

## Traditional Medicinal Plants

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### A Survey of medicinal plants in Tabora region, Tanzania

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### ABSTRACT

*A Survey of medicinal plants was conducted in Tabora Region between December, 1970 and July, 1989. 27 traditional healers from 30 villages in 25 village wards (i.e. about 15% of the Region) were interviewed. Also plants in the field and at the Lushoto herbarium were indentified. A total of 127 plant species belonging to 45 families and 05 genera were identified as medicinal plants used for the treatment of some 66 different human diseases in the region. The family Leguminosae was found to be leading by having 33 different medicinal plant species from 20 genera followed by Euphorbiaceae which had 9 species from 7 genera. Antidotes for snake bites were leading with 32 plant species, followed by stomach-ache and coughs, which had 21 and 14 medicinal plant species, respectively.*

### Introduction

Traditional medicine in Tanzania, like in other developing countries where medical facilities cannot satisfy national demands, plays a big role in combating both human and animal diseases. It is estimated that about 80% of the people who live in

rural areas rely on traditional healers for their treatment using medicinal herbs. However, these medicinal plants have not been well studied, tested or documented. Most of the information is still in the hands of traditional healers (FAO 1986). Due to the current threat brought by diseases like malaria, cancer, hypertension, AIDS and others, it is now high time we carried an international combined effort from both scientists and traditional healers to do some more research on medicinal plants which might give us some positive results. Some of the information which is now available about medicinal plants in Tanzania includes the work of Watt and Breyer-Brandwijk (1962), in a book on *Medicinal and Poisonous Plants of Southern and Eastern Africa; Medicinal Plants of East Africa* by Kokwaro (1976); and that of Raimo Harjula (1988) who made some ethnomedicinal studies in Meru, Arusha. The Traditional Medicine Research Unit at the Muhimbili Medical Centre in Dar es Salaam is responsible for this work and is currently undertaking some research on traditional medicine. The Tanzania Forestry Research Institute at Lushoto has been conducting some botanical surveys in Dodoma, Singida and East Usambara. Part of this information has been published by FAO (1986). (Some will won be published by Ruffo *et al.* This paper reports about a survey of medicinal plants which was done in Tabora Region, Tanzania.

Tabora Region has a total area of 7,615km<sup>2</sup>, and receives an average annual rainfall of 700-800 mm (ICRAF 1988). The main tribe in the region is the Nyamwesi, who live mainly as peasant farmers. According to the 1988 Census, the population in the region was estimated at 1,036,293 people, with an average annual growth of 2.4%. The vegetation of Tabora region is mainly *Miyombo* or *Brachystegia* woodland dominated by *Brachystegia spiciformis*, *Jubbernardia globiflora* and *pterocarpus angolensis* (Polhill, 1968).

## Methodology

A survey of medicinal plants in the Tabora Region of Western Tanzania floristic Region T4, was conducted by the now Tanzania Forestry Research Institute under the Ministry of Lands, Natural Resources and Tourism between December, 1970 and July, 1989 by interviewing 27 traditional healers from 30 villages in 25 village wards, covering about 15% of the Region. Figure 1 shows a map of Tabora region where medicinal plants were surveyed and Appendix 1 gives a list of villages and traditional healers who were interviewed during the survey. These medicinal plants were identified in the field, except for taxonomically difficult plants which had to be collected and pressed for further identification at Lushoto Herbarium. The data for each medicinal plant, including the name of a plant, disease treated, plant part used, method of preparation and dosage, was recorded (Appendix 2). These data were then summarised.

## Results

A total of 127 plant species belonging to 45 families and 95 genera, were identified as medicinal plants used for the treatment of 66 different human diseases in the Tabora region. The family Leguminosae was found to be leading by having 33 different medicinal plant species from 20 genera, followed by the Euphorbiaceae, which had 9 species from 7 genera. For the body problems, snake bites were leading with 32 medicinal species, followed by stomach-ache and coughs, which had 21 and 14 medicinal plants, respectively (Table 1 & 2).

