/*Medicinal Effects*[1]	Level 3 — Body Parts/*Processes* Treated[2]	Level 2 states
dehydration	dehydration	*fluid, electrolyte and acid balance*	**Metabolic System Disorders**
delayed puberty	delayed puberty	*sexual development*	**Endocrine System Disorders**
delirium	delirium	4	**Mental Disorders**
delusion	delusion	4	**Mental Disorders**
dementia	dementia	4	**Mental Disorders**
demulcent	*demulcent*	8, 1	**Skin/Subcutaneous Cellular Tissue Disorders**
dengue	dengue	1	**Infections/Infestations**
dental caries*	caries	teeth	**Digestive System Disorders**
deobstruent	*deobstruent*	1	**Abnormalities**
depilatory [7]	*depilatory*	hair	**Skin/Subcutaneous Cellular Tissue Disorders**
deposits	deposits	1	**Abnormalities**
depressant	*depressant*	4	**Mental Disorders**
depression	depression	4	**Mental Disorders**
dermatitis	dermatitis	8, 1	**Skin/Subcutaneous Cellular Tissue Disorders**
dermatitis due to internally taken substances	dermatitis due to internally taken substances	8, 1	**Skin/Subcutaneous Cellular Tissue Disorders**
detachment of retina	detachment of retina	retinas	**Sensory System Disorders**
detergent	*detergent*	8, 1	**Skin/Subcutaneous Cellular Tissue Disorders**
detoxicant	*detoxicant*	4	**Poisonings**
diabetes mellitus	diabetes mellitus	4	**Endocrine System Disorders**
diabetes insipidus	diabetes insipidus	pituitary	**Endocrine System Disorders**
diaphoretic	*diaphoretic*	*sweating*	**Metabolic System Disorders**
diaphragm	-	diaphragm	**Respiratory System Disorders**
diarrhoea	diarrhoea	intestine	**Digestive System Disorders**
dientamoebiasis	dientamoebiasis	1	**Infections/Infestations**
digestive system	-	digestive system	**Digestive System Disorders**
dipetalonemiasis	dipetalonemiasis	1	**Infections/Infestations**
diphtheria	diphtheria	1	**Infections/Infestations**
diplopia	diplopia	*vision*	**Sensory System Disorders**
disinfectant[8]	*disinfectant*	8, 1	**Skin/Subcutaneous Cellular Tissue Disorders**
dislocations	dislocations	joints, 5	**Muscular-Skeletal System Disorders**
displacement	displacement	1	**Abnormalities**
diuretic[9]	*diuretic*	*urination*	**Genitourinary System Disorders**
dizziness [10]	dizziness	4	**Ill-Defined Symptoms**
dracontiasis*	guinea worm infection	intestine, DS	**Infections/Infestations**
drug dependence	drug dependence	4	**Mental Disorders**
drug intoxication*	intoxication due to drugs	4	**Poisonings**
drug psychoses	drug psychoses	4	**Mental Disorders**
duodenal ulcers	duodenal ulcers	small intestine/ duodenum/ jejunum/ ileum	**Digestive System Disorders**
duodenitis*	inflammation	duodenum, DS	**Inflammation**
duodenum	-	duodenum	**Digestive System Disorders**
dwarfism	dwarfism	*growth*	**Endocrine System Disorders**
dysfunction	dysfunction	1	**Abnormalities**
dysmennorhoea	dysmennorhoea	*menstruation*	**Genitourinary System Disorders**
dyspareunia	dyspareunia	*copulation*	**Genitourinary System Disorders**
dysrhythmia	dysrhythmia	*heart beat*	**Circulatory System Disorders**
dystrophy	dystrophy	1	**Abnormalities**
dysuria	dysuria	*urination*	**Genitourinary System Disorders**
eardrums	-	eardrums	**Sensory System Disorders**
early or threatened labour	early or threatened labour	*pregnancy*	**Pregnancy/Birth/Puerperium Disorders**
ears	-	ears	**Sensory System Disorders**
eczema	eczema	8, 1	**Skin/Subcutaneous Cellular Tissue Disorders**
eggs	-	eggs	**Genitourinary System Disorders**
ejaculatory duct	-	ejaculatory duct	**Genitourinary System Disorders**
elbows	-	elbows	**Muscular-Skeletal System Disorders**
embolism	embolism	2	**Circulatory System Disorders**
emetic	*emetic*	3	**Digestive System Disorders**
emmenagogue	*emmenagogue*	*menstruation*	**Genitourinary System Disorders**
emollient	*emollient*	8, 1	**Skin/Subcutaneous Cellular Tissue Disorders**
emotional disturbances	emotional disturbances	4	**Mental Disorders**
emotional disturbances of adolescence	emotional disturbances of adolescence	4	**Mental Disorders**
emotional disturbances of childhood	emotional disturbances of childhood	4	**Mental Disorders**

[7] also see **VERTEBRATE POISONS**; and see **MATERIALS** for cosmetic depilatories
[8] for antimicrobial see also **Infections/Infestations**
[9] often relates to **Circulatory System Disorders**
[10] non-Menière's/vertiginous

Medicinal Terms (both accepted and non-accepted)	Level 3 — Disorders Treated/*Medicinal Effects*[1]	Level 3 — Body Parts/*Processes* Treated[2]	Level 2 states
emphysema	emphysema	lungs	**Respiratory System Disorders**
encephalitis (viral)	encephalitis (viral)	1	**Infections/Infestations**
encephalitis*	inflammation	brain, NS	**Inflammation**
encephalomyelitis*	inflammation	brain, spinal chord, NS	**Inflammation**
encephalopathy	encephalopathy	brain	**Nervous System Disorders**
endocarditis*	inflammation	endocardium	**Inflammation**
endocardium	-	endocardium	**Circulatory System Disorders**
endocrine system	-	endocrine system	**Endocrine System Disorders**
endometriosis*	inflammation	uterine mucosae, GS	**Inflammation**
endometrium*	-	uterine mucosae	**Genitourinary System Disorders**
energy metabolism	-	*energy metabolism*	**Metabolic System Disorders**
enlarged lymph glands *	adenopathy	4	**Ill-Defined Symptoms**
enlargement*	hypertrophy	1	**Abnormalities**
enteritis*	inflammation	DS	**Inflammation**
enteroviral infections	enteroviral infections	1	**Infections/Infestations**
enzyme activity	-	*enzyme activity*	**Metabolic System Disorders**
enzyme inhibitor	*enzyme inhibitor*	*enzyme activity*	**Metabolic System Disorders**
epicardium	-	epicardium	**Circulatory System Disorders**
epidemic meningitis*	meningitis (bacterial)	1	**Infections/Infestations**
epididymitis*	inflammation	epididymis, GS	**Inflammation**
epididymis	-	epididymis	**Genitourinary System Disorders**
epiglottis	-	epiglottis	**Respiratory System Disorders**
epilepsy	epilepsy	6	**Nervous System Disorders**
erysipelas	erysipelas	1	**Infections/Infestations**
erythema	erythema	8, 1	**Skin/Subcutaneous Cellular Tissue Disorders**
erythrocytes	-	erythrocytes	**Blood System Disorders**
euphoriant	*euphoriant*	4	**Mental Disorders**
Eustachian tubes	-	Eustachian tubes	**Sensory System Disorders**
excessive air pressure	excessive air pressure	4	**Poisonings**
excessive light	excessive light	4	**Poisonings**
expectorant	*expectorant*	-	**Respiratory System Disorders**
extremities	-	extremities	**Muscular-Skeletal System Disorders**
extrinsic allergic alveolitis [11]	extrinsic allergic alveolitis	-	**Respiratory System Disorders**
eyeballs*	-	globes	**Sensory System Disorders**
eyebrows	-	eyebrows	**Skin/Subcutaneous Cellular Tissue Disorders**
eyelids	-	eyelids	**Sensory System Disorders**
eye movements	-	*eye movements*	**Sensory System Disorders**
eyes	-	eyes	**Sensory System Disorders**
face	-	face	**Muscular-Skeletal System Disorders**
facial nerves	-	facial nerves	**Nervous System Disorders**
failure	failure	1	**Abnormalities**
fainting	fainting	4	**Ill-Defined Symptoms**
Fallopian tubes	-	Fallopian tubes	**Genitourinary System Disorders**
farmer's lung*	inflammation	alveoli, RS	**Inflammation**
fascia	-	fascia	**Muscular-Skeletal System Disorders**
fatty tissue		fatty tissue	**Muscular-Skeletal System Disorders**
favus	favus	1	**Infections/Infestations**
feet	-	feet	**Muscular-Skeletal System Disorders**
female breasts	-	female breasts	**Genitourinary System Disorders**
female fertility	-	*female fertility*	**Genitourinary System Disorders**
female genitals	-	female genitals	**Genitourinary System Disorders**
female infertility	female infertility	*female fertility*	**Genitourinary System Disorders**
female sterility	female sterility	*female fertility*	**Genitourinary System Disorders**
fertility (female) *	-	*female fertility*	**Genitourinary System Disorders**
fertility (male) *	-	*male fertility*	**Genitourinary System Disorders**
fever	fever	4	**Infections/Infestations**
fibrillation	fibrillation	muscles	**Muscular-Skeletal System Disorders**
fibrinolysis	-	*fibrinolysis*	**Blood System Disorders**
fibroids*	benign neoplasms	smooth muscle, MSS	**Neoplasms**
filariasis	filariasis	1	**Infections/Infestations**
fingers	-	fingers	**Muscular-Skeletal System Disorders**
fistula	fistula	1	**Abnormalities**
flagellate protozoa infections	flagellate protozoa infections	1	**Infections/Infestations**
flat feet	flat feet	feet	**Muscular-Skeletal System Disorders**
flatulence	flatulence	3	**Digestive System Disorders**
flea infestations	flea infestations	1	**Infections/Infestations**
fluid, electrolyte and acid balance	-	*fluid, electrolyte and acid balance*	**Metabolic System Disorders**
fluid overload	fluid overload	*fluid, electrolyte and acid balance*	**Metabolic System Disorders**
fluke infections	fluke infections	1	**Infections/Infestations**

[11] due to dust, fungi, including actinomycetes, etc.

Medicinal Terms (both accepted and non-accepted)	Level 3 — Disorders Treated/*Medicinal Effects*[1]	Level 3 — Body Parts/*Processes* Treated[2]	Level 2 states
fly infestations*	myiasis	1	**Infections/Infestations**
food poisoning (bacterial)	food poisoning (bacterial)	1	**Infections/Infestations**
foot and mouth	foot and mouth	1	**Infections/Infestations**
foreign bodies	foreign bodies	1	**Injuries**
foreskin	-	foreskin	**Genitourinary System Disorders**
fractures	fractures	bones	**Muscular-Skeletal System Disorders**
free radical scavenger	*free radical scavenger*	4	**Nutritional Disorders**
frontal lobe of brain	-	frontal lobe of brain	**Nervous System Disorders**
frostbite	frostbite	extremities	**Muscular-Skeletal System Disorders**
fungal infections	fungal infections	1	**Infections/Infestations**
fur	-	fur	**Skin/Subcutaneous Cellular Tissue Disorders**
furuncle*	carbuncle	8, 1	**Skin/Subcutaneous Cellular Tissue Disorders**
galactorrhoea	galactorrhoea	*lactation*	**Pregnancy/Birth/Puerperium Disorders**
gall bladder	-	gall bladder	**Digestive System Disorders**
gallstones	gallstones	gall bladder	**Digestive System Disorders**
ganglia	-	ganglia	**Nervous System Disorders**
gangrene	gangrene	2	**Circulatory System Disorders**
gas gangrene	gas gangrene	1	**Infections/Infestations**
gastric ulcers	gastric ulcers	stomach	**Digestive System Disorders**
gastritis*	inflammation	stomach, DS	**Inflammation**
gastroenteritis*	inflammation	DS	**Inflammation**
gastro-jejunal ulcers	gastro-jejunal ulcers	3	**Digestive System Disorders**
genital tract	-	genital tract	**Genitourinary System Disorders**
Genitourinary System	-	Genitourinary System	**Genitourinary System Disorders**
geophagy*	pica	4	**Mental Disorders**
germ cells	-	germ cells	**Genitourinary System Disorders**
giardiasis	giardiasis	1	**Infections/Infestations**
gigantism	gigantism	*growth*	**Endocrine System Disorders**
gingivitis*	inflammation	gums, DS	**Inflammation**
glanders	glanders	1	**Infections/Infestations**
glands	-	glands	**Endocrine System Disorders**
glans penis	-	glans penis	**Genitourinary System Disorders**
glaucoma	glaucoma	eyes	**Sensory System Disorders**
globes	-	globes	**Sensory System Disorders**
glossitis*	inflammation	tongue, DS	**Inflammation**
glottis	-	glottis	**Respiratory System Disorders**
glucosidase inhibitor	*glucosidase inhibitor*	*enzyme activity*	**Metabolic System Disorders**
gnathostomiasis	gnathostomiasis	1	**Infections/Infestations**
goitre	goitre	thyroid	**Endocrine System Disorders**
gonorrhoea	gonorrhoea	1	**Infections/Infestations**
gout	gout	*purine and pyrimidine metabolism*	**Metabolic System Disorders**
gouty arthritis	gouty arthritis	5	**Muscular-Skeletal System Disorders**
groin	-	groin	**Skin/Subcutaneous Cellular Tissue Disorders**
growing pains	growing pains	4	**Ill-Defined Symptoms**
growth	-	*growth*	**Endocrine System Disorders**
guinea worm infection	guinea worm infection	intestine, DS	**Infections/Infestations**
gums	-	gums	**Digestive System Disorders**
gynecomastia	gynecomastia	breasts	**Genitourinary System Disorders**
haematuria	haematuria	*urination*	**Genitourinary System Disorders**
haemolysis	haemolysis	blood	**Blood System Disorders**
haemolytic anaemia	haemolytic anaemia	blood	**Blood System Disorders**
haemorrhages	haemorrhages	1	**Injuries**
haemorrhages of pregnancy	haemorrhages of pregnancy	*pregnancy*	**Pregnancy/Birth/Puerperium Disorders**
haemorrhagic fever	haemorrhagic fever	1	**Infections/Infestations**
haemorrhoids	haemorrhoids	veins	**Circulatory System Disorders**
haemostatic	*haemostatic*	1	**Injuries**
hair	-	hair	**Skin/Subcutaneous Cellular Tissue Disorders**
hair follicles	-	hair follicles	**Skin/Subcutaneous Cellular Tissue Disorders**
hair loss	hair loss	hair	**Skin/Subcutaneous Cellular Tissue Disorders**
hair-worm infection	hair-worm infection	intestine, DS	**Infections/Infestations**
hallucinogen dependence	hallucinogen dependence	4	**Mental Disorders**
hallucinogenic	*hallucinogenic*	4	**Mental Disorders**
hallucinosis	hallucinosis	4	**Mental Disorders**
hands	-	hands	**Muscular-Skeletal System Disorders**
hard palate	-	hard palate	**Digestive System Disorders**
hay fever	hay fever	-	**Respiratory System Disorders**
head	-	head	**Muscular-Skeletal System Disorders**
hearing	-	*hearing*	**Sensory System Disorders**
heart	-	heart	**Circulatory System Disorders**
heart beat	-	*heart beat*	**Circulatory System Disorders**
heart disease	heart disease	heart	**Circulatory System Disorders**

Medicinal Terms (both accepted and non-accepted)	Level 3 — Disorders Treated/*Medicinal Effects*[1]	Level 3 — Body Parts/*Processes* Treated[2]	Level 2 states
heart muscle*	-	myocardium	**Circulatory System Disorders**
heart valves*	-	valves (of heart)	**Circulatory System Disorders**
helminth worm infections	helminth worm infections	1	**Infections/Infestations**
helminthiasis*	helminth worm infections	1	**Infections/Infestations**
hemagioma*	benign neoplasms	blood vessels, CS	**Neoplasms**
hepatic stimulant	*hepatic stimulant*	liver	**Digestive System Disorders**
hepatitis (viral)	hepatitis (viral)	1	**Infections/Infestations**
hepatitis A	hepatitis A	1	**Infections/Infestations**
hepatitis B	hepatitis B	1	**Infections/Infestations**
hepatitis non-A, non-B	hepatitis non-A, non-B	1	**Infections/Infestations**
hepatoprotective	*hepatoprotective*	liver	**Digestive System Disorders**
hernia	hernia	3	**Digestive System Disorders**
herpes (Herpes simplex)	herpes (Herpes simplex)	1	**Infections/Infestations**
herring worm disease	herring worm disease	intestine, DS	**Infections/Infestations**
hiccoughs	hiccoughs	-	**Respiratory System Disorders**
hips	-	hips	**Muscular-Skeletal System Disorders**
hirsutism	hirsutism	hair	**Skin/Subcutaneous Cellular Tissue Disorders**
histiocytes	-	histiocytes	**Muscular-Skeletal System Disorders**
histoplasmosis	histoplasmosis	lungs, RS	**Infections/Infestations**
HIV infections	HIV infections	1	**Infections/Infestations**
Hodgkin's disease*	leukaemias	BS, IS	**Neoplasms**
hoofs	-	hoofs	**Skin/Subcutaneous Cellular Tissue Disorders**
hookworm infection (New World)	hookworm infection (New World)	intestine, DS	**Infections/Infestations**
hookworm infection (Old World)	hookworm infection (Old World)	intestine, DS	**Infections/Infestations**
hydatid disease	hydatid disease	1	**Infections/Infestations**
hydragogue	*hydragogue*	3	**Digestive System Disorders**
hydrocoele	hydrocoele	testes	**Genitourinary System Disorders**
hymen	-	hymen	**Genitourinary System Disorders**
hypercholesterolaemia	hypercholesterolaemia	*lipoid metabolism*	**Metabolic System Disorders**
hypercholia	hypercholia	liver	**Digestive System Disorders**
hyperchylomicronaemia	hyperchylomicronaemia	*lipoid metabolism*	**Metabolic System Disorders**
hyperglycaemia	hyperglycaemia	4	**Endocrine System Disorders**
hyperglycaemic *	hypoglycaemia	4	**Endocrine System Disorders**
hyperglyceridaemia	hyperglyceridaemia	*lipoid metabolism*	**Metabolic System Disorders**
hyperhydrosis	hyperhydrosis	4	**Ill-Defined Symptoms**
hyperlipidaemia	hyperlipidaemia	*lipoid metabolism*	**Metabolic System Disorders**
hypermetropia*	long sight	*refraction and accommodation*	**Sensory System Disorders**
hypernatraemia	hypernatraemia	*fluid, electrolyte and acid balance*	**Metabolic System Disorders**
hyperoestrogenism	hyperoestrogenism	*sexual development*	**Endocrine System Disorders**
hyperosmolality*	hypernatraemia	*fluid, electrolyte and acid balance*	**Metabolic System Disorders**
hyperparathyroidism	hyperparathyroidism	parathyroid	**Endocrine System Disorders**
hyperplasia*	hypertrophy	1	**Abnormalities**
hyperpotasaemia	hyperpotasaemia	*fluid, electrolyte and acid balance*	**Metabolic System Disorders**
hypersomnia	hypersomnia	4	**Mental Disorders**
hypertension	hypertension	*blood pressure*	**Circulatory System Disorders**
hypertension of pregnancy	hypertension of pregnancy	*pregnancy*	**Pregnancy/Birth/Puerperium Disorders**
hypertensive *	hypotension	*blood pressure*	**Circulatory System Disorders**
hyperthermia	hyperthermia	*temperature regulation*	**Metabolic System Disorders**
hypertrophy	hypertrophy	1	**Abnormalities**
hypnotic	*hypnotic*	4	**Mental Disorders**
hypocalcaemia	hypocalcaemia	blood	**Blood System Disorders**
hypochondria	hypochondria	4	**Mental Disorders**
hypoglycaemia	hypoglycaemia	4	**Endocrine System Disorders**
hypoglycaemic *	hyperglycaemia	4	**Endocrine System Disorders**
hyponatraemia	hyponatraemia	*fluid, electrolyte and acid balance*	**Metabolic System Disorders**
hypoparathyroidism	hypoparathyroidism	parathyroid	**Endocrine System Disorders**
hypopharynx	-	hypopharynx	**Respiratory System Disorders**
hypopotasaemia	hypopotasaemia	*fluid, electrolyte and acid balance*	**Metabolic System Disorders**
hyposmolality*	hyponatraemia	*fluid, electrolyte and acid balance*	**Metabolic System Disorders**
hyposomnia	hyposomnia	4	**Mental Disorders**
hypotension	hypotension	*blood pressure*	**Circulatory System Disorders**
hypotensive *	hypertension	*blood pressure*	**Circulatory System Disorders**
hypothalamus	-	hypothalamus	**Endocrine System Disorders**

Medicinal Terms (both accepted and non-accepted)	Level 3 — Disorders Treated/*Medicinal Effects*[1]	Level 3 — Body Parts/*Processes* Treated[2]	Level 2 states
hypothermia	hypothermia	*temperature regulation*	**Metabolic System Disorders**
hypothyroidism	hypothyroidism	thyroid	**Endocrine System Disorders**
hypoxaemia	hypoxaemia	blood	**Blood System Disorders**
hysteria	hysteria	4	**Mental Disorders**
ileum	-	ileum	**Digestive System Disorders**
Ill-Defined Symptoms	-	-	**Ill-Defined Symptoms**
Immune System	-	-	**Immune System**
immunostimulant	*immunostimulant*	4	**Immune System**
immunosuppressant	*immunosuppressant*	4	**Immune System**
impetigo	impetigo	1	**Infections/Infestations**
implantation	-	*implantation*	**Genitourinary System Disorders**
impotence	impotence	*copulation*	**Genitourinary System Disorders**
indigestion	indigestion	3	**Digestive System Disorders**
infections	infections	1	**Infections/Infestations**
Infections/Infestations	-	1	**Infections/Infestations**
infertility (female)*	female infertility	*female fertility*	**Genitourinary System Disorders**
infertility (male)	male infertility	*male fertility*	**Genitourinary System Disorders**
Infestations	infestations	1	**Infections/Infestations**
Inflammation	-	1	**Inflammation**
inflammatory bowel disease*	inflammation	colon, DS	**Inflammation**
influenza	influenza	1	**Infections/Infestations**
Injuries	-	1	**Injuries**
inner ears	-	inner ears	**Sensory System Disorders**
insanity	insanity	4	**Mental Disorders**
insect infestations	insect infestations	1	**Infections/Infestations**
insect stings	insect stings	4	**Poisonings**
insomnia*	hyposomnia	4	**Mental Disorders**
intercranial region	-	intercranial region	**Nervous System Disorders**
internal bleeding	internal bleeding	1	**Injuries**
internal burns*	burns (internal)	1	**Injuries**
intervertebral discs	-	intervertebral discs	**Muscular-Skeletal System Disorders**
intestine	-	intestine	**Digestive System Disorders**
intoxicant	*intoxicant*	4	**Mental Disorders**
intoxication	intoxication	4	**Poisonings**
intoxication due to alcohol	intoxication due to alcohol	4	**Poisonings**
intoxication due to drugs	intoxication due to drugs	4	**Poisonings**
iodine deficiency	iodine deficiency	4	**Nutritional Disorders**
irises	-	irises	**Sensory System Disorders**
iron deficiency anaemia	iron deficiency anaemia	blood	**Blood System Disorders**
iron metabolism	-	*iron metabolism*	**Metabolic System Disorders**
irregular eye movements*	mystagmus	*eye movements*	**Sensory System Disorders**
irritable bowel syndrome	irritable bowel syndrome	large intestine	**Digestive System Disorders**
irritation	irritation	8, 1	**Skin/Subcutaneous Cellular Tissue Disorders**
ischaemia	ischaemia	arteries/arterioles/ capillaries	**Circulatory System Disorders**
islet cells of Langerhans	-	islet cells of Langerhans	**Endocrine System Disorders**
itching	itching	8, 1	**Skin/Subcutaneous Cellular Tissue Disorders**
jaws	-	jaws	**Muscular-Skeletal System Disorders**
jealousy	jealousy	4	**Mental Disorders**
jejunum	-	jejunum	**Digestive System Disorders**
jet lag	jet lag	4	**Mental Disorders**
jiggers*	tungiasis	1	**Infections/Infestations**
joints	-	joints	**Muscular-Skeletal System Disorders**
keratitis*	inflammation	corneas, SS	**Inflammation**
kidney cells	-	kidney cells	**Genitourinary System Disorders**
kidney stones	kidney stones	kidneys	**Genitourinary System Disorders**
kidneys	-	kidneys	**Genitourinary System Disorders**
knees	-	knees	**Muscular-Skeletal System Disorders**
kuru	kuru	1	**Infections/Infestations**
kwashiorkor	kwashiorkor	4	**Nutritional Disorders**
labia	-	labia	**Genitourinary System Disorders**
labour	-	*labour*	**Pregnancy/Birth/Puerperium Disorders**
labour induction	*labour induction*	*labour*	**Pregnancy/Birth/Puerperium Disorders**
labour pain	labour pain	*labour*	**Pregnancy/Birth/Puerperium Disorders**
labyrinthitis*	inflammation	inner ear, SS	**Inflammation**
lachrymal ducts	-	lachrymal ducts	**Sensory System Disorders**
lachrymal glands	-	lachrymal glands	**Sensory System Disorders**
lachrymal system	-	lachrymal system	**Sensory System Disorders**
lactation	-	*lactation*	**Pregnancy/Birth/Puerperium Disorders**
lactation stimulant	*lactation stimulant*	*lactation*	**Pregnancy/Birth/Puerperium Disorders**
large cells of lung	-	large cells of lung	**Respiratory System Disorders**
large intestine	-	large intestine	**Digestive System Disorders**

Medicinal Terms (both accepted and non-accepted)	Level 3 — Disorders Treated/*Medicinal Effects*[1]	Level 3 — Body Parts/*Processes* Treated[2]	Level 2 states
laryngitis*	inflammation	larynx, RS	**Inflammation**
larynx	-	larynx	**Respiratory System Disorders**
lathyrism	lathyrism	6	**Nervous System Disorders**
laxative	*laxative*	3	**Digestive System Disorders**
lead poisoning	lead poisoning	4	**Poisonings**
leech infestations	leech infestations	1	**Infections/Infestations**
legs	-	legs	**Muscular-Skeletal System Disorders**
leiomyoma*	benign neoplasms	smooth muscle, MSS	**Neoplasms**
leishmaniasis	leishmaniasis	1	**Infections/Infestations**
lens	-	lens	**Sensory System Disorders**
leprosy	leprosy	1	**Infections/Infestations**
leptospirosis	leptospirosis	1	**Infections/Infestations**
lesions	lesions	1	**Abnormalities**
leukaemias[12]	leukaemias	BS, IS	**Neoplasms**
leukocytes	-	leukocytes	**Blood System Disorders**
leukorrhoea	leukorrhoea	vaginal mucosae	**Genitourinary System Disorders**
libido	-	*libido*	**Genitourinary System Disorders**
lice infestations	lice infestations	1	**Infections/Infestations**
lichen	lichen	8, 1	**Skin/Subcutaneous Cellular Tissue Disorders**
ligaments	-	ligaments	**Muscular-Skeletal System Disorders**
light (excess of)*	excessive light	4	**Poisonings**
limbs	-	limbs	**Muscular-Skeletal System Disorders**
lipidaemia*	hyperlipidaemia	*lipoid metabolism*	**Metabolic System Disorders**
lipidoses	lipidoses	*lipoid metabolism*	**Metabolic System Disorders**
lipodystrophy	lipodystrophy	*lipoid metabolism*	**Metabolic System Disorders**
lipoid metabolism	-	*lipoid metabolism*	**Metabolic System Disorders**
lipoma*	benign neoplasms	fatty tissue, MSS	**Neoplasms**
lipoprotein deficiency	lipoprotein deficiency	*lipoid metabolism*	**Metabolic System Disorders**
lips	-	lips	**Digestive System Disorders**
listeriosis	listeriosis	1	**Infections/Infestations**
liver	-	liver	**Digestive System Disorders**
loaisis	loaisis	1	**Infections/Infestations**
lobomycosis	lobomycosis	1	**Infections/Infestations**
long labour	long labour	*labour*	**Pregnancy/Birth/Puerperium Disorders**
long sight	long sight	*refraction and accommodation*	**Sensory System Disorders**
low vision	low vision	*vision*	**Sensory System Disorders**
lower limbs	-	lower limbs	**Muscular-Skeletal System Disorders**
lumbago	lumbago	back	**Muscular-Skeletal System Disorders**
lumbar region	-	lumbar region	**Muscular-Skeletal System Disorders**
lungs	-	lungs	**Respiratory System Disorders**
lupus erythrematosus	lupus erythrematosus	8, 1	**Skin/Subcutaneous Cellular Tissue Disorders**
lyme disease	lyme disease	1	**Infections/Infestations**
lymph	-	lymph	**Immune System**
lymph glands	-	lymph glands	**Immune System**
lymph nodes	-	lymph nodes	**Immune System**
lymph vessels	-	lymph vessels	**Immune System**
lymphadenitis*	inflammation	lymph glands, IS	**Inflammation**
lymphangioma*	benign neoplasms	lymph vessels, IS	**Neoplasms**
lymphangitis*	inflammation	lymph vessels, IS	**Inflammation**
lymphocytes	-	lymphocytes	**Immune System**
lymphoma*	leukaemias	IS	**Neoplasms**
lymphosarcoma*	leukaemias	IS	**Neoplasms**
maduromycosis	maduromycosis	1	**Infections/Infestations**
magnesium metabolism	-	*magnesium metabolism*	**Metabolic System Disorders**
malaise/fatigue[13]	malaise/fatigue	4	**Ill-Defined Symptoms**
malaria	malaria	1	**Infections/Infestations**
male breasts	-	male breasts	**Genitourinary System Disorders**
male fertility	-	*male fertility*	**Genitourinary System Disorders**
male genitals	-	male genitals	**Genitourinary System Disorders**
male infertility	male infertility	*male fertility*	**Genitourinary System Disorders**
male sterility	male sterility	*male fertility*	**Genitourinary System Disorders**
malignant neoplasms	malignant neoplasms	1	**Neoplasms**
malnutrition	malnutrition	4	**Nutritional Disorders**
mandible	-	mandible	**Muscular-Skeletal System Disorders**
mania	mania	4	**Mental Disorders**
marasmus	marasmus	4	**Nutritional Disorders**
mast cells	-	mast cells	**Muscular-Skeletal System Disorders**
mastitis*	inflammation	breasts, GS	**Inflammation**
mastoids	-	mastoids	**Sensory System Disorders**
mastoiditis*	inflammation	mastoids, SS	**Inflammation**

[12] primary malignant neoplasm of lymphatic and haematopoietic tissue
[13] not due to heat, combat, pregnancy, neurasthenia, senile asthenia

Medicinal Terms (both accepted and non-accepted)	Level 3 — Disorders Treated/*Medicinal Effects*[1]	Level 3 — Body Parts/*Processes* Treated[2]	Level 2 states
maxilla	-	maxilla	**Muscular-Skeletal System Disorders**
measles	measles	1	**Infections/Infestations**
mediastinum	-	mediastinum	**Respiratory System Disorders**
medicine poisoning	medicine poisoning	4	**Poisonings**
melanoma*	malignant neoplasms	1	**Neoplasms**
melioidosis	melioidosis	1	**Infections/Infestations**
Menière's disease	Menière's disease	ears	**Sensory System Disorders**
meninges	-	meninges	**Nervous System Disorders**
meningitis (bacterial)	meningitis (bacterial)	1	**Infections/Infestations**
meningitis (viral)	meningitis (viral)	1	**Infections/Infestations**
meningitis*	inflammation	meninges, NS	**Inflammation**
menopause	-	*menopause*	**Genitourinary System Disorders**
menorrhagia	menorrhagia	*menstruation*	**Genitourinary System Disorders**
menstruation	-	*menstruation*	**Genitourinary System Disorders**
mental disability	mental disability	4	**Mental Disorders**
Mental Disorders	-	-	**Mental Disorders**
mesenteric glands	-	mesenteric glands	**Digestive System Disorders**
Metabolic System	-	Metabolic System	**Metabolic System Disorders**
metal poisoning	metal poisonings	4	**Poisonings**
metrorrhagia	metrorrhagia	*menstruation*	**Genitourinary System Disorders**
microbial infections	microbial infections	1	**Infections/Infestations**
middle ears	-	middle ears	**Sensory System Disorders**
migraines	migraines	6	**Nervous System Disorders**
mineral deficiency	mineral deficiency	4	**Nutritional Disorders**
mineral metabolism	-	*mineral metabolism*	**Metabolic System Disorders**
miotic	*miotic*	pupils	**Sensory System Disorders**
miscarriages	miscarriages	*pregnancy*	**Pregnancy/Birth/Puerperium Disorders**
morning sickness	morning sickness	*pregnancy*	**Pregnancy/Birth/Puerperium Disorders**
motion sickness	motion sickness	3	**Digestive System Disorders**
motor nerves	-	motor nerves	**Nervous System Disorders**
motor neurone disease	motor neurone disease	6	**Nervous System Disorders**
moulting	-	*moulting*	**Skin/Subcutaneous Cellular Tissue Disorders**
mountain sickness	mountain sickness	3	**Digestive System Disorders**
mouth	-	mouth	**Digestive System Disorders**
multiple dystrophy	multiple dystrophy	6	**Nervous System Disorders**
multiple sclerosis	multiple sclerosis	6	**Nervous System Disorders**
mumps	mumps	1	**Infections/Infestations**
muscle relaxant	*muscle relaxant*	5	**Muscular-Skeletal System Disorders**
muscle stimulant	*muscle stimulant*	5	**Muscular-Skeletal System Disorders**
muscles	-	muscles	**Muscular-Skeletal System Disorders**
Muscular-Skeletal System	-	Muscular-Skeletal System	**Muscular-Skeletal System Disorders**
myaisis	myiasis	1	**Infections/Infestations**
mycobacterium infection	mycobacterium infection[14]	1	**Infections/Infestations**
mycotic mycetomas	mycotic mycetomas	1	**Infections/Infestations**
mydriatic	*mydriatic*	pupils	**Sensory System Disorders**
myelitis*	inflammation	spinal chord, NS	**Inflammation**
myeloma*	leukaemias	BS, IS	**Neoplasms**
myelopathy	myelopathy	spinal chord	**Nervous System Disorders**
myocarditis*	inflammation	myocardium, CS	**Inflammation**
myocardium	-	myocardium	**Circulatory System Disorders**
myopathy	myopathy	muscles	**Muscular-Skeletal System Disorders**
myopia*	short sight	*refraction and accommodation*	**Sensory System Disorders**
myositis*	inflammation	muscles, MSS	**Inflammation**
myringitis*	inflammation	tympanic membranes, SS	**Inflammation**
mystagmus	mystagmus	*eye movements*	**Sensory System Disorders**
nails	-	nails	**Skin/Subcutaneous Cellular Tissue Disorders**
nappy rash	nappy rash	8, 1	**Skin/Subcutaneous Cellular Tissue Disorders**
narcolepsy	narcolepsy	4	**Mental Disorders**
narcotic	*narcotic*	4	**Mental Disorders**
nasal tract	-	nasal tract	**Respiratory System Disorders**
nasopharyngitis*	inflammation	nasopharynx, RS	**Inflammation**
nasopharynx	-	nasopharynx	**Respiratory System Disorders**
natriuretic	*natriuretic*	*urination*	**Genitourinary System Disorders**
nausea	nausea	3	**Digestive System Disorders**
navel	-	navel	**Skin/Subcutaneous Cellular Tissue Disorders**
neck	-	neck	**Muscular-Skeletal System Disorders**
necrosis	necrosis	1	**Abnormalities**
nematode infections	nematode infections	1	**Infections/Infestations**
Neoplasms	-	1	**Neoplasms**
neoplasms (benign)*	benign neoplasms	1	**Neoplasms**