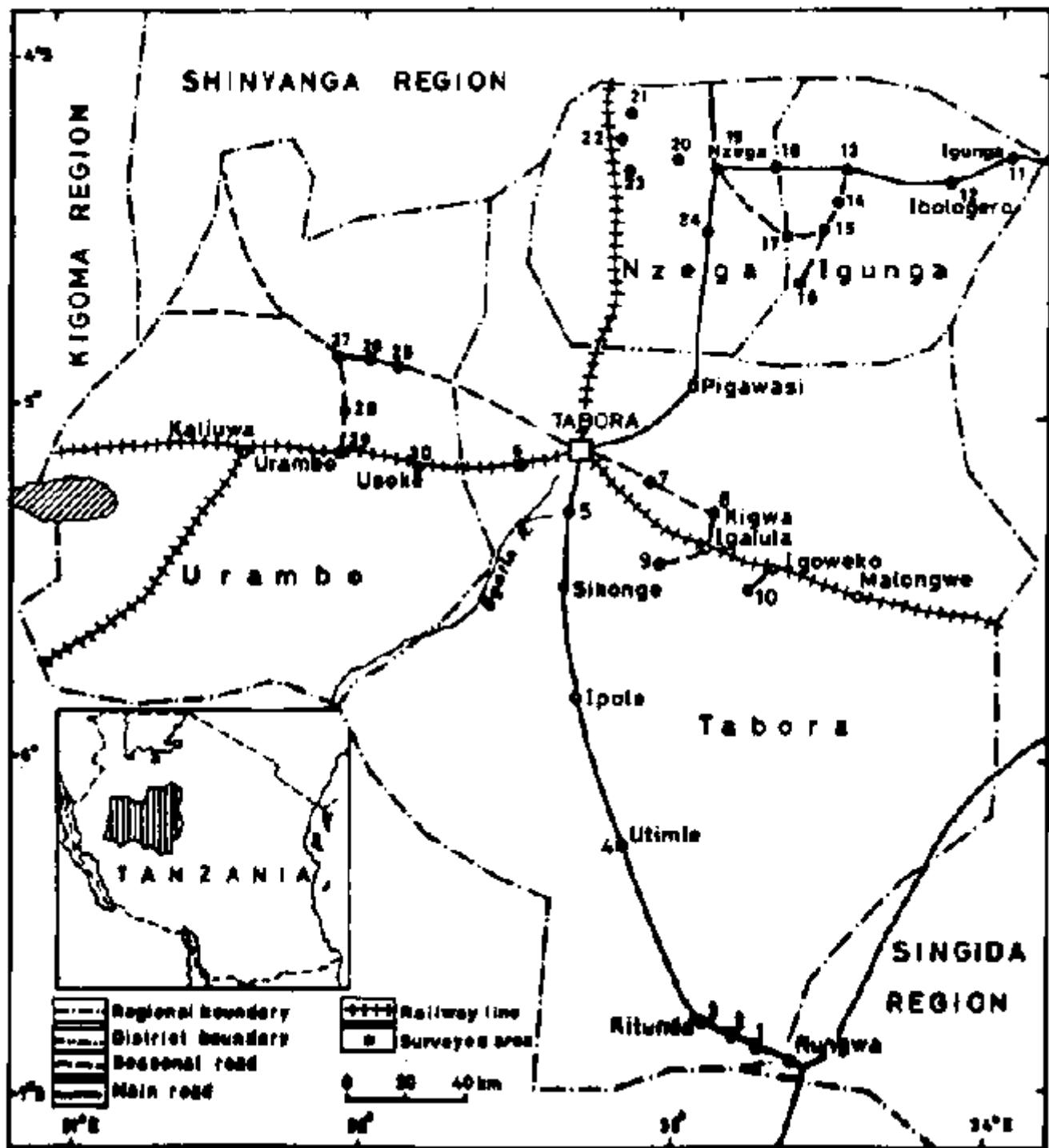
### **Conclusions and recommendations**

From the above results obtained from Tabora Region, it can be concluded that Tanzania has a big potential on medicinal plants, especially after comparing with the total of 127 medicinal plants for 66 human diseases from 15% of Tabora region (i.e., 25 village wards out of 166 wards of the 1988 census) and when this is compared with 44.4 million ha. of Tanzania natural forests, containing some 10,000 species of higher plants which also carry a very high degree of species diversity and endemism in the world (Lovett 1988, Lundgren, 1975 and Polhill, 1968).

It was also noted that some of these medicinal plants such as *Annona senegalensis*, *Flacourtie indica* and *Friesodielsia abovata* had multipurpose uses, including edible fruits and fuelwood.

It is therefore recommended that:

- (a) Further studies be carried out in other areas of Tabora as well as in other regions of Tanzania to establish a sound basis for further research on medicinal plants.
- (b) These medicinal plants be collected, screened and tested for their active principles on the diseases for which they are used.
- (c) Medicinal plants which prove to be really curative be developed and incorporated with modern medicinal practice.
- (d) Silvicultural studies be carried out on medicinal plants in order to facilitate their establishment in villages and botanical gardens.
- (e) Traditional healers be encouraged to incorporate their knowledge of medicinal plants with modern medicinal practice.
- (f) Medicinal plants of Tanzania be documented in a journal, such as, Journal of Tanzania Traditional Medicine, etc.
- (g) An international cooperation for exchange of knowledge and seed samples of medicinal plants be established.



**Fig. 1. Map of Tabora Region showing areas where medicinal plants were surveyed**

### Acknowledgement

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**Table 1: Alphabetical list of medicinal plants from Tabora region with their vernacular (Nyamwezi) names, part(s) used and diseases treated**