[14] non-leprosy

Medicinal Terms (both accepted and non-accepted)	Level 3 — Disorders Treated/*Medicinal Effects*[1]	Level 3 — Body Parts/*Processes* Treated[2]	Level 2 states
neoplasms (malignant)*	malignant neoplasms	1	**Neoplasms**
neoplasms (unspecified)*	unspecified neoplasms	1	**Neoplasms**
neoplasms of uncertain behaviour	neoplasms of uncertain behaviour	1	**Neoplasms**
nephritis*	inflammation	kidneys, GS	**Inflammation**
nerve injuries	nerve injuries	1	**Injuries**
nerve roots	-	nerve roots	**Nervous System Disorders**
nerves	-	nerves	**Nervous System Disorders**
nervous breakdowns	nervous breakdowns	4	**Mental Disorders**
nervous excitement	nervous excitement	4	**Mental Disorders**
Nervous System	-	-	**Nervous System Disorders**
neuroses	neuroses	4	**Mental Disorders**
neurotic depression	neurotic depression	4	**Mental Disorders**
neurotransmitters	-	neurotransmitters	**Nervous System Disorders**
niacin deficiency	niacin deficiency	4	**Nutritional Disorders**
nicotine dependence	nicotine dependence	4	**Mental Disorders**
night blindness	night blindness	*vision*	**Sensory System Disorders**
nightmares	nightmares	4	**Mental Disorders**
nipples	-	nipples	**Genitourinary System Disorders**
nocardiosis	nocardiosis	1	**Infections/Infestations**
non-dependent drug abuse	non-dependent drug abuse	4	**Mental Disorders**
non-malignant tumour*	benign neoplasms		**Neoplasms**
nose	-	nose	**Respiratory System Disorders**
noxious foods	noxious foods	4	**Poisonings**
Nutrition	-	*Nutrition*	**Nutritional Disorders**
nutritional deficiency	nutritional deficiency	4	**Nutritional Disorders**
obesity	obesity	4	**Nutritional Disorders**
obsessive disorders	obsessive disorders	4	**Mental Disorders**
obstructed labour	obstructed labour	*labour*	**Pregnancy/Birth/Puerperium Disorders**
obstructions	obstructions	1	**Abnormalities**
occipital lobe of brain	-	occipital lobe of brain	**Nervous System Disorders**
oedema	oedema	1	**Abnormalities**
oesophagus	-	oesophagus	**Digestive System Disorders**
oestrogenic	*oestrogenic*	*sexual development*	**Endocrine System Disorders**
oligomennorhoea	oligomennorhoea	*menstruation*	**Genitourinary System Disorders**
oligospermy	oligospermy	*male fertility*	**Genitourinary System Disorders**
oligurea	oligurea	*urination*	**Genitourinary System Disorders**
onchocerciasis	onchocerciasis	1	**Infections/Infestations**
open fractures	open fractures	bones	**Muscular-Skeletal System Disorders**
ophthalmia*	inflammation	eyes, SS	**Inflammation**
opioid [15]dependence	opioid dependence	4	**Mental Disorders**
optic nerves	-	optic nerves	**Sensory System Disorders**
oral cavity*	-	mouth	**Digestive System Disorders**
orbits of eyes	-	orbits of eyes	**Sensory System Disorders**
orchitis*	inflammation	testes, GS	**Inflammation**
organ failure	organ failure	1	**Abnormalities**
organic impotence	organic impotence	*copulation*	**Genitourinary System Disorders**
ornithosis*	psittacosis	1	**Infections/Infestations**
oropharynx	-	oropharynx	**Respiratory System Disorders**
ossicles	-	ossicles	**Sensory System Disorders**
osteitis*	inflammation	bones, MSS	**Inflammation**
osteoarthritis	osteoarthritis	5	**Muscular-Skeletal System Disorders**
osteomalacia	osteomalacia	4	**Nutritional Disorders**
osteomyelitis*	inflammation	bones, MSS	**Inflammation**
osteopathy	osteopathy	5	**Muscular-Skeletal System Disorders**
osteoporosis	osteoporosis	bones	**Muscular-Skeletal System Disorders**
otitis media*	inflammation	middle ear, SS	**Inflammation**
otitis*	inflammation	ear, SS	**Inflammation**
otosclerosis	otosclerosis	ears	**Sensory System Disorders**
outer ears	-	outer ears	**Sensory System Disorders**
ovaries	-	ovaries	**Genitourinary System Disorders**
oviduct	-	oviduct	**Genitourinary System Disorders**
ovulation	-	*ovulation*	**Genitourinary System Disorders**
ovulatory pain	ovulatory pain	*ovulation*	**Genitourinary System Disorders**
oxidase inhibitor	*oxidase inhibitor*	*enzyme activity*	**Metabolic System Disorders**
Pain		1	**Pain**
palate*	-	hard palate	**Digestive System Disorders**
palate*	-	soft palate	**Digestive System Disorders**
palpitations	palpitations	4	**Mental Disorders**
palsy	palsy	6	**Nervous System Disorders**
pancreas	-	pancreas	**Digestive System Disorders**
pancreatitis*	inflammation	pancreas, DS	**Inflammation**

[15]includes opiates

Medicinal Terms (both accepted and non-accepted)	Level 3 — Disorders Treated/*Medicinal Effects*[1]	Level 3 — Body Parts/*Processes* Treated[2]	Level 2 states
panic	panic	4	**Mental Disorders**
paracoccidiomycosis	paracoccidiomycosis	1	**Infections/Infestations**
paralysis	paralysis	6	**Nervous System Disorders**
paranoia	paranoia	4	**Mental Disorders**
paranoid states	paranoid states	4	**Mental Disorders**
paraphrenia	paraphrenia	4	**Mental Disorders**
parasitic infections	parasitic infections	1	**Infections/Infestations**
parasympathetic nervous system	-	parasympathetic nervous system	**Nervous System Disorders**
parathyroid	-	parathyroid	**Endocrine System Disorders**
paratyphoid*	typhoid/paratyphoid	1	**Infections/Infestations**
parietal lobe of brain	-	parietal lobe of brain	**Nervous System Disorders**
Parkinson's disease	Parkinson's disease	6	**Nervous System Disorders**
parotid	-	parotid	**Digestive System Disorders**
pasturellosis	pasturellosis	1	**Infections/Infestations**
pediculosis*	lice infestations	head, MSS	**Infections/Infestations**
pellagra	pellagra	4	**Nutritional Disorders**
pelvic cellular tissue	-	pelvic cellular tissue	**Genitourinary System Disorders**
pelvic inflammation*	inflammation	uterine ligament, GS	**Inflammation**
pelvis	-	pelvis	**Muscular-Skeletal System Disorders**
penis	-	penis	**Genitourinary System Disorders**
peptic ulcers	peptic ulcers	3	**Digestive System Disorders**
perianal area	-	perianal area	**Skin/Subcutaneous Cellular Tissue Disorders**
pericarditis*	inflammation	pericardium, CS	**Inflammation**
pericardium	-	pericardium	**Circulatory System Disorders**
perineum	-	perineum	**Genitourinary System Disorders**
periodic fever	periodic fever	4	**Infections/Infestations**
peripheral nerves	-	peripheral nerves	**Nervous System Disorders**
peripheral nervous system	-	peripheral nervous system	**Nervous System Disorders**
peritoneum	-	peritoneum	**Digestive System Disorders**
peritonitis*	inflammation	peritoneum, DS	**Inflammation**
pernicious anaemia	pernicious anaemia	blood	**Blood System Disorders**
personality disorders	personality disorders	4	**Mental Disorders**
pertussis*	whooping cough/pertussis	1	**Infections/Infestations**
petroleum products poisonings	petroleum products poisonings	4	**Poisonings**
pharyngitis*	inflammation	pharynx, RS	**Inflammation**
pharynx	-	pharynx	**Respiratory System Disorders**
phimosis	phimosis	foreskin	**Genitourinary System Disorders**
phlebitis*	inflammation	veins, CS	**Inflammation**
phlegm*	inflammation	respiratory mucosae, RS	**Inflammation**
phobias	phobias	4	**Mental Disorders**
phosphorous metabolism	-	*phosphorous metabolism*	**Metabolic System Disorders**
photosensitivity	photosensitivity	8, 1	**Skin/Subcutaneous Cellular Tissue Disorders**
phthiriasis *	lice infestations	pubic hair, SST	**Infections/Infestations**
pica	pica	4	**Mental Disorders**
pigmentation	pigmentation	1	**Abnormalities**
pilonidial cysts	pilonidial cysts	8, 1	**Skin/Subcutaneous Cellular Tissue Disorders**
pin worm infection	pin worm infection	intestine, DS	**Infections/Infestations**
pineal gland	-	pineal gland	**Endocrine System Disorders**
pinta	pinta	1	**Infections/Infestations**
pituitary	-	pituitary	**Endocrine System Disorders**
pityriasis nigra	pityriasis nigra	1	**Infections/Infestations**
placenta	-	placenta	**Genitourinary System Disorders**
plague	plague	1	**Infections/Infestations**
plasma	-	plasma	**Blood System Disorders**
plasma protein synthesis	-	*plasma protein synthesis*	**Metabolic System Disorders**
platelet aggregation	-	*platelet aggregation*	**Blood System Disorders**
platelets	-	platelets	**Blood System Disorders**
pleura	-	pleura	**Respiratory System Disorders**
pleurisy*	inflammation	pleura, RS	**Inflammation**
pneumoconioses	pneumoconioses	-	**Respiratory System Disorders**
pneumonia	pneumonia	lungs	**Respiratory System Disorders**
pneumonia (bacterial)	pneumonia (bacterial)	1	**Infections/Infestations**
pneumonia (protozoal)	pneumonia (protozoal)	1	**Infections/Infestations**
pneumonia (viral)	pneumonia (viral)	1	**Infections/Infestations**
Poisonings	-	-	**Poisonings**
polio	polio	1	**Infections/Infestations**
pollakiuria	pollakiuria	*urination*	**Genitourinary System Disorders**
polycythemia	polycythemia	bone marrow	**Blood System Disorders**

Medicinal Terms (both accepted and non-accepted)	Level 3 — Disorders Treated/*Medicinal Effects*[1]	Level 3 — Body Parts/*Processes* Treated[2]	Level 2 states
polyglandular dysfunction	polyglandular dysfunction	4	**Endocrine System Disorders**
polyps	polyps	1	**Abnormalities**
polyuria	polyuria	*urination*	**Genitourinary System Disorders**
porphyria metabolism	-	*porphyria metabolism*	**Metabolic System Disorders**
post menopause	-	*post menopause*	**Genitourinary System Disorders**
post partum	-	*post partum*	**Pregnancy/Birth/Puerperium Disorders**
post partum bleeding	post partum bleeding	*post partum*	**Pregnancy/Birth/Puerperium Disorders**
pre-eclampsia	pre-eclampsia	*pregnancy*	**Pregnancy/Birth/Puerperium Disorders**
pre-menstrual syndrome	pre-menstrual syndrome	*menstruation*	**Genitourinary System Disorders**
pregnancy	-	*pregnancy*	**Pregnancy/Birth/Puerperium Disorders**
Pregnancy/Birth/Puerperium	-	-	**Pregnancy/Birth/Puerperium Disorders**
premature ejaculation	premature ejaculation	*copulation*	**Genitourinary System Disorders**
premature menopause	premature menopause	*menopause*	**Genitourinary System Disorders**
prepuce*	-	foreskin	**Genitourinary System Disorders**
priapism	priapism	penis	**Genitourinary System Disorders**
primary malignant neoplasms	primary malignant neoplasms	1	**Neoplasms**
proctitis*	inflammation	rectum, DS	**Inflammation**
prolapse	prolapse	1	**Abnormalities**
prolonged pregnancy	prolonged pregnancy	*pregnancy*	**Pregnancy/Birth/Puerperium Disorders**
prostate	-	prostate	**Genitourinary System Disorders**
prostatitis*	inflammation	prostate, GS	**Inflammation**
protein deficiency	protein deficiency	4	**Nutritional Disorders**
proteinase inhibitor	*proteinase inhibitor*	*enzyme activity*	**Metabolic System Disorders**
protozoal infections	protozoal infections	1	**Infections/Infestations**
protozoal pneumonia*	pneumonia (protozoal)	1	**Infections/Infestations**
pruritus*	itching	8, 1	**Skin/Subcutaneous Cellular Tissue Disorders**
psittacosis	psittacosis	1	**Infections/Infestations**
psoriasis	psoriasis	8, 1	**Skin/Subcutaneous Cellular Tissue Disorders**
psychic impotence	psychic impotence	*copulation*	**Genitourinary System Disorders**
psychic trauma*	trauma (psychic)	4	**Mental Disorders**
psychogenic pain	psychogenic pain	4	**Mental Disorders**
psychogenic physical symptoms	psychogenic physical symptoms	4	**Mental Disorders**
psychoses	psychoses	4	**Mental Disorders**
puerperium	-	*puerperium*	**Pregnancy/Birth/Puerperium Disorders**
pulmonary circulation	-	*pulmonary circulation*	**Circulatory System Disorders**
pupils	-	pupils	**Sensory System Disorders**
purgative	*purgative*	3	**Digestive System Disorders**
purifier	*purifier*	4	**Poisonings**
purine and pyrimidine metabolism	-	*purine and pyrimidine metabolism*	**Metabolic System Disorders**
purpura	purpura	blood	**Blood System Disorders**
pustules	pustules	8, 1	**Skin/Subcutaneous Cellular Tissue Disorders**
Q fever	Q fever	1	**Infections/Infestations**
rabies	rabies	1	**Infections/Infestations**
radiation poisoning	radiation poisoning	4	**Poisonings**
rashes	rashes	8, 1	**Skin/Subcutaneous Cellular Tissue Disorders**
rat bite fever	rat bite fever	1	**Infections/Infestations**
rectum	-	rectum	**Digestive System Disorders**
red blood cells*	-	erythrocytes	**Blood System Disorders**
refraction and accommodation	-	*refraction and accommodation*	**Sensory System Disorders**
refrigerant	*refrigerant*	*temperature regulation*	**Metabolic System Disorders**
relapsing fever	relapsing fever	1	**Infections/Infestations**
relaxant	*relaxant*	4	**Mental Disorders**
respiratory mucosae	-	respiratory mucosae	**Respiratory System Disorders**
respiratory stimulant	*respiratory stimulant*	-	**Respiratory System Disorders**
Respiratory System	-		**Respiratory System Disorders**
restorative	*restorative*	4	**Nutritional Disorders**
retardation*	mental disability	4	**Mental Disorders**
reticulosarcoma*	leukaemias	IS, BS	**Neoplasms**
retinas	-	retinas	**Sensory System Disorders**
retina vascular changes	retina vascular changes	retinas	**Sensory System Disorders**
retinitis*	inflammation	retinas, SS	**Inflammation**
retinopathy	retinopathy	retinas	**Sensory System Disorders**
rheumatism	rheumatism	5	**Muscular-Skeletal System Disorders**
rheumatoid arthritis	rheumatoid arthritis	5	**Muscular-Skeletal System Disorders**
rhinitis*	inflammation	nasal tract, RS	**Inflammation**
rhinosporidiosis	rhinosporidiosis	1	**Infections/Infestations**
Rhodesian trypanosomiasis	Rhodesian trypanosomiasis	1	**Infections/Infestations**
ribs	-	ribs	**Muscular-Skeletal System Disorders**
rickets	rickets	4	**Nutritional Disorders**