| <b>Botanical name</b>               | <b>Vernacular name</b>                     | <b>Part used</b> | <b>Diseases treated</b>  |
|-------------------------------------|--|------------------|--|
| <b>Anacardiaceae</b>                |  |                  |  |
| <i>Lannea schimperi</i>             | <i>Mugumbu</i>                             | Bark & root      | Mental disorders and snake bites   |
| <i>Ozoroa reticulata</i>            | <i>Mukalakala</i>                          | Bark             | Body swellings, coughs, diarrhoea, gonorrhoea, malaria, epilepsy, prolapse of rectum and stomachache |
| <b>Annonaceae</b>                   |  |                  |  |
| <i>Annona senegalensis</i>          | <i>Mutopetope Mufila</i>                   | Roots            | Snake bites and Stomachache  |
|                                     | <i>Mukonola</i>                            |                  |  |
| <i>Friesodielsia obovata.</i>       | <i>Musalasi</i>                            | Roots            | Anaemia, infertility snake bites   |
| <b>Apocynaceae</b>                  |  |                  |  |
| <i>Condylocarpon diplorrhynchus</i> | <i>Musonga Musongati</i>                   | Bark & leaves    | Galactogogue, wounds and sores   |
| <i>Holarrhena pubescens</i>         | <i>Musongalukuga</i>                       | Roots            | Gonorrhoea, bilharzia and stomachache  |
| <i>Strophanthus eminii</i>          | <i>Musungululu</i>                         | Bark & roots     | Asthma, syphilis, Constipation, measles small pox, scabies, epilepsy, spleen and heart diseases      |
| <i>Muvelevele</i>                   |  |                  |  |
| <b>Araceae</b>                      |  |                  |  |
| <i>Pistia stratiotes</i>            | <i>Ileve, Maleve</i>                       | Roots            | Fire burns   |
| <b>Asclepiadaceae</b>               |  |                  |  |
| <i>Calotropis procera</i>           | <i>Mpumbula</i>                            | Roots            | Boils, hydrocele, stomach and tooth ache   |
| <i>Gymnema sylvestre</i>            | <i>Luhaga</i>                              | Roots            | Aphrodisiac  |
| <b>Aristolachiaceae</b>             |  |                  |  |
| <i>Aristolachia -</i>               | <i>Kilikamo</i>                            | Roots            | Convulsions, petersiana poisoning, stomachache, snake bites  |
| <b>Bignoniaceae</b>                 |  |                  |  |
| <i>Kigelia africana</i>             | <i>Mudungwa, Mulegeya, Mwicha, Msanhwa</i> | Bark, roots      | Convulsions  |
| <b>Boraginaceae</b>                 |  |                  |  |
| <i>Trichodesma zeylanicum</i>       | <i>Igungulu</i>                            | Roots            | Coughs, poisoning and stomachache  |

**Burseraceae**

|                            |  |      |                          |
|----------------------------|--|------|--------------------------|
| <i>Commiphora africana</i> | <i>Musagasi, Mupondamu, Bark Mutonto</i> | Bark | Snake bites and traucoma |
|----------------------------|--|------|--------------------------|

**Capparidaceae**

|                              |                 |                |  |
|------------------------------|-----------------|----------------|--|
| <i>Boscia salicifolia</i>    | <i>Muguluka</i> | Bark,<br>Roots | Headache, rheumatism,<br>scabies and toothache |
| <i>Gynandropsis gynandra</i> | <i>Mugagani</i> | Leaves         | Colds, coughs, earache and<br>eye-diseases     |

**Celastraceae**

|                          |               |       |   |
|--------------------------|---------------|-------|---|
| <i>Maytenus-galensis</i> | <i>Mwezya</i> | Roots | Snake bites, infertility and<br>stomachache |
|--------------------------|---------------|-------|---|

**Combretaceae**

|                           |                          |                  |   |
|---------------------------|--------------------------|------------------|---|
| <i>Combretum cillinum</i> | <i>Mulandala</i>         | Roots<br>leaves  | Snake bites   |
| <i>C. fragrans</i>        | <i>Muluzyaminzi</i>      | Roots,<br>leaves | Malaria, wounds and<br>traucoma                                       |
| <i>C. longispicatum</i>   | <i>Vugoveko</i>          | Roots            | Malaria and snakebites  |
| <i>C. molle</i>           | <i>Mulama</i>            | Leaves           | Earache and wounds  |
| <i>C. obovatum</i>        | <i>Vugoveko</i>          | Roots            | Gonorrhoea  |
| <i>C. zeyheri</i>         | <i>Musana</i>            | Roots,<br>leaves | Coughs, diarrhoea, rectal<br>prolapse, Snake bites and<br>stomachache |
| <i>Terminalia mollis</i>  | <i>Mudisi, Mukelenge</i> | Bark,            | Bilharzia Coughs, measles,  |
| <i>T. sericea</i>         | <i>Mupululu, Muzima</i>  | roots            | rectal prolapse, and  |
|                           |                          | Leaves           | stomachache   |

**Compositae**

|                        |                                      |        |  |
|------------------------|--------------------------------------|--------|--|
| <i>Bidens pilosa</i>   | <i>Ndasa</i>                         | Leaves | Wounds and relapsing fevers<br>in children   |
| <i>Vernonia glabra</i> | <i>Kilulankunja,<br/>Mukalinkali</i> | Roots  | Malaria, gonorrhoea, syphilis<br>and measles |

**Cyperaceae**

|                            |                       |       |                  |
|----------------------------|-----------------------|-------|------------------|
| <i>Cyperus articulatus</i> | <i>Vulago, Vuseli</i> | Roots | Intestinal worms |
|----------------------------|-----------------------|-------|------------------|

**Ebenaceae**

|                          |                 |                  |             |
|--------------------------|-----------------|------------------|-------------|
| <i>Diosyros fischeri</i> | <i>Mufuvata</i> | Roots,<br>leaves | Snake bites |
|--------------------------|-----------------|------------------|-------------|

**Euphorbiaceae**

|                              |                     |                  |  |
|------------------------------|---------------------|------------------|--|
| <i>Antidesma venosum</i>     | <i>Musekela</i>     | Roots,<br>leaves | Snake bites and poisoning                        |
| <i>Bridelia duvigneaudi</i>  | <i>Muvuzivuzi</i>   | Roots            | Intestinal worms                                 |
| <i>Euphorbia candelabrum</i> | <i>Mulangali</i>    | Twigs            | Constipation                                     |
| <i>E. grantii</i>            | <i>Mudulansongo</i> | Roots            | Constipation, epilepsy and<br>snake bites        |
| <i>E. hirta</i>              | <i>Vakikulu</i>     | Leaves           | Menstrual disorders,<br>ringworm and snake bites |

|                                 |   |                  |   |
|---------------------------------|---|------------------|---|
| <i>Jatropha curcas</i>          | <i>Inyang'a</i>                                 | Seed             | Intestinal worms  |
| <i>Hymenocardia acida</i>       | <i>Mupala</i>                                   | Leaves           | Coughs, rectal prolapse and stomachache   |
| <i>Oldfieldia dactylophylla</i> | <i>Muliwanfwengi</i>                            | Roots            | Aphrodisiac, gonorrhoea and hernia  |
| <i>Phyllanthus engleri</i>      | <i>Mugogondi,</i><br><i>Mung'ong'o Ntandala</i> | Roots<br>leaves  | Coughs and bilharzia  |
| <i>P. reticulatus</i>           | <i>Muvinzandimi</i>                             | Roots,<br>leaves | Snake bites   |
| <b>Flacourtiaceae</b>           |   |                  |   |
| <i>Flacourtie indica</i>        | <i>Mupugusura, Musingila</i>                    | Roots            | Coughs, snake bites,  |
|                                 | <i>Musungu</i>                                  |                  | Infertility and stomachache   |
| <b>Gramineae</b>                |   |                  |   |
| <i>Pennisetum purpureum</i>     | <i>Ibingobingo, Isumbu,</i>                     | Stem             | Measles Infertility   |
|                                 | <i>Vupemba</i>                                  | Stem             |   |
| <b>Labiatae</b>                 |   |                  |   |
| <i>Ocimum suave</i>             | <i>Ilumbasya, Ilumba</i>                        | Twigs            | Colds, fever, Dementia  |
| <b>Leguminosae</b>              |   |                  |   |
| <i>Abrus precatorius</i>        | <i>Muchichi, Mshiti</i>                         | Roots            | Aphrodisiac, scabies, smallpox, anaemia, eye and spleen diseases                            |
| <i>A. schimperi</i>             | <i>Vugagati</i>                                 | Roots            | Hypertension and postpartum stomach pains   |
| <i>Acacia drepanolobium</i>     | <i>Vuvula</i>                                   | Roots            | Abscess and bilharzia   |
| <i>A. hockii</i>                | <i>Munyenyla</i>                                | Roots            | Abscess   |
| <i>A. mellifera</i>             | <i>Mugongwa, Ilugala</i>                        | Roots            | Impotence   |
| <i>A. nilotica</i>              | <i>Mugulunga, Mudubilo</i>                      | Roots            | Anaemia, asthma   |
| <i>A. senegal</i>               | <i>Katita, Mgwata</i>                           | Roots            | Abscess   |
| <i>Albizia harveyi</i>          | <i>Mupogolo</i>                                 | Leaves           | Chest pains, wounds and stomachache   |
| <i>A. petersiana</i>            | <i>Musisigulu</i>                               | Roots            | Hernia, and lung  |
| <i>Brachystegia spiciformis</i> | <i>Mutundu</i>                                  | Bark             | Coughs and snake bite   |
| <i>Burkea africana</i>          | <i>Muganda, Mukalati</i>                        | Bark             | Headache  |
| <i>Cajanus cajan</i>            | <i>Mubalazi, Mutengwa.</i>                      | Roots            | Aphrodisiac   |
| <i>Cassia abbreviata</i>        | <i>Mumulimuli,</i>                              | Roots            | Hernia, intestinal worms, gonorrhoea, syphilis  |
|                                 | <i>Mulundalunda,</i>                            |                  | Snake bites, stomachache, bilharzia, sores, malaria, postpartum stomach pains and poisoning |
| <i>C. obtusifolia</i>           | <i>Muzegezega</i>                               | Roots            | Hernia, yellow fever, dementia and convulsions  |
| <i>C. singueana</i>             | <i>Mudimwambuli,</i><br><i>Musambisambi</i>     | Roots<br>Leaves  | Convulsions, coughs, intestinal worms, malaria,   |