Medicinal Terms (both accepted and non-accepted)	Level 3 — Disorders Treated/*Medicinal Effects*[1]	Level 3 — Body Parts/*Processes* Treated[2]	Level 2 states
ringworm	ringworm	1	**Infections/Infestations**
roundworm infection	roundworm infection	intestine, DS	**Infections/Infestations**
rubella	rubella	1	**Infections/Infestations**
rumen	-	rumen	**Digestive System Disorders**
sacroiliac region	-	sacroiliac region	**Muscular-Skeletal System Disorders**
sacrum	-	sacrum	**Muscular-Skeletal System Disorders**
salivary glands	-	salivary glands	**Digestive System Disorders**
salmonellosis	salmonellosis	1	**Infections/Infestations**
salpingo-oophoritis*	inflammation	Fallopian tubes, GS	**Inflammation**
sandfleas infestation	tungiasis	1	**Infections/Infestations**
sarcoma*	malignant neoplasms	connective tissue, MSS	**Neoplasms**
scabies	scabies	1	**Infections/Infestations**
scalp	-	scalp	**Skin/Subcutaneous Cellular Tissue Disorders**
scarlet fever/scarlatina	scarlet fever/scarlatina	1	**Infections/Infestations**
scarlatina*	scarlet fever/scarlatina	1	**Infections/Infestations**
scars	scars	1	**Injuries**
schistosomiasis	schistosomiasis	1	**Infections/Infestations**
schizophrenia	schizophrenia	4	**Mental Disorders**
sciatica	sciatica	back	**Muscular-Skeletal System Disorders**
sclerae	-	sclerae	**Sensory System Disorders**
sclerosis	sclerosis	1	**Abnormalities**
scorpion stings	scorpion stings	4	**Poisonings**
scrotum	-	scrotum	**Genitourinary System Disorders**
scurvy*	vitamin C deficiency	4	**Nutritional Disorders**
sebaceous glands	-	sebaceous glands	**Skin/Subcutaneous Cellular Tissue Disorders**
secondary malignant neoplasms	secondary malignant neoplasms	1	**Neoplasms**
sedative	*sedative*	4	**Mental Disorders**
semen	-	semen	**Genitourinary System Disorders**
seminal vesicles	-	seminal vesicles	**Genitourinary System Disorders**
senile dementia	senile dementia	4	**Mental Disorders**
senility psychoses	senility psychoses	4	**Mental Disorders**
sensory nerves	-	sensory nerves	**Nervous System Disorders**
Sensory System	-		**Sensory System Disorders**
septicaemia	septicaemia	1	**Infections/Infestations**
sexual development	-	*sexual development*	**Endocrine System Disorders**
sexual deviations and disorders	sexual deviations and disorders	4	**Mental Disorders**
sexual precocity	sexual precocity	*sexual development*	**Endocrine System Disorders**
shigellosis	shigellosis	1	**Infections/Infestations**
shingles (Herpes zoster)	shingles (Herpes zoster)	1	**Infections/Infestations**
shock	shock	4	**Mental Disorders**
short sight	short sight	*refraction and accommodation*	**Sensory System Disorders**
shoulders	-	shoulder	**Muscular-Skeletal System Disorders**
sialaporia	sialaporia	salivary glands	**Digestive System Disorders**
sialism	sialism	salivary glands	**Digestive System Disorders**
sickle cell anaemia	sickle cell anaemia	blood	**Blood System Disorders**
simple fractures	simple fractures	bones	**Muscular-Skeletal System Disorders**
sinus	-	sinus	**Respiratory System Disorders**
sinusitis*	inflammation	sinus, RS	**Inflammation**
skeletal muscles	-	skeletal muscles	**Muscular-Skeletal System Disorders**
skin	-	skin	**Skin/Subcutaneous Cellular Tissue Disorders**
Skin/Subcutaneous Cellular Tissue	-	-	**Skin/Subcutaneous Cellular Tissue Disorders**
skin of specific areas	-	skin of specific areas	**Skin/Subcutaneous Cellular Tissue Disorders**
skull	-	skull	**Muscular-Skeletal System Disorders**
sleep disorders	sleep disorders	4	**Mental Disorders**
slimming aids	*slimming aids*	4	**Nutritional Disorders**
slow growth	slow growth	*growth*	**Endocrine System Disorders**
slow virus infections	slow virus infections	1	**Infections/Infestations**
small cells of lung	-	small cells of lung	**Respiratory System Disorders**
small intestine	-	small intestine	**Digestive System Disorders**
small penis	small penis	penis	**Genitourinary System Disorders**
smallpox	smallpox	1	**Infections/Infestations**
smell	-	*smell*	**Sensory System Disorders**
smooth muscles	-	smooth muscles	**Muscular-Skeletal System Disorders**
snake bites	snake bites	4	**Poisonings**
snoring	snoring	-	**Respiratory System Disorders**
soft palate	-	soft palate	**Digestive System Disorders**
soft tissues	-	soft tissues	**Muscular-Skeletal System Disorders**
solvent poisoning	solvent poisoning	4	**Poisonings**
somnambulism	somnambulism	4	**Mental Disorders**
sore throat*	inflammation	throat, RS	**Inflammation**
sores	sores	8, 1	**Skin/Subcutaneous Cellular Tissue Disorders**

Medicinal Terms (both accepted and non-accepted)	Level 3 — Disorders Treated/*Medicinal Effects*[1]	Level 3 — Body Parts/*Processes* Treated[2]	Level 2 states
spasms	spasms	muscles	**Muscular-Skeletal System Disorders**
spasticity	spasticity	5	**Muscular-Skeletal System Disorders**
sperm	-	sperm	**Genitourinary System Disorders**
spermatic chord	-	spermatic chord	**Genitourinary System Disorders**
spina bifida	spina bifida	1	**Abnormalities**
spinal chord	-	spinal chord	**Nervous System Disorders**
spinal meninges	-	spinal meninges	**Nervous System Disorders**
spinal muscular atrophy	spinal muscular atrophy	6	**Nervous System Disorders**
spinal plexus	-	spinal plexus	**Nervous System Disorders**
spine	-	spine	**Muscular-Skeletal System Disorders**
spleen	-	spleen	**Blood System Disorders**
spondylosis	spondylosis	5	**Muscular-Skeletal System Disorders**
sporotrichosis	sporotrichosis	1	**Infections/Infestations**
sprains	sprains	muscles	**Muscular-Skeletal System Disorders**
squints	squints	eyes	**Sensory System Disorders**
stammering	stammering	4	**Mental Disorders**
sterility (female)*	female sterility	*female fertility*	**Genitourinary System Disorders**
sterility (male)*	male sterility	*male fertility*	**Genitourinary System Disorders**
sternum	-	sternum	**Muscular-Skeletal System Disorders**
steroidal	*steroidal*	4	**Endocrine System Disorders**
stimulant	*stimulant*	6	**Nervous System Disorders**
stings	stings	4	**Poisonings**
stomach	-	stomach	**Digestive System Disorders**
stomachic	*stomachic*	3	**Digestive System Disorders**
stomatitis*	inflammation	mouth, DS	**Inflammation**
strains*	sprains		**Muscular-Skeletal System Disorders**
strangulated hernia	strangulated hernia	3	**Digestive System Disorders**
stress[16]	stress	4	**Mental Disorders**
stricture	stricture	1	**Abnormalities**
strokes	strokes	2	**Circulatory System Disorders**
stupour*	coma	4	**Ill-Defined Symptoms**
stuttering*	stammering	4	**Mental Disorders**
subcutaneous cellular tissue	-	subcutaneous cellular tissue	**Skin/Subcutaneous Cellular Tissue Disorders**
subglottis	-	subglottis	**Respiratory System Disorders**
sunburn	sunburn	8, 1	**Skin/Subcutaneous Cellular Tissue Disorders**
sunscreen	*sunscreen*	8, 1	**Skin/Subcutaneous Cellular Tissue Disorders**
superficial injuries	superficial injuries	1	**Injuries**
supraglottis	-	supraglottis	**Respiratory System Disorders**
sweat glands	-	sweat glands	**Skin/Subcutaneous Cellular Tissue Disorders**
sweating	-	*sweating*	**Metabolic System Disorders**
swelling*	oedema	1	**Abnormalities**
sympathetic nervous system	-	sympathetic nervous system	**Nervous System Disorders**
syncope*	fainting	4	**Ill-Defined Symptoms**
synovia	-	synovia	**Muscular-Skeletal System Disorders**
syphilis	syphilis	1	**Infections/Infestations**
tapeworm infections	tapeworm infections	1	**Infections/Infestations**
taste	-	*taste*	**Sensory System Disorders**
teeth	-	teeth	**Digestive System Disorders**
teething	teething	teeth	**Digestive System Disorders**
temperature regulation	-	*temperature regulation*	**Metabolic System Disorders**
temporal lobe of brain	-	temporal lobe of brain	**Nervous System Disorders**
tendons	-	tendons	**Muscular-Skeletal System Disorders**
testes	-	testes	**Genitourinary System Disorders**
tetanus	tetanus	1	**Infections/Infestations**
thiamin deficiency	thiamin deficiency	4	**Nutritional Disorders**
thighs	-	thighs	**Muscular-Skeletal System Disorders**
thorax	-	thorax	**Respiratory System Disorders**
thread worm infection	thread worm infection	intestine, DS	**Infections/Infestations**
throat	-	throat	**Respiratory System Disorders**
thrombosis	thrombosis	veins	**Circulatory System Disorders**
thymus	-	thymus	**Endocrine System Disorders**
thyroid	-	thyroid	**Endocrine System Disorders**
thyroiditis*	inflammation	thyroid, ES	**Inflammation**
tics	tics	4	**Mental Disorders**
tinea*	ringworm	1	**Infections/Infestations**
tinnitus	tinnitus	ears	**Sensory System Disorders**
toes	-	toes	**Muscular-Skeletal System Disorders**
tongue	-	tongue	**Digestive System Disorders**
tonic	*tonic*	4	**Nutritional Disorders**
tonsilitis*	inflammation	tonsils, RS	**Inflammation**

[16] acute reaction to

Medicinal Terms (both accepted and non-accepted)	Level 3 — Disorders Treated/*Medicinal Effects*[1]	Level 3 — Body Parts/*Processes* Treated[2]	Level 2 states
tonsils	-	tonsils	**Respiratory System Disorders**
touch	-	*touch*	**Sensory System Disorders**
toxaemia	toxaemia	4	**Infections/Infestations**
toxocariasis	toxocariasis	1	**Infections/Infestations**
toxoplasmosis	toxoplasmosis	1	**Infections/Infestations**
trachea	-	trachea	**Respiratory System Disorders**
tracheitis*	inflammation	trachea, RS	**Inflammation**
trachoma	trachoma	1	**Infections/Infestations**
tranquilliser	*tranquilliser*	4	**Mental Disorders**
trauma (psychic)	trauma (psychic)	4	**Mental Disorders**
trematode infections[17]	trematode infections	1	**Infections/Infestations**
trembling	trembling	muscles	**Muscular-Skeletal System Disorders**
trichinosis	trichinosis	intestine, DS	**Infections/Infestations**
trichomoniasis	trichomoniasis	vagina, urethra, prostate, GS	**Infections/Infestations**
trunk*	-	body	**Muscular-Skeletal System Disorders**
trypanosomiasis	trypanosomiasis	1	**Infections/Infestations**
trypsin inhibitor	*trypsin inhibitor*	*enzyme activity*	**Metabolic System Disorders**
tuberculosis	tuberculosis	1	**Infections/Infestations**
tularemia	tularemia	1	**Infections/Infestations**
tumours*	unspecified neoplasms	1	**Neoplasms**
tungiasis	tungiasis	1	**Infections/Infestations**
tympanic membranes	-	tympanic membranes	**Sensory System Disorders**
typhoid/paratyphoid	typhoid/paratyphoid	1	**Infections/Infestations**
typhus	typhus	1	**Infections/Infestations**
ulcers	ulcers	8, 1	**Skin/Subcutaneous Cellular Tissue Disorders**
ulcers*	duodenal ulcers	small intestine/ duodenum/ jejunum/ileum	**Digestive System Disorders**
ulcers*	gastric ulcers	stomach	**Digestive System Disorders**
ulcers*	peptic ulcers	3	**Digestive System Disorders**
ulcers*	gastro-jejunal ulcers	3	**Digestive System Disorders**
unspecified neoplasms	unspecified neoplasms	1	**Neoplasms**
upper limbs	-	upper limbs	**Muscular-Skeletal System Disorders**
ureter	-	ureter	**Genitourinary System Disorders**
urethra	-	urethra	**Genitourinary System Disorders**
urethral leakage	urethral leakage	urethra	**Genitourinary System Disorders**
urethral stones	urethral stones	urethra	**Genitourinary System Disorders**
urethritis*	inflammation	urethra, GS	**Inflammation**
urinary incontinence	urinary incontinence	*urination*	**Genitourinary System Disorders**
urinary retention	urinary retention	*urination*	**Genitourinary System Disorders**
urinary tract	-	urinary tract	**Genitourinary System Disorders**
urination	-	*urination*	**Genitourinary System Disorders**
urticaria	urticaria	8, 1	**Skin/Subcutaneous Cellular Tissue Disorders**
uterine ligament	-	uterine ligament	**Genitourinary System Disorders**
uterine mucosae	-	uterine mucosae	**Genitourinary System Disorders**
uterine relaxant	*uterine relaxant*	uterus	**Genitourinary System Disorders**
uterine stimulant	*uterine stimulant*	uterus	**Genitourinary System Disorders**
uterus	-	uterus	**Genitourinary System Disorders**
uveitis*	inflammation	iris, SS	**Inflammation**
uvula	-	uvula	**Digestive System Disorders**
vaccine poisoning	vaccine poisoning	4	**Poisonings**
vagina	-	vagina	**Genitourinary System Disorders**
vaginal mucosae	-	vaginal mucosae	**Genitourinary System Disorders**
vaginitis*	inflammation	vagina, GS	**Inflammation**
valves of heart	-	valves of heart	**Circulatory System Disorders**
varicose veins	varicose veins	veins	**Circulatory System Disorders**
vas deferens	-	vas deferens	**Genitourinary System Disorders**
vascular anomalies	vascular anomalies	1	**Abnormalities**
vasoconstriction	vasoconstriction	arteries/arterioles/ capillaries	**Circulatory System Disorders**
vasodilation	vasodilation	arteries/arterioles/ capillaries	**Circulatory System Disorders**
veins	-	veins	**Circulatory System Disorders**
venereal diseases (non-specified)[18]	venereal diseases	4	**Infections/Infestations**
venomous bites	venomous bites	4	**Poisonings**
ventricles	-	ventricles	**Nervous System Disorders**
vertebrae	-	vertebrae	**Muscular-Skeletal System Disorders**
vertebral column*	-	spine	**Muscular-Skeletal System Disorders**
Vincent's angina	Vincent's angina	1	**Infections/Infestations**
viral encephalitis*	encephalitis (viral)	1	**Infections/Infestations**

[17] non schistosomiasis
[18] see also gonorrhoea and syphilis

Medicinal Terms (both accepted and non-accepted)	Level 3 — Disorders Treated/*Medicinal Effects*[1]	Level 3 — Body Parts/*Processes* Treated[2]	Level 2 states
viral hepatitis*	hepatitis (viral)	1	**Infections/Infestations**
viral infections	viral infections	1	**Infections/Infestations**
viral meningitis*	meningitis (viral)	1	**Infections/Infestations**
viral pneumonia*	pneumonia (viral)	1	**Infections/Infestations**
viral warts	viral warts	1	**Infections/Infestations**
vision	-	*vision*	**Sensory System Disorders**
visual disturbance	visual disturbance	*vision*	**Sensory System Disorders**
vitamin deficiency	vitamin deficiency	4	**Nutritional Disorders**
vitamin A deficiency	vitamin A deficiency	4	**Nutritional Disorders**
vitamin B deficiency	vitamin B deficiency	4	**Nutritional Disorders**
vitamin C deficiency	vitamin C deficiency	4	**Nutritional Disorders**
vitamin D deficiency	vitamin D deficiency	4	**Nutritional Disorders**
vitamin E deficiency	vitamin E deficiency	4	**Nutritional Disorders**
vitamin K deficiency	vitamin K deficiency	4	**Nutritional Disorders**
vitamin P deficiency	vitamin P deficiency	4	**Nutritional Disorders**
vitiligo	vitiligo	8, 1	**Skin/Subcutaneous Cellular Tissue Disorders**
vitreous bodies	-	vitreous bodies	**Sensory System Disorders**
voice loss	voice loss	larynx	**Respiratory System Disorders**
volume depletion*	dehydration	*fluid and electrolyte balance*	**Metabolic System Disorders**
vomiting	vomiting	3	**Digestive System Disorders**
vomiting of pregnancy*	morning sickness	*pregnancy*	**Pregnancy/Birth/Puerperium Disorders**
vulva	-	vulva	**Genitourinary System Disorders**
vulvitis*	inflammation	vulva, GS	**Inflammation**
warts	warts	8, 1	**Skin/Subcutaneous Cellular Tissue Disorders**
weight loss	weight loss	4	**Nutritional Disorders**
whipworm infection	whipworm infection	intestine, DS	**Infections/Infestations**
white blood cells*	-	leukocytes	**Blood System Disorders**
whitlows	whitlows	8, 1	**Skin/Subcutaneous Cellular Tissue Disorders**
whooping cough/pertussis	whooping cough/pertussis	1	**Infections/Infestations**
wounds	wounds	1	**Injuries**
wrists	-	wrists	**Muscular-Skeletal System Disorders**
Yangste oedema*	hair-worm infection	intestine, DS	**Infections/Infestations**
yaws	yaws	1	**Infections/Infestations**
yellow fever	yellow fever	1	**Infections/Infestations**
zygomycosis	zygomycosis	1	**Infections/Infestations**

TABLE 53. List of non-accepted specialist terms for neoplasm disorders showing how they should be coded as Level 3 states in the standard.