|                                  |  |               |   |                           |
|----------------------------------|--|---------------|---|---------------------------|
|                                  |  |               |   | epilepsy and yellow fever |
| <i>Dalbergia melanoxylon</i>     | <i>Mugombe</i>                             | Roots, Leaves | Convulsions, menstrual disorders, snake bites, traucoma and toothache                 |                           |
| <i>D. nitida</i>                 | <i>Kafinulambasa</i>                       | Roots         | Toothache   |                           |
| <i>Dichrostachys cinerea</i>     | <i>Mutunduli</i>                           | Leaves        | Boils, coughs, wounds, galactogogue, snake bites, menstrual disorders and stomachache |                           |
| <i>Entanda abyssinica</i>        | <i>Mufutwambula</i>                        | Roots         | Gonorrhoea, anaemia and hypertension  |                           |
| <i>Isoberlinia angolensis</i>    | <i>Muva</i>                                | Bark          | Coughs, wounds and snake bites  |                           |
| <i>Lonchocarpus capassa</i>      | <i>Muvule</i>                              | Roots, leaves | Snake bites   |                           |
| <i>L. bussei</i>                 | <i>Muvule</i>                              | Roots         | Allergy   |                           |
| <i>Oormocarpum trachycarpum</i>  | <i>Mukondwapuli</i><br><i>Muvulwambuli</i> | Leaves        | Snake bites and pneumonia   |                           |
| <i>Pericopsis angolensis</i>     | <i>Muvunga</i>                             | Leaves        | Coughs, fire burns, sores and snake bites   |                           |
| <i>Piliostigma thonningii</i>    | <i>Mutindambogo</i>                        | Bark          | Snake bites   |                           |
| <i>Pterocarpus angolensis</i>    | <i>Muninga</i>                             | Bark          | Diarrhoea and wounds  |                           |
| <i>P. tinctorius</i>             | <i>Mukulungu</i>                           | Bark          | Eye problems  |                           |
| <i>Swartzia madagascariensis</i> | <i>Kasanda</i>                             | Roots         | Malaria and yellow fever  |                           |
| <i>Tamarindus indica</i>         | <i>Musisi</i>                              | Leaves        | Malaria, wounds, mental disorders and stomachache                                     |                           |
| <i>Xeroderris stuhlmannii</i>    | <i>Munyenye, Mjungu</i>                    | Bark          | Mastitis and backache   |                           |
| <b>Liliaceae</b>                 |  |               |   |                           |
| <i>Aloe sp.</i>                  | <i>Itembwe, Lugaka</i>                     | Leaves        | Aphrodisiac, heart pains, impotence, spleen and kidney diseases                       |                           |
| <i>Asparagus falcatus</i>        | <i>Kasolanhangha, Sawi</i>                 | Roots         | Aphrodisiac, hernia and gonorrhoea  |                           |
| <b>Loganiaceae</b>               |  |               |   |                           |
| <i>Strychnos innovia</i>         | <i>Mukulwa, Mumundu</i>                    | Roots         | Aphrodisiac   |                           |
| <i>S. potatorum</i>              | <i>Mugwegwe,</i><br><i>Mupandepande</i>    | Roots, Leaves | Coughs, malaria and gonorrhoea  |                           |
| <i>S. spinosa</i>                | <i>Mwage</i>                               | Roots         | Intestinal worms, gonorrhoea and syphilis   |                           |
| <b>Meliaceae</b>                 |  |               |   |                           |
| <i>Ekabergia benguelensis</i>    | <i>Mutuzya</i>                             | Roots         | Mental disorders  |                           |
| <i>Turraea sp.</i>               | <i>Mulingiwe</i>                           | Roots         | Convulsions   |                           |

|   |                              |              |  |  |
|---|------------------------------|--------------|--|--|
| <b>Menispermaceae</b>                     |                              |              |  |  |
| <i>Cissampelos pareira</i>                | <i>Mukuluwanti</i>           | Roots        | Snake bites, poisoning and stomachache                       |  |
| <b>Moraceae</b>                           |                              |              |  |  |
| <i>Ficus natalensis</i>                   | <i>Mulumba</i>               | Bark, twigs  | Whooping cough   |  |
| <i>F. sycomorus</i>                       | <i>Mukuyu</i>                | Bark, twigs  | Diarrhoea  |  |
| <b>Musaceae</b>                           |                              |              |  |  |
| <i>Musa sapientum</i>                     | <i>Idoke</i>                 | Flowers      | Asthma   |  |
| <b>Myrtaceae</b>                          |                              |              |  |  |
| <i>Psidium guajava</i>                    | <i>Mupera</i>                | Leaves       | Diarrhoea, malaria and wounds                                |  |
| <b>Ochnaceae</b>                          |                              |              |  |  |
| <i>Ochna schweinfurthii</i>               | <i>Kavulwampako</i>          | Roots        | Poisoning and snake bites                                    |  |
|   | <i>Kawantundwe Kupande</i>   |              |  |  |
| <b>Olacaceae</b>                          |                              |              |  |  |
| <i>Ximenia americana</i>                  | <i>Munembwa, Mutandwa</i>    | Roots        | Anaemia, hernia, intestinal worms mental disorders           |  |
| <i>X. caffra</i>                          | <i>Munembwa, Mutandwa</i>    | Roots        | Anaemia, hernia, intestinal worms and mental disorders       |  |
| <b>Oleaceae</b>                           |                              |              |  |  |
| <i>Schrebera trichoclada</i>              | <i>Muputika</i>              | Bark, leaves | Coughs, snake bites, traucoma, stomachache and eye diseases  |  |
| <b>Orchidaceae</b>                        |                              |              |  |  |
| <i>Anselia africana</i>                   | <i>Inyazya</i>               | Stems        | Rheumatism, snake bites and body swelling                    |  |
| <b>Pedaliaceae</b>                        |                              |              |  |  |
| <i>Sesamum angolense</i>                  | <i>Mulenda-gwawima</i>       | Roots        | Measles and poisoning  |  |
|   | <i>Ilendi-lya-wima</i>       | leaves       |  |  |
| <b>Polygalaceae</b>                       |                              |              |  |  |
| <i>Longipenduculata securidaca</i>        | <i>Muteyu</i>                | Roots        | Constipation, hernia, infertility, toothache and stomachache |  |
| <b>Rhamnaceae</b>                         |                              |              |  |  |
| <i>Ziziphus mucronata</i>                 | <i>Kagovole, Lugugunu</i>    | Roots        | Snake bites and stomachache                                  |  |
| <b>Rubiaceae</b>                          |                              |              |  |  |
| <i>Catunaregan spinosa ssp. taylorii.</i> | <i>Mochangoko, Mupongolo</i> | Roots        | Convulsions, hernia, hypertension and intestinal worms       |  |
| <i>Fadogia cienkowskii</i>                | <i>Kambolambola</i>          | Roots        | Infertility  |  |
| <i>Crossopterix febrifuga</i>             | <i>Musaswambeke</i>          | Bark         | Diarrhoea and convulsions                                    |  |

|   |   |                 |  |
|---|---|-----------------|--|
| <i>Gardenia ternifolia</i> ssp. <i>jovi stonantis</i> | <i>Kilindila Mugunda</i>  | Roots           | Coughs, snake bites  |
| <i>Hymenodutylon parvifolium</i>                      | <i>Muginya, Mujunguluji</i><br><i>Mpepesavakia</i><br><i>Muvinzwansanzu</i> | Roots           | Intestinal worms, snake bites and menstrual disorders          |
| <i>Multidentia evassa varapula</i>                    | <i>Mukukumba, Muyogayo</i>  | Roots           | Earache  |
| <i>Rothmania engleriana</i>                           | <i>Mkondokondo</i><br><i>Mutwinya</i>                                       | Roots           | Snake bites and stomachache                                    |
| <b>Rutaceae</b>                                       |   |                 |  |
| <i>Citrus aurantifolia</i>                            | <i>Mudimu</i>   | Leaves          | Asthma   |
| <i>Verpis glomerata</i>                               | <i>Mulungusigiti</i>  | Roots           | Body swelling, constipation and infertility                    |
| <i>Zathoxylum chalybeum</i>                           | <i>Mudali, Mulungulungu</i>   | Roots           | Malaria and body swellings                                     |
| <b>Sapindaceae</b>                                    |   |                 |  |
| <i>Zanha africana</i>                                 | <i>Mukalya</i>  | Roots           | Colds, convulsions<br>stomachache                              |
| <b>Sapotaceae</b>                                     |   |                 |  |
| <i>Chrysophyllum bangweolense</i>                     | <i>Museveye</i>   | Roots           | Diarrhoea  |
| <i>Manilkara mochisia</i>                             | <i>Mukonze</i>  | Bark            | Mastitis   |
| <b>Solanaceae</b>                                     |   |                 |  |
| <i>Physalis peruviana</i>                             | <i>Sinkini</i>  | Roots           | Intestinal worms   |
| <i>Solanum gilo</i>                                   | <i>Mutole</i>   | Roots           | Hernia   |
| <i>S. incarnum</i>                                    | <i>Mudulanu, Mutulantu</i>  | Roots           | Constipation, hernia, wounds, tonsillitis and intestinal worms |
| <b>Sterculiaceae</b>                                  |   |                 |  |
| <i>Sterculia africana</i>                             | <i>Muhozya, Muhoja</i>  | Bark            | Snake bites and mental disorders                               |
| <i>Waltheria indica</i>                               | <i>Ikumbo-lyaza, ikandagizi</i>   | Roots           | Coughs, poisoning and snake bites                              |
| <b>Filiaceae</b>                                      |   |                 |  |
| <i>Grewia bicolor</i>                                 | <i>Mukoma</i>   | Roots           | Anaemia and fertility  |
| <b>Umbelliferae</b>                                   |   |                 |  |
| <i>Steganotaenia araliaceae</i>                       | <i>Munyongampembe</i><br><i>Mbyotolo</i>                                    | Roots<br>Leaves | Snake bites  |
| <b>Verbenaceae</b>                                    |   |                 |  |
| <i>Clerodendrum capitatum</i>                         | <i>Kapolo</i>   | Roots           | Constipation in children                                       |
| <i>C. myricoides</i>                                  | <i>Mnindi, Mpugambu</i>   | Leaves          | Dementia   |
| <i>Premna senensis</i>                                | <i>Mununhwanhala</i>  | Roots           | Aphrodisiac  |
| <i>Vitex mombassae</i>                                | <i>Mutalali, Masumgwi</i>   | Roots           | Diabetes   |
| <b>Vitaceae</b>                                       |   |                 |  |
| <i>Cissus carnifolia</i>                              | <i>Mutandamwaka</i>   | Roots           | Hernia and bilharzia   |

|                          |                      |       |                         |
|--------------------------|----------------------|-------|-------------------------|
| <i>C. quadrangularis</i> | <i>Vula-wo-nsuwi</i> | Roots | Rectal prolapse         |
| <i>Cissus sp.</i>        | <i>Lonzwe</i>        | Roots | Hernia and hypertension |