(**Column 3**: 1 indicates that relevant Body Parts from Table 33 may be selected; **BS** - Blood System; **CS** - Circulatory System; **IS** - Immune System; **MSS** - Muscular-Skeletal System.)

Non-Accepted Specialist Terms for Neoplasm Disorders	Level 3 - Disorders Treated	Level 3 - Body Parts Treated
adenoma	benign neoplasms	1
birth marks	benign neoplasms	blood vessels, CS
cancer	malignant neoplasms	1
carcinomas	malignant neoplasms	1
fibroids	benign neoplasms	smooth muscle, MSS
hemagioma	benign neoplasms	blood vessels, CS
Hodgkin's disease	leukaemias	BS/IS
leiomyoma	benign neoplasms	smooth muscle, MSS
lipoma	benign neoplasms	fatty tissue, MSS
lymphangioma	benign neoplasms	lymph vessels, IS
lymphoma	leukaemias	IS
lymphosarcoma	leukaemias	IS
melanoma	malignant neoplasms	1
myeloma	leukaemias	IS/BS
non-malignant tumour	benign neoplasms	1
reticulosarcoma	leukaemias	IS/BS
sarcoma	malignant neoplasms	connective tissue
tumours	unspecified neoplasms	1

TABLE 54. List of non-accepted specialist terms for inflammatory disorders, showing the Body Parts Treated, grouped by Body System. (All these disorders should be placed in the **Level 2** disorder group - **Inflammation**.)

Non-Accepted Specialist Terms for Inflammatory Disorders	Level 3 - Body Parts Treated
Circulatory System	
arteritis	arteries
carditis	heart
endocarditis	endocardium
myocarditis	myocardium
pericarditis	pericardium
phlebitis	veins
Digestive System	
appendicitis	appendix
cholecystitis	gall bladder
colitis	colon
duodenitis	duodenum
enteritis	digestive system
gastritis	stomach
gastroenteritis	digestive system
gingivitis	gums
glossitis	tongue
inflammatory bowel disease	colon
pancreatitis	pancreas
peritonitis	peritoneum
proctitis	rectum
stomatitis	mouth
Endocrine System	
thyroiditis	thyroid

/continued over

Non-Accepted Specialist Terms for Inflammatory Disorders	Level 3 - Body Parts Treated
Genitourinary System	
cervicitis	cervix
cystitis	bladder
endometriosis	uterine mucosae
epididymitis	epididymis
mastitis	breasts
nephritis	kidneys
orchitis	testes
pelvic inflammation	uterine ligament
prostatitis	prostate
salpingo-oophoritis	Fallopian tubes
urethritis	urethra
vaginitis	vagina
vulvitis	vulva
Immune System	
lymphadenitis	lymph glands
lymphangitis	lymph vessels
Muscular-Skeletal System	
bursitis	bursa/synovia
myositis	muscles
osteitis	bones
osteomyelitis	bones
Nervous System	
encephalitis	brain
encephalomyelitis	brain, spinal chord
meningitis[1]	meninges
myelitis	spinal chord
Respiratory System	
alveolitis	alveoli
bronchiolitis	bronchioles
bronchitis	bronchi
catarrh	respiratory mucosae
farmer's lung	alveoli
laryngitis	larynx
nasopharyngitis	nasopharynx
pharyngitis	pharynx
phlegm	respiratory mucosae
pleurisy	pleura
rhinitis	nasal tract
sinusitis	sinuses
sore throat	throat
tonsilitis	tonsils
tracheitis	trachea
Sensory System	
choroiditis	choroids
conjunctivitis	conjunctivae
dacryoadenitis	lachrymal glands
dacryocystitis	lachrymal ducts
keratitis	corneas
labyrinthitis	inner ears
mastoiditis	mastoids
myringitis	tympanic membranes
opthalmia	eyes
otitis media	middle ears
otitis	ears
retinitis	retinas
uveitis	irises

[1] see also **Infections/Infestations** for bacterial and viral meningitis

TABLE 55. Alphabetical list of non-accepted specialist terms for inflammatory disorders showing Level 3, Body Parts Treated (both broad and narrow terms). (All these disorders should be placed in the **Level 2** state **Inflammation.**)

Non-Accepted Specialist Terms for Inflammatory disorders	Level 3 - Body Part Treated	
	Narrow Term	Broadest Term
alveolitis	alveoli	Respiratory System
appendicitis	appendix	Digestive System
arteritis	arteries	Circulatory System
bronchiolitis	bronchioles	Respiratory System
bronchitis	bronchi	Respiratory System
bursitis	bursa	Muscular-Skeletal System
bursitis	synovia	Muscular-Skeletal System
carditis	heart	Circulatory System
catarrh	respiratory mucosae	Respiratory System
cervicitis	cervix	Genitourinary System
cholecystitis	gall bladder	Digestive System
choroiditis	choroids	Sensory System
colitis	colon	Digestive System
conjunctivitis	conjunctivae	Sensory System
cystitis	bladder	Genitourinary System
dacryoadenitis	lachrymal glands	Sensory System
dacryocystitis	lachrymal ducts	Sensory System
duodenitis	duodenum	Digestive System
encephalitis	brain	Nervous System
encephalomyelitis	brain, spinal chord	Digestive System
endocarditis	endocardium	Circulatory System
endometriosis	uterine mucosae	Genitourinary System
enteritis	digestive system	Digestive System
epididymitis	epididymis	Genitourinary System
farmer's lung	alveoli	Respiratory System
gastritis	stomach	Digestive System
gastroenteritis	digestive system	Digestive System
gingivitis	gums	Digestive System
glossitis	tongue	Digestive System
inflammatory bowel disease	colon	Digestive System
keratitis	corneas	Sensory System
labyrinthitis	inner ears	Sensory System
laryngitis	larynx	Respiratory System
lymphadenitis	lymph glands	Immune System
lymphangitis	lymph vessels	Immune System
mastitis	breasts	Genitourinary System
mastoiditis	mastoid	Sensory System
meningitis	meninges	Nervous System
myelitis	spinal chord	Nervous System
myocarditis	myocardium	Circulatory System
myositis	muscles	Muscular-Skeletal System
myringitis	tympanic membranes	Sensory System
nasopharyngitis	nasopharynx	Respiratory System
nephritis	kidneys	Genitourinary System
opthalmia	eyes	Sensory System
orchitis	testes	Genitourinary System
osteitis	bones	Muscular-Skeletal System
osteomyelitis	bones	Muscular-Skeletal System
otitis media	middle ears	Sensory System
otitis	ears	Sensory System
pancreatitis	pancreas	Digestive System,
pelvic inflammation	uterine ligament	Genitourinary System
pericarditis	pericardium	Circulatory System
peritonitis	peritoneum	Digestive System
pharyngitis	pharynx	Respiratory System
phlebitis	veins	Circulatory System
phlegm	respiratory mucosae	Respiratory System

/continued over

Non-Accepted Specialist Terms for Inflammatory disorders	Level 3 - Body Part Treated	
	Narrow Term	Broadest Term
pleurisy	pleura	Respiratory System
proctitis	rectum	Digestive System
prostatitis	prostate	Genitourinary System
retinitis	retina	Sensory System
rhinitis	nasal tract	Respiratory System
salpingo-oophoritis	Fallopian tubes	Genitourinary System
sinusitis	sinus	Respiratory System
sore throat	throat	Respiratory System
stomatitis	mouth	Digestive System
thyroiditis	thyroid	Endocrine System
tonsilitis	tonsils	Respiratory System
tracheitis	trachea	Respiratory System
urethritis	urethra	Genitourinary System
uveitis	irises	Sensory System
vaginitis	vagina	Genitourinary System
vulvitis	vulva	Genitourinary System

TABLE 56. List of Body Parts most likely to be affected by **Inflammation.**

BLOOD SYSTEM
spleen

CIRCULATORY SYSTEM
arteries
heart
myocardium
pericardium
veins

DIGESTIVE SYSTEM
anal canal
anus
appendix
bile duct
caecum
colon
duodenum
gall bladder
gums
ileum
intestine
jejenum
large intestine
lips
liver
mouth
oesophagus
pancreas
peritoneum
rectum
salivary glands
small intestine
stomach
teeth
tongue

ENDOCRINE SYSTEM
adrenal glands
thymus
thyroid

GENITOURINARY SYSTEM
areola
Bartholin's gland
bladder
breasts
cervix
epididymis
Fallopian tubes
female genitals
kidneys
labia
male genitals
nipples
ovaries
penis
perineum
peritoneum
prostate
scrotum
spermatic chord
testes
urethra
uterine ligament
uterine mucosae
uterus
vagina
vas deferens
vulva

IMMUNE SYSTEM
lymph glands
lymph nodes
lymph vessels

MUSCULAR-SKELETAL SYSTEM
bones
bursa
connective tissues
fascia
invertebral discs
jaw
joints
knees
legs
muscles
sacroiliac region
synovia
tendons
thighs

NERVOUS SYSTEM
brain
cerebral meninges
cerebrum
cranial nerves
meninges
nerves
spinal chord

RESPIRATORY SYSTEM
alveoli
bronchi
bronchioles
glottis
larynx
lungs
nasal tract
nasopharynx
nose
pharynx
pleura
respiratory mucosae
sinuses
throat
tonsils
trachea

SENSORY SYSTEM
choroids
conjunctivae
corneas
ears
Eustachian tubes
eyelids
eyes
inner ears
irises
lachrymal ducts
lachrymal glands
mastoids
middle ears
optic nerves
orbit of eyes
ossicles
outer ears
retinas
tympanic membranes

SKIN/SUBCUTANEOUS CELLULAR TISSUE
skin
skin of specific areas
navel
perianal area
subcutaneous cellular tissue

TABLE 57. List of Body Parts most likely to be affected by **Pain**[1].

CIRCULATORY SYSTEM	MUSCULAR-SKELETAL SYSTEM	spine
heart	ankles	tendons
pericardium	arms	thighs
	back	toes
DIGESTIVE SYSTEM	body	upper limbs
abdomen	bones	vertebrae
anus	bursa	wrists
bile duct	cartilages	
caecum	chest	NERVOUS SYSTEM
colon	coccyx	nerves
gall bladder	elbows	
mouth	extremities	RESPIRATORY SYSTEM
rectum	face	diaphragm
stomach	fascia	larynx
teeth	feet	nasopharynx
tongue	fingers	nose
	hands	pharynx
GENITOURINARY SYSTEM	head	pleura
bladder	hips	sinuses
breasts	invertebral discs	throat
female genitals	jaw	
foreskin	joints	SENSORY SYSTEM
kidneys	knees	ears
male genitals	legs	eyes
ovaries	ligaments	mastoids
penis	limbs	orbits of eyes
perineum	lower limbs	
scrotum	lumbar region	SKIN/SUBCUTANEOUS CELLULAR TISSUE
seminal vesicles	mandible	
spermatic chord	maxilla	skin
testes	muscles	
ureter	neck	
urinary tract	pelvis	
uterus	ribs	
vagina	sacroiliac region	
vulva	shoulder	

[1] see also menstrual pain, labour pain, ovulatory pain, psychogenic pain, and growing pain within their respective Level 2 disorder groups (not within Pain)

TABLE 58. Medicinal terms which relate to allergies. (See key to Table 52 for explanation of column 3.)

Medicinal Terms (both accepted and non-accepted)	Level 3 - Disorders Treated	Level 3 - Body Parts/ *Processes* Treated	**Level 2** states
anaphylactic shock	anaphylactic shock	4	**Poisonings**
allergic arthritis	allergic arthritis	5	**Muscular-Skeletal System**
allergic asthma	allergic asthma	-	**Respiratory System**
allergic colitis	allergic colitis	3	**Digestive System**
allergic contact dermatitis	allergic contact dermatitis	8, 1	**Skin/Subcutaneous Cellular Tissue**
allergic gastroenteritis	allergic gastroenteritis	3	**Digestive System**
allergic reactions	allergic reactions	4	**Poisonings**
allergic rhinitis (non-pollen)	allergic rhinitis (non-pollen)	-	**Respiratory System**
allergic urticaria	allergic urticaria	8, 1	**Skin/Subcutaneous Cellular Tissue**
hay fever	hay fever	-	**Respiratory System**
rhinitis*	inflammation	nasal tract, RS	**Inflammation**
extrinsic allergic alveolitis [1]	extrinsic allergic alveolitis	-	**Respiratory System**
contact dermatitis[2]	contact dermatitis	8, 1	**Skin/Subcutaneous Cellular Tissue**
dermatitis	dermatitis	8, 1	**Skin/Subcutaneous Cellular Tissue**
dermatitis due to internally taken substances	dermatitis due to internally taken substances	8, 1	**Skin/Subcutaneous Cellular Tissue**

TABLE 59. Medicinal terms which relate to ulcers. (See key to Table 52 for explanation of column 3.)

Medicinal Terms (both accepted and non-accepted)	Level 3 - Disorders Treated	Level 3 - Body Parts/ *Processes* Treated	**Level 2** states
duodenal ulcers	duodenal ulcers	small intestine/ duodenum/ jejunum/ ileum	**Digestive System**
gastric ulcers	gastric ulcers	stomach	**Digestive System**
gastro-jejunal ulcers	gastro-jejunal ulcers	3	**Digestive System**
peptic ulcers	peptic ulcers	3	**Digestive System**
ulcers	ulcers	8,1	**Skin/Subcutaneous Cellular Tissue**
ulcers*	duodenal ulcers	small intestine/ duodenum/ jejunum/ ileum	**Digestive System**
ulcers*	gastric ulcers	stomach	**Digestive System**
ulcers*	peptic ulcers	3	**Digestive System**
ulcers*	gastro-jejunal ulcers	3	**Digestive System**

[1] due to dust, fungi, including actinomycetes etc.
[2] due to detergents, oils and grease, solvents, drugs and medicines, chemical products, food contact, plants etc.

TABLE 60. Alphabetical list of Level 3, Disorders Treated within the **Level 2** group **Infections/Infestations** showing the causal organism(s) and organism group(s). (Number of species is unknown for many genera.)

Level 3 - Disorders Treated	Causal Organisms	Organism Groups
actinomycosis	*Actinomyces*	Bacteria
adenoviral infections	Adenovirus	Viruses
AIDS	HIV	Viruses
allescheriosis	*Pseudallescheria*	Fungi
amoebiasis	-	Protozoa
amoebiasis	Amoebida	Protozoa
amoebic dysentery	*Entamoeba histolytica*	Protozoa
annelid worm infestations	-	Annelida
anthrax	*Bacillus anthracis*	Bacteria
arachnid infestations	-	Arthropoda-Arachnida
arboviral infection	Arbovirus	Viruses
arthropod infestations	-	Arthropoda
aspergillosis	*Aspergillus*	Fungi
bacterial infections	*Escherischia coli*	Bacteria
bacterial infections	*Haemophilus influenzae*	Bacteria
bacterial infections	*Klebsiella pneumoniae*	Bacteria
bacterial infections	*Mycobacterium* spp.[1]	Bacteria
bacterial infections	*Mycoplasma*	Bacteria
bacterial infections	*Proteus mirabilis*	Bacteria
bacterial infections	*Proteus morganii*	Bacteria
bacterial infections	*Serratia*	Bacteria
bacterial infections	*Staphylococcus*	Bacteria
bacterial infections	*Streptococcus*	Bacteria
bacterial infections	*Streptococcus pneumoniae*	Bacteria
bacterial infections (intestine)	*Aeromonas*	Bacteria
bacterial infections (intestine)	*Arizona*	Bacteria
bacterial infections (intestine)	*Escherischia coli*	Bacteria
bacterial infections (intestine)	*Listeria monocytogenes*	Bacteria
bacterial infections (intestine)	*Proteus mirabilis*	Bacteria
bacterial infections (intestine)	*Proteus morganii*	Bacteria
bacterial infections (intestine)	*Pseudomonas*	Bacteria
bacterial infections (intestine)	*Staphylococcus* sp.	Bacteria
bacterial infections (intestine)	*Yersinia enterocolitica*	Bacteria
balantidiasis	*Balantidium coli*	Protozoa
blastomycosis	*Blastomyces dermatitidis*	Fungi
botulism	*Clostridium botulinum*	Bacteria
brucellosis	*Brucella abortus*	Bacteria
brucellosis	*Brucella canis*	Bacteria
brucellosis	*Brucella melitensis*	Bacteria
brucellosis	*Brucella suis*	Bacteria
candidiasis	*Candida*	Fungi
capillariasis	*Capillaria*	Nemata
cerebral malaria	*Plasmodium falciparum*	Protozoa
Chagas' disease	*Trypanosoma cruzi*	Protozoa
chicken pox	Postvaricella encephalitis	Viruses
chicken pox	Varicella pneumonitis	Viruses
chiggers	*Trombicula larvae*	Arthropoda-Arachnida-Acari
chills	-	-
cholera	*Vibrio cholerae*	Bacteria
chromoblastomycosis	*Cladosporium carrionii*	Fungi
chromoblastomycosis	*Phialophora* spp.	Fungi
chromoblastomycosis	*Rhinocladiella* spp.	Fungi
cladosporiosis	*Cladosporium*	Fungi
coccidiomycosis	*Coccidioides immitis*	Fungi
coccidiosis	*Isospora bellii*	Protozoa
coccidiosis	*Isospora hominis*	Protozoa
colds	Coronoavirus	Viruses
colds	Influenza virus	Viruses
colds	Parainfluenza virus	Viruses
colds	Rhinovirus	Viruses
colds	Syncytial virus	Viruses
cold sores	Herpes simplex	Viruses

[1] non-leprosy/non-tuberculosis (*Mycobacterium leprae, M. tuberculosis*)

Level 3 - Disorders Treated	Causal Organisms	Organism Groups
cowpox	Cowpox virus	Viruses
coxsackie	Enterovirus coxsackie	Viruses
creeping eruption	*Ancylostoma braziliense*	Nemata
creeping eruption	*Ancylostoma caninum*	Nemata
Creutzfeldt Jakob disease	Slow virus	Viruses
cryptococcosis	*Cryptococcus neoformans*	Fungi
cryptosporidiosis	*Cryptosporidium*	Protozoa
dengue	Dengue Arbovirus	Viruses
dientamoebiasis	*Dientamoeba fragilis*	Protozoa
dipetalonemiasis	*Dipetalonema*	Nemata (Filarial)
diphtheria	*Corynebacterium diphtheriae*	Bacteria
encephalitis (viral)	Arbovirus	Viruses
enteroviral infection	Enterovirus	Viruses
erysipelas (of the skin)	*Streptococcus pyogenes*	Bacteria
erysepelas	*Erysipelothrix incidiosa*	Bacteria
favus	*Trichophyton gallinae*	Fungi
favus	*Trichophyton schoenleinii*	Fungi
favus	*Trichophyton verrucosum*	Fungi
fever	-	-
filarial nematode infections	-	Nemata (Filarial)
filariasis	-	Nemata (Filarial)
filariasis	*Brugia malayi*	Nemata (Filarial)
filariasis	*Masorella ozzardi*	Nemata (Filarial)
filariasis	*Wuchereria bancroftii*	Nemata (Filarial)
flagellate protozoa infections	flagellate protozoa[2]	Protozoa
flea infestations	*Ctenocephalides canis*	Arthropoda - Insecta
flea infestations	*Ctenocephalides felis*	Arthropoda - Insecta
flea infestations	*Pulex irritans*	Arthropoda - Insecta
fluke infections	-	Platyhelminthes-Trematoda
fluke infections	*Clonorchis*	Platyhelminthes-Trematoda
fluke infections	*Dicrocoelium*	Platyhelminthes-Trematoda
fluke infections	*Echinostoma*	Platyhelminthes-Trematoda
fluke infections	*Fasciola*	Platyhelminthes-Trematoda
fluke infections	*Fasciolopsis*	Platyhelminthes-Trematoda
fluke infections	*Gastrodiscoides*	Platyhelminthes-Trematoda
fluke infections	*Heterophyes*	Platyhelminthes-Trematoda
fluke infections	*Metagonimus*	Platyhelminthes-Trematoda
fluke infections	*Opisthorchis*	Platyhelminthes-Trematoda
fluke infections	*Stellantochasmus*	Platyhelminthes-Trematoda
food poisoning (bacterial)	*Bacillus cereus*	Bacteria
food poisoning (bacterial)	*Campylobacter* spp.	Bacteria
food poisoning (bacterial)	*Clostridium perfringens*	Bacteria
food poisoning (bacterial)	*Clostridium* spp.	Bacteria
food poisoning (bacterial)	*Staphylococcus*	Bacteria
food poisoning (bacterial)	*Vibrio parahaemolyticus*	Bacteria
foot and mouth	Apthovirus	Viruses
fungal infections	*Piedraia hortai*	Fungi
fungal infections	*Pyrenochaeta romeroi*	Fungi
fungal infections	*Trichosporon*	Fungi
fungal infections	*Zopfia senegalensis*	Fungi
gas gangrene	*Clostridium hystolyticum*	Bacteria
gas gangrene	*Clostridium oedematiens*	Bacteria
gas gangrene	*Clostridium perfringens*	Bacteria
gas gangrene	*Clostridium septicum*	Bacteria
gas gangrene	*Clostridium sordelli*	Bacteria
giardiasis	*Giardia lamblia*	Protozoa
glanders	*Pseudomonas mallei*	Bacteria
gnathostomiasis	*Gnathostoma*	Nemata
gonorrhoea	*Neisseria gonorrhoea*	Bacteria
guinea worm infection	*Dracunculus medinensis*	Nemata
haemorrhagic fever	Arboviruses	Viruses
haemorrhagic fever	Arena viruses	Viruses
haemorrhagic fever	Aunya viruses	Viruses
haemorrhagic fever	Flaviviruses	Viruses
hair-worm infections[3]	*Trichostrongyloides*	Nemata

[2] non *Trichomonas*
[3] Yangste oedema

Level 3 - Disorders Treated	Causal Organisms	Organism Groups
helminth worm infections	-	Helminths[4]
hepatitis	Hepatitis virus	Viruses
hepatitis A	Hepatitis A virus	Viruses
hepatitis B	Hepatitis B virus	Viruses
hepatitis non-A, non-B	Hepatitis non-A, non-B virus	Viruses
herpes	Herpes simplex	Viruses
herring worm disease	*Anisakia larvae*	Nemata
histoplasmosis	*Histoplasma capsulatum*	Fungi
HIV infections	HIV virus	Viruses
hookworm infections (New World)	*Necator americanus*	Nemata
hookworm infections (Old World)	*Ancylostoma duodenale*	Nemata
hydatid disease	*Echinococcus granulosus*	Platyhelminthes-Cestoda
hydatid disease	*Echinococcus multilocularis*	Platyhelminthes-Cestoda
impetigo	*Staphylococcus aureus*	Bacteria
impetigo	*Streptococcus pyogenes*	Bacteria
influenza	Influenza virus	Viruses
insect infestations	-	Arthropoda-Insecta
kuru	Slow virus	Viruses
leech infestation	*Hirundinea*	Annelida
leishmaniasis	*Leishmania*	Protozoa
leprosy	*Mycobacterium leprae*	Bacteria
leptospirosis	*Leptospira interrogans*	Bacteria (Spirochaetes)
lice infestations	*Pediculus*	Arthropoda-Insecta
listeriosis	*Listeria monocytogenes*	Bacteria
loaisis	*Loa loa*	Nemata (Filarial)
lobomycosis	*Loboa loboi*	Fungi
lyme disease	*Borellia burgdorferi*	Bacteria (Spirochaetes)
maduromycosis	*Acremonium falciforme*	Fungi
maduromycosis	*Actinomadura*	Bacteria
maduromycosis	*Aspergillus nidulans*	Fungi
maduromycosis	*Madurella*	Fungi
maduromycosis	*Madurella mycetomia*	Fungi
maduromycosis	*Nocardia*	Bacteria
maduromycosis	*Pseudallescheria*	Fungi
maduromycosis	*Streptomyces*	Bacteria
malaria	*Plasmodium falciparum*	Protozoa
malaria	*Plasmodium malariae*	Protozoa
malaria	*Plasmodium ovale*	Protozoa
malaria	*Plasmodium vivax*	Protozoa
measles	Morbillivirus	Viruses
melioidosis	*Pseudomonas pseudomallei*	Bacteria
meningitis (bacterial)	*Haemophilus influenzae*	Bacteria
meningitis (bacterial)	*Neisseria gonorrhoea*	Bacteria
meningitis (bacterial)	*Serratia*	Bacteria
meningitis (bacterial)	*Staphylococcus aureus*	Bacteria
meningitis (bacterial)	*Streptococcus pneumoniae*	Bacteria
meningitis (bacterial)[5]	*Neisseria meningitidis*	Bacteria
meningitis (viral)	Adenovirus	Viruses
meningitis (viral)	Meningitis virus	Viruses
meningitis (viral)	Enterovirus	Viruses
mumps	Paramyxovirus	Viruses
mycotic mycetomas	*Neotestudina rosatii*	Fungi
mycotic mycetomas	*Coccidioides immitis*	Fungi
mycotic mycetomas	*Aspergillus*	Fungi
myiasis	Diptera larvae	Arthropoda-Insecta
nematode infections	-	Nemata
nocardiosis	*Nocardia*	Bacteria
onchocerciasis	*Onchocerca*	Nemata (Filarial)
paracoccidioidomycosis	*Paracoccidiodes brasiliensis*	Fungi
pasteurellosis	*Pasteurella multocida*	Bacteria
pasteurellosis	*Pasteurella pseudotuberculosis*	Bacteria
periodic fever	-	-
pinta	*Treponema carateum*	Bacteria (Spirochaetes)

[4]Platyhelminthes and Nemata
[5]epidemic meningitis

Level 3 - Disorders Treated	Causal Organisms	Organism Groups
pinworm infection	*Enterobius vermicularis*	Nemata
pityriasis nigra	*Exophiala werneckii*	Fungi
pityriasis nigra	*Stenella araguata*	Fungi
plague	*Yersinia pestis*	Bacteria
pneumonia (bacterial)	*Haemophilus influenzae*	Bacteria
pneumonia (bacterial)	*Klebsiella pneumoniae*	Bacteria
pneumonia (bacterial)	*Legionella pneumophila*	Bacteria
pneumonia (bacterial)	*Serratia*	Bacteria
pneumonia (bacterial)	*Staphylococcus*	Bacteria
pneumonia (bacterial)	*Streptococcus pneumoniae*[6]	Bacteria
pneumonia (bacterial)	*Streptococcus pyogenes*	Bacteria
pneumonia (protozoal)	*Pneumocystis carinii*	Protozoa
pneumonia (viral)	Pneumonia virus	Viruses
polio	Poliovirus	Viruses
protozoal infections	-	Protozoa
psittacosis[7]	*Chlamydia psittaci*	Bacteria
Q fever	*Coxiella burnetti*	Bacteria (Rickettsias)
rabies	Lyssa virus	Viruses
rat bite fever	*Spirillum minor*	Bacteria
rat bite fever	*Streptobacillus moniliformis*	Bacteria
relapsing fever	*Borellia*	Bacteria (Spirochaetes)
rhinosporidosis	*Rhinosporidium seeberi*	Fungi
Rhodesian trypansosomiasis	*Trypanosoma rhodesiense*	Protozoa
ringworm	*Epidermophyton* spp.	Fungi
ringworm	*Microsporum audoinii*	Fungi
ringworm	*Microsporum canis*	Fungi
ringworm	*Trichophyton schoenleinii*	Fungi
roundworm infections	*Ascaris lumbidioides*	Nemata
rubella	Rubella	Viruses
salmonellosis	*Salmonella*	Bacteria
scabies	*Desmodes*	Arthropoda-Arachnida-Acari
scabies	*Psoroptes*	Arthropoda-Arachnida-Acari
scabies	*Sarcoptes scabei*	Arthropoda-Arachnida-Acari
scarlet fever/scarlatina	*Streptococcus pyogenes*	Bacteria
schistosomiasis	*Schistosoma*	Platyhelminthes-Trematoda
septicaemia	*Escherischia coli*	Bacteria
septicaemia	*Haemophilus influenzae*	Bacteria
septicaemia	*Pseudomonas*	Bacteria
septicaemia	*Salmonella*	Bacteria
septicaemia	*Serratia*	Bacteria
septicaemia	*Staphylococcus*	Bacteria
septicaemia	*Streptococcus*	Bacteria
septicaemia	*Streptococcus pneumoniae*	Bacteria
shigellosis	*Shigella boydii*	Bacteria
shigellosis	*Shigella dysenteriae*	Bacteria
shigellosis	*Shigella flexneri*	Bacteria
shigellosis	*Shigella sonnei*	Bacteria
shingles	Herpes zoster	Viruses
slow virus infections	Slow virus	Viruses
smallpox	Variola major	Viruses
smallpox	Variola minor	Viruses
sporotrichosis	*Sporothrix schenckii*	Fungi
syphilis	*Treponema pallidum*	Bacteria
tapeworm infections	-	Platyhelminthes-Cestoda
tapeworm infections	*Cysticercus cellulosae*	Platyhelminthes-Cestoda
tapeworm infections	*Diphyllobothrium*	Platyhelminthes-Cestoda
tapeworm infections	*Diplogonoporus*	Platyhelminthes-Cestoda
tapeworm infections	*Dipylidium*	Platyhelminthes-Cestoda
tapeworm infections	*Hymenolepis*	Platyhelminthes-Cestoda
tapeworm infections	*Sparganum*	Platyhelminthes-Cestoda
tapeworm infections	*Taenia* spp.	Platyhelminthes-Cestoda
tetanus	*Clostridium tetani*	Bacteria
threadworm infections	*Strongyloides stercoralis*	Nemata
toxaemia	-	-
toxocariasis	*Toxocara*	Nemata

[6] commonest form of bacterial pneumonia
[7] ornithosis

Level 3 - Disorders Treated	Causal Organisms	Organism Groups
toxoplasmosis	*Toxoplasma gondii*	Protozoa
trachoma	*Chlamydia trachomatis*	Bacteria
trichinosis	*Trichinella spiralis*	Nemata
trichomoniasis	*Trichomonas*	Protozoa (Flagellates)
trypanosomiasis	*Trypanosoma*	Protozoa
tuberculosis	*Mycobacterium tuberculosis*	Bacteria
tularemia	*Francisella tularensis*	Bacteria
tungiasis	*Tunga penetrans*	Arthropoda-Insecta
typhoid/paratyphoid	*Salmonella typha*	Bacteria
typhoid/paratyphoid	*Salmonella paratypha*	Bacteria
typhus	*Rickettsia* spp.	Bacteria
Vincent's angina	*Treponema vincentii*	Bacteria
viral infections	-	Viruses
viral warts	Papillomavirus	Viruses
whipworm infection	*Trichuris*	Nemata
whooping cough	*Bordetella bronchiseptica*	Bacteria
whooping cough	*Bordetella parapertussis*	Bacteria
whooping cough/pertussis	*Bordetella pertussis*	Bacteria
yaws	*Treponema pertenue*	Bacteria
yellow fever	Flavivirus	Viruses
zygomycosis	*Basidiobolus heptosporus*	Fungi
zygomycosis	*Absidia corymbifera*	Fungi
zygomycosis	*Conidiobolus coronatus*	Fungi
zygomycosis	*Rhizopus orizae*	Fungi

TABLE 61. Alphabetical list of medicinally important organisms showing the Level 3 Disorders within **Infections/Infestations** that they cause, and the organism group to which they belong (see also Appendix B, Table 46).