**Table 2: A list of diseases and their respective medicinal plants from Tabora region.**

| Disease         | Medicinal Plant  |
|-----------------|--|
| Abscess         | <i>Acacia drepanolobium, A. hockii, A. sieberiana</i>  |
| Acute coughs    | <i>Pericopsis angolensis, Schrebera trichoclada Aloe sp., Asparagus falcatus, Abrus precatorius, Cajanus cajan, Gymnema sylvestre, Indigofera rhinocarpa, Oldfieldia dactylophylla, Premna senensis, Strychnos innocua</i>   |
| Aphrodisiac     |  |
| Allergy         | <i>Lonchocarpus bussei, Vepris glomerata</i>   |
| Anaemia         | <i>Abrus precatorius, Acacia nilotica, Entada abyssinica, Friesodielsia obovata, Grewia bicolor, Ximenia americana, X. caffra</i>  |
| Ankylostomiasis | <i>Bridelia duvigneaudii, Cassia singueana, Physalis peruviana, Ximenia americana, X. caffra</i>   |
| Asthma          | <i>Acacia nilotica, Citrus aurantifolia, Musa sapientum, Strophanthus eminii</i>   |
| Backache        | <i>Xeroderris stuhlmannii</i>  |
| Body swellings  | <i>Anselia africana, Ozoroa reticulata, Vepris glomerata, Zanthoxylum chalybeum</i>  |
| Boils           | <i>Calotropis procera, Dichrostachys cinerea</i>   |
| Chest pain      | <i>Albizia harveyi</i>   |
| Colds           | <i>Gardenia ternifolia ssp. jovi-tonantis, Gynandropsis gynandra, Ocimum suave, Zantha africana</i>  |
| Constipation    | <i>Clerodendrum capitatum, Jatropha curcas, Euphorbia candelabrum, E. grantii, Securidaca longependunculata, Solanum incanum, Strophanthus eminii, Vepris glomerata</i>  |
| Convulsions     | <i>Aristolochia petersiana, Caturanegam spinosa, Cassia obtusifolia, C. singueana, Crossopterix febrifuga, Dalbergia melanoxylon, Gardenia ternifolia ssp. jovi-tonantis, Kigelia africana.</i>  |
| Coughs          | <i>Brachystegia spiciformis, Cassia singueana, Combretum zeyheri, Flacourtie indica, Gynandropsis gynandra, Hymenocardia acida, Dichrostachys cinerea, Julbernardia globiflora, Ozoroa reticulata, Phyllanthus englerii, Schrebera trichoclada, Strychnos potatorum, Terminalia sericea, Waltheria indica.</i> |
| Dementia        | <i>Cassia obtusifolia, Clerodendrum myricoides, Ocimum suave.</i>  |
| Diabetes        | <i>Vintex mombassae</i>  |

|                           |  |
|---------------------------|--|
| Diarrhoea                 | <i>Combretum zeyheri, Chrysophyllum bangweolense, Crossopterix febrifuga, Ficus sycomorus, Ozoroa reticulata, Psidium guajava.</i>   |
| Earache                   | <i>Cannabis saliva, Combretum molle, Gynandropsis gynandra, Multidentia crassa.</i>  |
| Epilepsy                  | <i>Cassia singueana, Euphorbia grani, Ozoroa reticulata, Strophanthus eminii.</i>  |
| Eye disease               | <i>Abrus precatorius, Gynandropsis gynandra, Pterocarpus angolensis, P. tinctorius, Schrebera trichoclada.</i>   |
| Fire burns                | <i>Pistia stratiotes, Pericopsis angolensis</i>  |
| Fever                     | <i>Ocimum suave.</i>   |
| Gonorrhoea                | <i>Asparagus falcatus, Cassia abbreviata, Combretum obovatum, Holarrhena febrifuga, Entada abyssinica, Oldfieldia dactylophylla, Ozoroa reticulata, Strychnos potatorum, Vernonia glabra.</i>  |
| Headache                  | <i>Boscia salicifolia, Burkea africana</i>   |
| Head sores                | <i>Cassia abbreviata</i>   |
| Heart pain                | <i>Aloe sp., Strophanthus eminii</i>   |
| Hernia                    | <i>Albizia petersiana, Cassia abbreviata, C. obtusifolia, Asparagus falcatus, Caturanegam spinosa ssp. taylorii, Cissua cornifolia, C. sp., Oldfieldia dactylophylla, Securidaca longepedunculata, Solanum incanum, S. gilo, Ximenia americana, X. caffra.</i> |
| Hydrocele                 | <i>Albizia petersiana, Cassia abbreviata, Lotropis procera.</i>  |
| Hypertension              | <i>Alrus schimperi ssp. africanus, Caturanegam spinosa up. taylorii, Cissus sp., Entada abyssinica</i>   |
| Impotence                 | <i>Acacia mellifera, A. Senegal, Aloe sp., Indigofera rhinocarpa.</i>  |
| Infertility               | <i>Grewia bicolor, Securidaca longependunculata, Sorghum vulgare.</i>  |
| Intestinal worms          | <i>Aloe sp., Acacia nilotica, Caturanegam spinosa ssp. taylorii, Cassia abbreviata, Cyprus articulatus, Ficus natalensis, Jatropha curcas, Solanum incanum.</i>  |
| "Kalimi"<br>(Tonsillitis) | <i>Acacia nilotica, Ficus natalensis, Trichodesma zeylanicum, Solanum incanum.</i>   |
| Kidney disease            | <i>Aloe sp.</i>  |
| Lactation problem         | <i>Dichrostachys cinerea, Diplorhynchus condylocarpon</i>  |
| Leprosy                   | <i>Terminalia stuhlmannii</i>  |
| Lung disease              | <i>Albizia petersiana</i>  |
| Madness                   | <i>Ekebergia benguellensis, Isoberlinia angolensis, Lannea schemperi, Sterculia africana, Tamarindus indica, Ximenia americana, X. caffra.</i>   |
| Malaria                   | <i>Cassia abbreviata, C. singueana, Combretum fragrans, C. longispicatum, Dalbergia melanoxylon, Ozoroa reticulata, Psidium guajava, Strychnos potatorum, Swartzia madagascariensis, Vernonia glabra, Zanthoxylum chalybeum.</i>                               |
| Mastitis                  | <i>Manilkara mochisia, Xiroderris stuhlmannii</i>  |
| Measles                   | <i>Pennisetum purpureum, Sesamum angolensis, Strophanthus eminii, Terminalia sericea, Vemonia glabra.</i>  |