Causal Organisms	Organism Groups	Level 3 - Disorders Treated
		toxaemia
-	-	chills
-	-	fever
-	-	periodic fever
-	Annelida	annelid worm infestations
	Arthropoda	arthropod infestations
-	Arthropoda-Arachnida	arachnid infestations
-	Arthropoda-Insecta	insect infestations
-	Helminths[1]	helminth worm infections
-	Platyhelminthes-Cestoda	tapeworm infections
-	Nemata	nematode infections
	Nemata (Filarial)	filariasis
-	Platyhelminthes-Trematoda	fluke infections
-	Protozoa	amoebiasis
-	Protozoa	protozoal infections
-	Viruses	viral infections
Absidia corymbifera	Fungi	zygomycosis
Acremonium falciforme	Fungi	maduromycosis
Actinomadura	Bacteria	maduromycosis
Actinomyces	Bacteria	actinomycosis
Adenovirus	Viruses	adenoviral infection
Adenovirus	Viruses	meningitis (viral)
Aeromonas	Bacteria	bacterial infections (intestine)
Amoebida	Protozoa	amoebiasis
Ancylostoma braziliense	Nemata	creeping eruption
Ancylostoma caninum	Nemata	creeping eruption
Ancylostoma duodenale	Nemata	hookworm infections (Old World)
Anisakia larvae	Nemata	herring worm disease
Apthovirus	Viruses	foot and mouth
Arbovirus	Viruses	arboviral infection

[1] Platyhelminthes and Nemata

Causal Organisms	Organism Groups	Level 3 - Disorders Treated
Arbovirus	Viruses	encephalitis (viral)
Arbovirus	Viruses	haemorrhagic fever
Arena viruses	Viruses	haemorrhagic fever
Arizona	Bacteria	bacterial infections (intestine)
Ascaris lumbidioides	Nemata	roundworm infections
Aspergillus	Fungi	aspergillosis
Aspergillus	Fungi	mycotic mycetomas
Aspergillus nidulans	Fungi	maduromycosis
Bacillus anthracis	Bacteria	anthrax
Bacillus cereus	Bacteria	food poisoning (bacterial)
Balantidium coli	Protozoa	balantidiasis
Basidiobolus heptosporus	Fungi	zygomycosis
Blastomyces dermatitidis	Fungi	blastomycosis
Bordetella bronchiseptica	Bacteria	whooping cough
Bordetella parapertussis	Bacteria	whooping cough
Bordetella pertussis	Bacteria	whooping cough
Borellia	Bacteria (Spirochaetes)	relapsing fever
Borellia burgdorferi	Bacteria (Spirochaetes)	lyme disease
Brucella abortus	Bacteria	brucellosis
Brucella canis	Bacteria	brucellosis
Brucella melitensis	Bacteria	brucellosis
Brucella suis	Bacteria	brucellosis
Brugia malayi	Nemata (Filarial)	filariasis
Bunya viruses	Viruses	haemorrhagic fever
Campylobacter spp.	Bacteria	food poisoning (bacterial)
Candida	Fungi	candidiasis
Capillaria	Nemata	capillariasis
Chlamydia psittaci	Bacteria	psittacosis
Chlamydia trachomatis	Bacteria	trachoma
Cladosporium	Fungi	cladosporiosis
Cladosporium carrionii	Fungi	chromoblastomycosis
Clonorchis	Platyhelminthes-Trematoda	fluke infections
Clostridium botulinum	Bacteria	botulism
Clostridium hystolyticum	Bacteria	gas gangrene
Clostridium oedematiens	Bacteria	gas gangrene
Clostridium perfringens	Bacteria	food poisoning (bacterial)
Clostridium perfringens	Bacteria	gas gangrene
Clostridium septicum	Bacteria	gas gangrene
Clostridium sordelli	Bacteria	gas gangrene
Clostridium spp.	Bacteria	food poisoning (bacterial)
Clostridium tetani	Bacteria	tetanus
Coccidioides immitis	Fungi	mycotic mycetomas
Coccidioides immitis	Fungi	coccidiomycosis
Conidiobolus coronatus	Fungi	zygomycosis
Coronoavirus	Viruses	colds
Corynebacterium diphtheriae	Bacteria	diphtheria
Cowpox virus	Viruses	cowpox
Coxiella burnetti	Bacteria (Rickettsias)	Q fever
Cryptococcus neoformans	Fungi	cryptococcosis
Cryptosporidium	Protozoa	cryptosporidiosis
Ctenocephalides canis	Arthropoda - Insecta	flea infestations
Ctenocephalides felis	Arthropoda - Insecta	flea infestations
Cysticercus cellulosae	Platyhelminthes-Cestoda	tapeworm infections
Dengue Arbovirus	Viruses	dengue
Desmodes	Arthropoda-Arachnida-Acari	scabies
Dicrocoelium	Platyhelminthes-Trematoda	fluke infections
Dientamoeba fragilis	Protozoa	dientamoebiasis
Dipetalonema	Nemata (Filarial)	dipetalonemiasis
Diphyllobothrium	Platyhelminthes-Cestoda	tapeworm infections
Diplogonoporus	Platyhelminthes-Cestoda	tapeworm infections
Diptera larvae (fly larvae)	Arthropoda-Insecta	myiasis
Dipylidium	Platyhelminthes-Cestoda	tapeworm infections
Dracunculus medinensis	Nematodes	guinea worm infection
Echinococcus granulosus	Platyhelminthes-Cestoda	hydatid disease
Echinococcus multilocularis	Platyhelminthes-Cestoda	hydatid disease
Echinostoma	Platyhelminthes-Trematoda	fluke infections
Entamoeba histolytica	Protozoa	amoebic dysentery
Enterobius vermicularis	Nemata	pinworm infection

Causal Organisms	Organism Groups	Level 3 - Disorders Treated
Enterovirus	Viruses	enteroviral infection
Enterovirus	Viruses	meningitis (viral)
Enterovirus coxsackie	Viruses	coxsackie
Epidermophyton spp.	Fungi	ringworm
Erysipelothrix incidiosa	Bacteria	erysepelas
Escherischia coli	Bacteria	bacterial infections
Escherischia coli	Bacteria	bacterial infections (intestine)
Escherischia coli	Bacteria	septicaemia
Exophiala werneckii	Fungi	pityriasis nigra
Fasciola	Platyhelminthes-Trematoda	fluke infections
Fasciolopsis	Platyhelminthes-Trematoda	fluke infections
flagellate protozoa	Protozoa - Flagellates	flagellate protozoa infections
Flavivirus	Viruses	yellow fever
Flaviviruses	Viruses	haemorrhagic fever
fly larvae	Arthropoda - Insecta	myiasis
Francisella tularensis	Bacteria	tularemia
Gastrodiscoides	Platyhelminthes-Trematoda	fluke infections
Giardia lamblia	Protozoa	giardiasis
Gnathostoma	Nematodes	gnathostomiasis
Haemophilus influenzae	Bacteria	bacterial infections
Haemophilus influenzae	Bacteria	meningitis (bacterial)
Haemophilus influenzae	Bacteria	pneumonia (bacterial)
Haemophilus influenzae	Bacteria	septicaemia
Hepatitis A virus	Viruses	hepatitis A
Hepatitis B virus	Viruses	hepatitis B
Hepatitis non-A, non-B virus	Viruses	hepatitis non-A, non-B
Hepatitis virus	Viruses	hepatitis
Herpes simplex	Viruses	herpes
Herpes zoster	Viruses	shingles
Heterophyes	Platyhelminthes-Trematoda	fluke infections
Hirundinea	Annelida	leech infestation
Histoplasma capsulatum	Fungi	histoplasmosis
HIV	Viruses	AIDS
HIV virus	Viruses	HIV infections
Hymenolepis	Platyhelminthes-Cestoda	tapeworm infections
Influenza virus	Viruses	colds
Influenza virus	Viruses	influenza
Isospora bellii	Protozoa	coccidiosis
Isospora hominis	Protozoa	coccidiosis
Klebsiella pneumoniae	Bacteria	bacterial infections
Klebsiella pneumoniae	Bacteria	pneumonia (bacterial)
Legionella pneumophila	Bacteria	pneumonia (bacterial)
Leishmania	Protozoa	leishmaniasis
Leptospira interrogans	Bacteria (Spirochaetes)	leptospirosis
lice	Arthropoda - Insecta	lice infestations
Listeria monocytogenes	Bacteria	bacterial infections (intestine)
Listeria monocytogenes	Bacteria	listeriosis
Loa loa	Nemata (Filarial)	loaisis
Loboa loboi	Fungi	lobomycosis
Lyssa virus	Viruses	rabies
Madurella	Fungi	maduromycosis
Madurella mycetomia	Fungi	maduromycosis
Masorella ozzardi	Nemata (Filarial)	filariasis
Meningitis virus	Viruses	meningitis (viral)
Metagonimus	Platyhelminthes-Trematoda	fluke infections
Microsporum audoinii	Fungi	ringworm
Microsporum canis	Fungi	ringworm
Morbillivirus	Viruses	measles
Mycobacterium leprae	Bacteria	leprosy
Mycobacterium spp.	Bacteria	bacterial infections[2]
Mycobacterium tuberculosis	Bacteria	tuberculosis
Mycoplasma	Bacteria	bacterial infections
Necator americanus	Nemata	hookworm infections (New World)
Neisseria gonorrhoea	Bacteria	gonorrhoea
Neisseria gonorrhoea	Bacteria	meningitis (bacterial)
Neisseria meningitidis	Bacteria	meningitis (bacterial)

[2]non-leprosy/non-tuberculosis

Causal Organisms	Organism Groups	Level 3 - Disorders Treated
Neotestudina rosatii	Fungi	mycotic mycetomas
Nocardia	Bacteria	maduromycosis
Nocardia	Bacteria	nocardiosis
Onchocerca	Nemata (Filarial)	onchocerciasis
Opisthorchis	Platyhelminthes-Trematoda	fluke infections
Papillomavirus	Viruses	viral warts
Paracoccidiodes brasiliensis	Fungi	paracoccidioidomycosis
Parainfluenza virus	Viruses	colds
Paramyxovirus	Viruses	mumps
Pasteurella multocida	Bacteria	pasteurellosis
Pasteurella pseudotuberculosis	Bacteria	pasteurellosis
Pediculus	Arthropoda-Insecta	lice infestations
Phialophora spp.	Fungi	chromoblastomycosis
Piedraia hortai	Fungi	fungal infections
Plasmodium falciparum	Protozoa	cerebral malaria
Plasmodium falciparum	Protozoa	malaria
Plasmodium malariae	Protozoa	malaria
Plasmodium ovale	Protozoa	malaria
Plasmodium vivax	Protozoa	malaria
Pneumocystis carinii	Protozoa	pneumonia (protozoal)
Pneumonia virus	Viruses	pneumonia (viral)
Poliovirus	Viruses	polio
Postvaricella encephalitis	Viruses	chicken pox
Proteus mirabilis	Bacteria	bacterial infections
Proteus mirabilis	Bacteria	bacterial infections (intestine)
Proteus morganii	Bacteria	bacterial infections
Proteus morganii	Bacteria	bacterial infections (intestine)
Pseudallescheria	Fungi	allescheriosis
Pseudallescheria	Fungi	maduromycosis
Pseudomonas	Bacteria	bacterial infections (intestine)
Pseudomonas	Bacteria	septicaemia
Pseudomonas mallei	Bacteria	glanders
Pseudomonas pseudomallei	Bacteria	melioidosis
Psoroptes	Arthropoda-Arachnida-Acari	scabies
Pulex irritans	Arthropoda-Insecta	flea infestations
Pyrenochaeta romeroi	Fungi	fungal infections
Rhinocladiella spp.	Fungi	chromoblastomycosis
Rhinosporidium seeberi	Fungi	rhinosporidosis
Rhinovirus	Viruses	colds
Rhizopus orizae	Fungi	zygomycosis
Rickettsia spp.	Bacteria (Rickettsias)	typhus
Rubella	Viruses	rubella
Salmonella	Bacteria	salmonellosis
Salmonella	Bacteria	septicaemia
Salmonella paratyphi	Bacteria	typhoid/paratyphoid
Salmonella typhi	Bacteria	typhoid/paratyphoid
Sarcoptes scabei	Arthropoda-Arachnida-Acari	scabies
Schistosoma	Platyhelminthes-Trematoda	schistosomiasis
Serratia	Bacteria	bacterial infections
Serratia	Bacteria	meningitis (bacterial)
Serratia	Bacteria	pneumonia (bacterial)
Serratia	Bacteria	septicaemia
Shigella boydii	Bacteria	shigellosis
Shigella dysenteriae	Bacteria	shigellosis
Shigella flexneri	Bacteria	shigellosis
Shigella sonnei	Bacteria	shigellosis
Slow virus	Viruses	Creutzfeldt Jakob disease
Slow virus	Viruses	kuru
Slow virus	Viruses	slow virus infections
Sparganum	Platyhelminthes-Cestoda	tapeworm infections
Spirillum minor	Bacteria	rat bite fever
Sporothrix schenckii	Fungi	sporotrichosis
Staphylococcus	Bacteria	bacterial infections
Staphylococcus	Bacteria	food poisoning (bacterial)
Staphylococcus	Bacteria	pneumonia (bacterial)
Staphylococcus	Bacteria	septicaemia
Staphylococcus aureus	Bacteria	impetigo
Staphylococcus aureus	Bacteria	meningitis (bacterial)

Causal Organisms	Organism Groups	Level 3 - Disorders Treated
Staphylococcus sp.	Bacteria	bacterial infections (intestine)
Stellantochasmus	Platyhelminthes-Trematoda	fluke infections
Stenella araguata	Fungi	pityriasis nigra
Strongyloides stercoralis	Nemata	threadworm infections
Streptobacillus moniliformis	Bacteria	rat bite fever
Streptococcus	Bacteria	bacterial infections
Streptococcus	Bacteria	septicaemia
Streptococcus pneumoniae	Bacteria	bacterial infections
Streptococcus pneumoniae	Bacteria	meningitis (bacterial)
Streptococcus pneumoniae	Bacteria	septicaemia
Streptococcus pneumoniae[3]	Bacteria	pneumonia (bacterial)
Streptococcus pyogenes	Bacteria	erysipelas (of the skin)
Streptococcus pyogenes	Bacteria	impetigo
Streptococcus pyogenes	Bacteria	pneumonia (bacterial)
Streptococcus pyogenes	Bacteria	scarlet fever
Streptomyces	Bacteria	maduromycosis
Syncytial virus	Viruses	colds
Taenia spp.	Platyhelminthes-Cestoda	tapeworm infections
Toxocara	Nemata	toxocariasis
Toxoplasma gondii	Protozoa	toxoplasmosis
Treponema carateum	Bacteria (Spirochaetes)	pinta
Treponema pallidum	Bacteria (Spirochaetes)	syphilis
Treponema pertenue	Bacteria (Spirochaetes)	yaws
Treponema vincentii	Bacteria (Spirochaetes)	Vincent's angina
Trichinella spiralis	Nemata	trichinosis
Trichomonas	Protozoa (Flagellates)	trichomoniasis
Trichophyton gallinae	Fungi	favus
Trichophyton schoenleinii	Fungi	favus
Trichophyton schoenleinii	Fungi	ringworm
Trichophyton verrucosum	Fungi	favus
Trichosporon	Fungi	fungal infections
Trichostrongyloides	Nemata	hair-worm infections
Trichuris	Nemata	whipworm infection
Trombicula larvae	Arthropoda-Arachnida-Acari	chiggers
Trypanosoma	Protozoa	trypanosomiasis
Trypanosoma cruzi	Protozoa	Chagas' disease
Trypanosoma rhodesiense	Protozoa	Rhodesian trypansosomiasis
Tunga penetrans	Arthropoda-Insecta	tungiasis
Varicella pneumonitis	Viruses	chicken pox
Variola major	Viruses	smallpox
Variola minor	Viruses	smallpox
Vibrio cholerae	Bacteria	cholera
Vibrio parahaemolyticus	Bacteria	food poisoning (bacterial)
Wuchereria bancroftii	Nemata (Filarial)	filariasis
Yersinia enterocolitica	Bacteria	bacterial infections (intestine)
Yersinia pestis	Bacteria	plague
Zopfia senegalensis	Fungi	fungal infections

[3]commonest form of bacterial pneumonia

TABLE 62. Medicinally important organisms (listed alphabetically within taxonomic group order) showing the the Level 3 Disorders within **Infections/ Infestations** that they cause.

Organism Groups and Organism Names	Level 3 - Disorders
NON-SPECIFIED ORGANISMS	
-	toxaemia
-	fever
-	periodic fever
-	chills
ANNELIDA	annelid worm infestations
Hirundinea	leech infestation
ARTHROPODA	arthropod infestations
ARTHROPODA-ARACHNIDA	arachnid infestations
ARTHROPODA-ARACHNIDA-ACARI	
Desmodes	scabies
Psoroptes	scabies
Sarcoptes scabei	scabies
Trombicula larvae	chiggers
ARTHROPODA-INSECTA	insect infestations
ARTHROPODA-INSECTA-ANOPLURA	
Pediculus	lice infestations
ARTHROPODA-INSECTA-DIPTERA	
Diptera larvae (fly larvae)	myiasis
ARTHROPODA-INSECTA-DIPTERA-SIPHONAPTERA	
Ctenocephalides canis	flea infestations
Ctenocephalides felis	flea infestations
Pulex irritans	flea infestations
Tunga penetrans	tungiasis (chigoe/sandflea infestations/jiggers)
BACTERIA	
Actinomadura	maduromycosis
Actinomyces	actinomycosis
Aeromonas	bacterial infections (intestine)
Arizona	bacterial infections (intestine)
Bacillus anthracis	anthrax
Bacillus cereus	food poisoning (bacterial)
Bordetella bronchiseptica	whooping cough
Bordetella parapertussis	whooping cough
Bordetella pertussis	whooping cough
Borellia	relapsing fever
Borellia burgdorferi	lyme disease
Brucella abortus	brucellosis
Brucella canis	brucellosis
Brucella melitensis	brucellosis
Brucella suis	brucellosis
Campylobacter spp.	food poisoning (bacterial)
Chlamydia psittaci	psittacosis[1]
Chlamydia trachomatis	trachoma
Clostridium botulinum	botulism
Clostridium hystolyticum	gas gangrene
Clostridium oedematiens	gas gangrene
Clostridium perfringens	food poisoning (bacterial)
Clostridium perfringens	gas gangrene
Clostridium septicum	gas gangrene