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|---------------------------|--|
| Menstrual problems        | <i>Dalbergia melanoxylon, Dichrostachys cinerea, Euphorbia hirta, Fadogia cienkowskii, Hymenocardia acida.</i>   |
| Pneumonia                 | <i>Ormocarpum trachycarpum</i>   |
| Periodic fevers           | <i>Bidens pilosa</i>   |
| Poisoning                 | <i>Aristolochia petersiana, Antidesma venosum, Cassia abbreviata, Cissampelos pereira, Ochna schweinfurthii, Sesamum angolense, Trichodesma zeylanicum, Waltheria indica.</i>  |
| Post-partum stomach pains | <i>Abrua schimperi, Cassia abbreviata.</i>   |
| Prolapse of rectum        | <i>Cissus quadrangularis, Combretum zeyheri, Ozoroa reticulata, Terminalia sericea.</i>  |
| Restlessness              | <i>Ekebergia benguellensis, Isoberlinia angolensis</i>   |
| Rheumatism                | <i>Anselia africana, Boscia salicifolia, Vepris glomerata, Zanthoxylum chalybeum.</i>  |
| Ringworm                  | <i>Euphorbia hirta</i>   |
| Scabies                   | <i>Abrus precatorius, Boscia salicifolia, Strophanthus eminii, Terminalia sericea.</i>   |
| Schistosomiasis           | <i>Acacia drepanolobium, Cassia abbreviata, Cissus connifolia, Holarrhena pubescens, Phyllanthus engleri, Terminalia mollis.</i>   |
| Small pox                 | <i>Abrus precatorius, Strophanthus eminii.</i>   |
| Snake bites               | <i>Annona senegalensis, Anselia africana, Aristolochia petersiana, Antidesma venosum, Brachystegia spiciformis, Cassia abbreviata, Cissampelos pereira, Cissus cornifolia, Combretum collinum, C. longispicatum, C. zeyheri, Commiphora africana, Diospyros fischeri, Euphorbia grantii, E. hirta, Friesodielsia obovata, Gardenia ternifolia ssp. jovis-tonantis, Hymenodictyon parvifolium, Julbernardia globiflora, Lannea schimperi, Lonchocarpus capassa, Ochna schweinfurthii, Pericopsis angolensis, Piliostigma thonningii, Maytenus senegalensis, Ormocarpum trachycarpum, Rothmannia engleriana, Steganotaenia araliaceae, Securidaca longepedunculata, Schrebera trichoclada, Strophanthus eminii, Sterculia africana, Strychnos popatorum, Waltheria indica.</i> |
| Sores                     | <i>Diplorhynchus condylocarpa, Pericopsis angolensis</i>   |
| Spleen disease            | <i>Abrus precatorius, Aloe sp., Strophanthus eminii.</i>   |
| Sterility                 | <i>Fadogia ceinkowskii, Flacourtia indica, Friesodielsia obovata, Maytenus senegalensis, Sorghum vulgare, Vepris glomerata.</i>  |
| Stomachache               | <i>Annona senegalensis, Aristolochia petersiana, Calotropis procera, Albizia harveyi, Combretum zeyheri, Cissampelos pereira, Crossopterix febrifuga, Dichrostachys cinerea, Flacourtia indica, Hymenodictyon parvifolium, Maytenus senegalensis, Ozoroa reticulata, Rothmannia engleriana, Securidaca Longepedunculata, Schrebera trichoclada, Strychnos potatorum, Tamarindus indica, Terminalia serica, Trichodesma zeylanicum, Zanka africana, Ziziphus mucronata.</i>   |
| Syphilis                  | <i>Asparagus falcatus, Cassia abbreviata, Strophanthus eminii, Strychnos spinosa, Vernonia glabra.</i>   |
| Tonsillitis               | <i>Sesamum angolense, Schrebera trichoclada, Solanum incanum.</i>  |

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|----------------|--|
| Toothache      | <i>Boscia salicifolia, Calotropia procera, Dalbergia melanoxylon, D. nitidula, Securidaca longepedunculata.</i>  |
| Trachoma       | <i>Commiphora africana, Combretum fragrans, Dalbergia melanoxylon, Schrebera trichoclada.</i>  |
| Whooping cough | <i>Ficus natalensis</i>  |
| Wounds         | <i>Albizia harveyi, Bidens pilosa, Combretum fragrans, C. molle, Diplorrhynchus condylocarpon, Dichrostachys cinerea, Julbernardia globiflora, Pericopsis angolensis, Pterocarpus angolensis, Psidium guajava, Solanum incanum, Tamarindus indica.</i> |
| Yellow fever   | <i>Cassia obtusifolia, C. singusana, Swartzia madagascariensis.</i>  |