[1] ornithosis

Organism Groups and Organism Names	Level 3 - Disorders
BACTERIA (continued)	
Clostridium sordelli	gas gangrene
Clostridium spp.	food poisoning (bacterial)
Clostridium tetani	tetanus
Corynebacterium diphtheriae	diphtheria
Coxiella burnetti	Q fever
Erysipelothrix incidiosa	erysepelas
Escherischia coli	bacterial infections (intestine)
Escherischia coli	bacterial infections
Escherischia coli	septicaemia
Francisella tularensis	tularemia
Haemophilus influenzae	bacterial infections
Haemophilus influenzae	pneumonia (bacterial)
Haemophilus influenzae	septicaemia
Haemophilus influenzae	meningitis (bacterial)
Klebsiella pneumoniae	bacterial infections
Klebsiella pneumoniae	pneumonia (bacterial)
Legionella pneumophila	pneumonia (bacterial)
Leptospira interrogans	leptospirosis
Listeria monocytogenes	bacterial infections (intestine)
Listeria monocytogenes	listeriosis
Mycobacterium leprae	leprosy
Mycobacterium spp.	bacterial infections[2]
Mycobacterium tuberculosis	tuberculosis
Mycoplasma	bacterial infections
Neisseria gonorrhoea	gonorrhoea
Neisseria gonorrhoea	meningitis (bacterial)
Neisseria meningitidis	meningitis (bacterial)[3]
Nocardia	maduromycosis
Nocardia	nocardiosis
Pasteurella multocida	pasteurellosis
Pasteurella pseudotuberculosis	pasteurellosis
Proteus mirabilis	bacterial infections (intestine)
Proteus mirabilis	bacterial infections
Proteus morganii	bacterial infections
Proteus morganii	bacterial infections (intestine)
Pseudomonas	bacterial infections (intestine)
Pseudomonas	septicaemia
Pseudomonas mallei	glanders
Pseudomonas pseudomallei	melioidosis
Rickettsia spp.	typhus
Salmonella	salmonellosis
Salmonella	septicaemia
Salmonella paratyphi	typhoid/paratyphoid
Salmonella typhi	typhoid/paratyphoid
Serratia	bacterial infections
Serratia	meningitis (bacterial)
Serratia	pneumonia (bacterial)
Serratia	septicaemia
Shigella boydii	shigellosis
Shigella dysenteriae	shigellosis
Shigella flexneri	shigellosis
Shigella sonnei	shigellosis
Spirillum minor	rat bite fever
Staphylococcus	bacterial infections
Staphylococcus	food poisoning (bacterial)
Staphylococcus	pneumonia (bacterial)
Staphylococcus	septicaemia
Staphylococcus aureus	impetigo
Staphylococcus aureus	meningitis (bacterial)
Staphylococcus sp.	bacterial infections (intestine)
Streptobacillus moniliformis	rat bite fever
Streptococcus	bacterial infections
Streptococcus	septicaemia
Streptococcus pneumoniae	bacterial infections

[2] non-leprosy/non-tuberculosis
[3] epidemic meningitis

Organism Groups and Organism Names	Level 3 - Disorders
BACTERIA (continued)	
Streptococcus pneumoniae	meningitis (bacterial)
Streptococcus pneumoniae	septicaemia
Streptococcus pneumoniae[4]	pneumonia (bacterial)
Streptococcus pyogenes	erysipelas (of the skin)
Streptococcus pyogenes	impetigo
Streptococcus pyogenes	pneumonia (bacterial)
Streptococcus pyogenes	scarlet fever
Streptomyces	maduromycosis
Treponema carateum	pinta
Treponema pallidum	syphilis
Treponema pertenue	yaws
Treponema vincentii	Vincent's angina
Vibrio cholerae	cholera
Vibrio parahaemolyticus	food poisoning (bacterial)
Yersinia enterocolitica	bacterial infections (intestine)
Yersinia pestis	plague
FUNGI	
Absidia corymbifera	zygomycosis
Acremonium falciforme	maduromycosis
Aspergillus	mycotic mycetomas
Aspergillus	aspergillosis
Aspergillus nidulans	maduromycosis
Basidiobolus haptosporus	zygomycosis
Blastomyces dermatitidis	blastomycosis
Candida	candidiasis
Cladosporium	cladosporiosis
Cladosporium carrionii	chromoblastomycosis
Coccidiodes immitis	mycotic mycetomas
Coccidioides immitis	coccidiomycosis
Conidiobolus coronatus	zygomycosis
Cryptococcus neoformans	cryptococcosis
Epidermophyton spp.	ringworm
Exophiala werneckii	pityriasis nigra
Histoplasma capsulatum	histoplasmosis (lungs)
Loboa loboi	lobomycosis
Madurella	maduromycosis
Madurella mycetomia	maduromycosis
Microsporum audoinii	ringworm
Microsporum canis	ringworm
Neotestudina rosatii	mycotic mycetoma
Paracoccidiodes brasiliensis	paracoccidioidomycosis
Phialophora spp.	chromoblastomycosis
Piedraia hortai	fungal infections
Pseudallescheria	allescheriosis
Pseudallescheria	maduromycosis
Pyrenochaeta romeroi	fungal infections
Rhinocladiella spp.	chromoblastomycosis
Rhinosporidium seeberi	rhinosporidosis
Rhizopus orizae	zygomycosis
Sporothrix schenckii	sporotrichosis
Stenella araguata	pityriasis nigra
Trichophyton gallinae	favus
Trichophyton schoenleinii	favus
Trichophyton schoenleinii	ringworm
Trichophyton verrucosum	favus
Trichosporon	fungal infections
Zopfia senegalensis	fungal infections

[4] commonest form of bacterial pneumonia

Organism Groups and Organism Names	Level 3 - Disorders
NEMATA[1]	
-	filarial nematode infections
-	filariasis
-	nematode infections
-	nematode infections (intestines)
Ancylostoma braziliense	creeping eruption
Ancylostoma caninum	creeping eruption
Ancylostoma duodenale	hookworm infections (Old World)
Anisakia larvae	herring worm disease
Ascaris lumbidioides	roundworm infections
Brugia malayi	filariasis
Capillaria	capillariasis
Dipetalonema[2]	dipetalonemiasis
Dracunculus medinensis	guinea worm infection
Enterobius vermicularis	pinworm infection
Gnathostoma	gnathostomiasis
Loa loa	loaisis
Masorella ozzardi	filariasis
Necator americanus	hookworm infections (New World)
Onchocerca	onchocerciasis
Strongyloides stercoralis	threadworm infections
Toxocara	toxocariasis
Trichinella spiralis	trichinosis
Trichostrongyloides	hair-worm infections
Trichuris	whipworm infection
Wuchereria bancroftii	filariasis
PLATYHELMINTHES-CESTODA	tapeworm infections
Cysticercus cellulosae	tapeworm infections
Diphyllobothrium	tapeworm infections
Diplogonoporus	tapeworm infections
Dipylidium	tapeworm infections
Echinococcus granulosus	hydatid disease
Echinococcus multilocularis	hydatid disease
Hymenolepis	tapeworm infections
Sparganum	tapeworm infections
Taenia spp.	tapeworm infections
PLATYHELMINTHES- TREMATODA	fluke infections
Clonorchis	fluke infections
Dicrocoelium	fluke infections
Echinostoma	fluke infections
Fasciola	fluke infections
Fasciolopsis	fluke infections
Gastrodiscoides	fluke infections
Heterophyes	flukeinfections
Metagonimus	fluke infections
Opisthorchis	fluke infections
Schistosoma	schistosomiasis
Stellantochasmus	fluke infections
PROTOZOA[3]	protozoal infections
-	amoebiasis
Amoebida	amoebiasis
Balantidium coli	balantidiasis
Cryptosporidium	cryptosporidiosis
Dientamoeba fragilis	dientamoebiasis
Entamoeba histolytica	amoebic dysentery
flagellate protozoa[4]	flagellate infections (intestine)
Giardia lamblia	giardiasis

[1] see Appendix B (Table 46), for classification below NEMATA.
[2] Acanthocheilonema
[3] see Appendix B (Table 46), for classification below PROTOZOA.
[4] not *Trichomonas*

Organism Groups and Organism Names	Level 3 - Disorders
PROTOZOA (continued)	
Isospora bellii	coccidiosis
Isospora hominis	coccidiosis
Leishmania	leishmaniasis
Plasmodium falciparum	cerebral malaria
Plasmodium falciparum	malaria
Plasmodium malariae	malaria
Plasmodium ovale	malaria
Plasmodium vivax	malaria
Pneumocystis carinii	pneumonia (protozoal)
Toxoplasma gondii	toxoplasmosis
Trichomonas (flagellate protozoa)	trichomoniasis
Trypanosoma	trypanosomiasis
Trypanosoma cruzi	Chagas' disease
Trypanosoma rhodesiense	Rhodesian trypansosomiasis
VIRUSES	viral infections
Adenovirus	adenoviral infection
Adenovirus	meningitis (viral)
Apthovirus	foot and mouth
Arbovirus	arboviral infection
Arbovirus	encephalitis (viral)
Arboviruses	haemorrhagic fever
Arena viruses	haemorrhagic fever
Bunya viruses	haemorrhagic fever
Coronoavirus	colds
Cowpox virus	cowpox
Dengue Arbovirus	dengue
Enterovirus	enteroviral infection
Enterovirus	meningitis (viral)
Enterovirus coxsackie	coxsackie
Flavivirus	yellow fever
Flaviviruses	haemorrhagic fever
Hepatitis A virus	hepatitis A
Hepatitis B virus	hepatitis B
Hepatitis non-A, non-B virus	hepatitis non-A, non-B
Hepatitis virus	hepatitis
Herpes simplex	herpes
Herpes simplex	cold sores
Herpes zoster	shingles
HIV	AIDS
HIV virus	HIV infections
Influenza virus	colds
Influenza virus	influenza
Lyssa virus	rabies
Meningitis virus	meningitis (viral)
Morbillivirus	measles
Papillomavirus	viral warts
Parainfluenza virus	colds
Paramyxovirus	mumps
Pneumonia virus	pneumonia (viral)
Poliovirus	polio
Postvaricella encephalitis	chicken pox
Rhinovirus	colds
Rubella	rubella
Slow virus	Creuzfeldt Jakob disease
Slow virus	kuru
Slow virus	slow virus infections
Syncytial virus	colds
Varicella pneumonitis	chicken pox
Variola major	smallpox
Variola minor	smallpox

TABLE 63. Infective bacterial agents showing Gram − or Gram + status, or neither.

Bacterial genera	Gram
Acinetobacter	−
Actinomadura	+
Actinomyces	+
Aeromonas	−
Arizona	−
Bacillus	+
Bordetella	−
Borellia	−
Brucella	−
Campylobacter	−
Chlamydia	−
Clostridium	+
Corynebacterium	+
Coxiella	−
Erysipelothrix	+
Escherichia	−
Francisella	−
Haemophilus	−
Klebsiella	−
Legionella	−
Leptospira	−
Listeria	+
Mycobacterium	+
Mycoplasma	neither
Neisseria	−
Nocardia	+
Pasteurella	−
Proteus	−
Pseudomonas	−
Rickettsia	−
Salmonella	−
Serratia	−
Shigella	−
Spirillum minor	−
Staphylococcus	+
Streptobacillus	−
Streptococcus	+
Streptomyces	+
Treponema	−
Vibrio	−
Yersinia	−

TABLE 64. Relationship between the Economic Botany Data Collection Standard and the **International Classification of Diseases** (ICD.9.CM).

Column 2 lists the three digit categories within IDC.9.CM which correspond to Level 3 Disorders for **Level 2** states for **MEDICINES** within the Economic Botany Data Collection Standard. The IDC.9.CM does not have separate groups for **Inflammation** and **Pain**, and it has an additional group for certain conditions originating in the Perinatal Period (760-779).

Level 2 states in Economic Botany Data Collection Standard	ICD.9.CM CODES
Unspecified Medicinal Disorders	–
Abnormalities	740–759
Blood System Disorders	280–289
Circulatory System Disorders	390–459
Digestive System Disorders	520–579
Endocrine System Disorders	240–259
Genitourinary System Disorders	580–629
Ill-Defined Symptoms	780–799
Immune System Disorders	270–279
Infections/Infestations	001–139
Inflammation	–
Injuries	800–959
Mental Disorders	290–319
Metabolic System Disorders	270–279
Muscular-Skeletal System Disorders[1]	710–739
Neoplasms	140–239
Malignant Neoplasms	199
Primary Malignant Neoplasms[2]	140–195
Leukaemias[3]	200–208
Secondary Malignant Neoplasms[4]	196–198
Carcinomas *in situ*	230–234
Benign Neoplasms	210–229
Neoplasms Of Uncertain Behaviour	235–238
Unspecified Neoplasms	239
Nervous System Disorders	320–359
Nutritional Disorders	260–269
Pain	–
Poisonings	960–979
Pregnancy/Birth/Puerperium Disorders	630–676
Respiratory System Disorders	460–519
Sensory System Disorders	360–389
Skin/Subcutaneous Cellular Tissue Disorders	680–709

[1] includes connective tissue
[2] of specific sites
[3] primary malignant neoplasm of lymphatic and haematopoietic tissue
[4] of specific sites

TABLE 65. Level 3 states for Disorders/*Effects* specific to **VERTEBRATE POISONS** and not occurring in **MEDICINES**. (Those in brackets do occur in **MEDICINES.**)

Level 3 - Disorders Caused/*Harmful Effects*
(Abnormalities) *mitotic* *mutagenic* *teratogenic* *Death* **(Nutritional Disorders)** *antifeedant* **(Pregnancy/Birth/Puerperium Disorders)** *abortifacient*[1] foetal growth retardation *Repellent*

[1] used in **VERTEBRATE POISONS** to refer to accidental abortions due to poisonings; the use of procuring abortions is placed in **SOCIAL USES**

APPENDIX H: WORKED EXAMPLE

TABLE 66. An example of recording use data using the Economic Botany Data Collection Standard. (Data from the Survey of Economic Plants for Arid and Semi-Arid Lands.)

Boswellia sacra Flueck.

USES

FOOD
- **'Roots'**: debarked 'roots', raw.

ANIMAL FOOD
- **Fertile Plant Parts**: flowers, goats, fodder.
- **Aerial Parts**: leaves.

BEE PLANTS
nectar source.

MATERIALS
- **Unspecified Materials**: exudates, perfumes; bark, splints.
- **Wood**: defoliated stems/branches, guns.
- **Gums/Resins**: exudates, resins, incense; gum, depilatories; gum, hair oil; gum, walls; gum, adhesives; gum, candles; gum, cleansers; gum, skin cosmetics; gum, tattoos; gums,coverings.
- **Tannins/Dyestuffs**: inner bark, dyes, clothes, red; dyes, brown; inner bark, tannins.

SOCIAL USES
- **Smoking Materials/Drugs**: flower buds, masticatories; fruits, masticatories.
- **'Religious' Uses**: gum, ritual/religion/magic.

MEDICINES
- **Unspecified Medicinal Disorders**: fruits, goats; fruits, humans.
- **Abnormalities**: bark, humans, skin, oedemas.
- **Digestive System Disorders**: resin, humans, stomach, *stomachic*; flower buds, humans; fruits, humans; gum, humans, teeth, caries.
- **Genitourinary System Disorders**: resin, humans, *diuretic*.
- **Infections/Infestations**: resin, humans, schistosomiasis; resin, humans, syphilis; gum, humans, respiratory system, colds; gum, humans, eyes, infections.
- **Inflammation**: gum, humans, breasts.
- **Injuries**: bark, humans, wounds; bark, humans, skin, burns.
- **Muscular-Skeletal System Disorders**: humans, rheumatism; gum, humans, bones, fractures; bark, humans, bones, fractures.
- **Nervous System Disorders**: resin.
- **Pain**: bark, humans, muscular-skeletal system; gum, humans, teeth; gum, humans, head, *analgesic*; gum, humans, eyes.
- **Pregnancy/Birth/Puerpuerium Disorders**: bark, humans, morning sickness; gum.
- **Skin/Subcutaneous Cellular Tissue Disorders**: bark, humans, skin, sores; gum, humans, skin, antiseptic.

DESCRIPTORS

Wood Properties: size availability - small only.

Chemical Analyses: diterpenoids.

NOTES

MATERIALS - Gums/Resins:
Vernacular Names of Plant Product
Frankincense is the name of the gum resin from *B. sacra*. The very best frankincense comes from the Najd or steppe area to the north of the hills of Dhofar, Oman. Naijdi is the highest quality, Shazri is the next in quality (from Qara mountains) and Sha'abi is from the coastal plain. Alternative names for these are Negdi, Ehskot and Rasmi, respectively.

TABLE 67. Guide to the interpretation of fonts within the standard.

FONT	CORRESPONDING DATA TYPES	NOTES
BOLD UPPER CASE	**LEVEL 1** states	
Bold Title Case	**Level 2** states	
non-bold lower case (following after **Level 2** states)	level 3 states	Each group of linked terms is separated by a semi-colon
Underlined Title Case	Stand-Alone descriptors	
non-bold lower case (following after Stand-Alone descriptors	States for Stand-Alone descriptors	
Italicised Title Case	*Notes Categories*	
Free text following on from *Notes Categories*	*Notes*	

WORKED EXAMPLE:

In the example for *Boswellia sacra* (Table 65) six **LEVEL 1** states are recorded of which one is **MEDICINES.** Within **MEDICINES** twelve **Level 2** states are recorded, one of them being **Infections/Infestations.** Within **Infections/Infestations** there are four groups of linked states for the Level 3 descriptors; these are each separated by a semi-colon.

1) Plant Parts Used (resin), Vertebrates Treated (humans), Disorders Treated (schistosomiasis);
[Interpretation: resin used by humans to treat schistosomiasis].

2) Plant Part Used (resin), Vertebrates Treated (humans), Disorders Treated (syphilis);
[Interpretation: resin used by humans to treat syphilis].

3) Plant Part Used (gum), Vertebrates Treated (humans), Body Parts Treated (respiratory system), Disorders Treated (colds);
[Interpretation: gum used by humans for colds of the respiratory system].

4) Plant Part Used (gum), Vertebrates Treated (humans), Body Parts Treated (eyes), Disorders Treated (infections);
[Interpretation: gums used by humans to treat eye infections].

There are two Stand-Alone descriptors, namely Wood Properties and Chemical Analyses, each with a single state recorded. There is also a *Note Category* concerning the *Vernacular Names of Plant Product* (for **MATERIALS — Gums/Resins**) which is given in a free text format.

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