African Journal of Pharmacy and Pharmacology Vol. 3(13). pp. 664-684, December, 2009 Special Review
Available online http://www.academicjournals.org/ajpp
ISSN 1996-0816 © 2009 Academic Journals

Full Length Research Paper

Ethnobotanical uses of some plants of two ethnoecological regions of Cameroon

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Accepted 15 December, 2009

This paper presents the result of a study on the herbal drugs that are used in two ethnoecological regions of Cameroon, namely littoral and south-west and Sudano-sahelian zones. The data were collected through direct interviews with herbalists, traditional healers and customers between 2006 and 2007 and the popular medicinal plants used to cure several diseases were inventorized. An inventory of 614 plants species belonging to 84 families was prepared along with their local and Latin names. The present study also gave details about the herbal cures of different disorders, based on the information provided by local herbalists or traditional healers. In all, 68% of the plants were used in the two regions to treat more than twenty important diseases.

Key words: Herbal drugs, medicinal plants, ethnoecological zone, Cameroon.

INTRODUCTION

In recent years, the use of plants in traditional medicine has increased the interest in ethno-botanical studies throughout the world. In fact, WHO estimated that 70% of populations from many countries are using traditional or folk medicine to cure various ailments. In Cameroon, traditional medicine is still not organized. That is why its integration into the health system has not being much effective (Nkongmeneck et al., 2007). The conceptual strategy of health envisaged the organization of traditional medicine. For that, a strategic plan was worked out to provide the main trends for the development and the integration of this folk medicine in Cameroon (Anonymous, 2006). The interest in herbal medicine in this country (Cameroon) has progressed parallel to the increased interest in other developed countries. Recently, various studies (Ekole, 1994; Dikanda, 2000; Yomi, 2001; Jiofack et al., 2007; Nkongmeneck, 2007; Thornell and Sandberg, 2007) have been conducted to prevent folk medicine from disappearing. The total consideration of this medicine and their integration in the national strategic plan of traditional medicine in this country can be noted (Anonymous, 2006).

For centuries, people have been using herbal medicine for the treatment of some daily diseases. The Sudano-sahelian and south west regions are two of the centres of the Cameroon ethnoecological region with rich plant diversity (Nkuinkeu, 1998; Mapongmetsem, 2007). Accordingly, the traditional herbal medicines are important to the life of the people. In these areas, contagious diseases, cardiovascular disorders and cancer were investigated (Nkuinkeu et al., 2007). The aims of this research were to focus on the kinds of medical diversity found in the two herbal regions, the frequency of usage of the plants and thus, to show the different treatment types that are applied in each region. This study is not considered to be the first survey stating the herbal drugs in Cameroon, but is focusing on these two rich zones, characterized by a several conspicuous diseases, such as malaria, male and female sexual diseases, sexually transmitted diseases (STD), typhoid, anaemia and dysentery which are the most important

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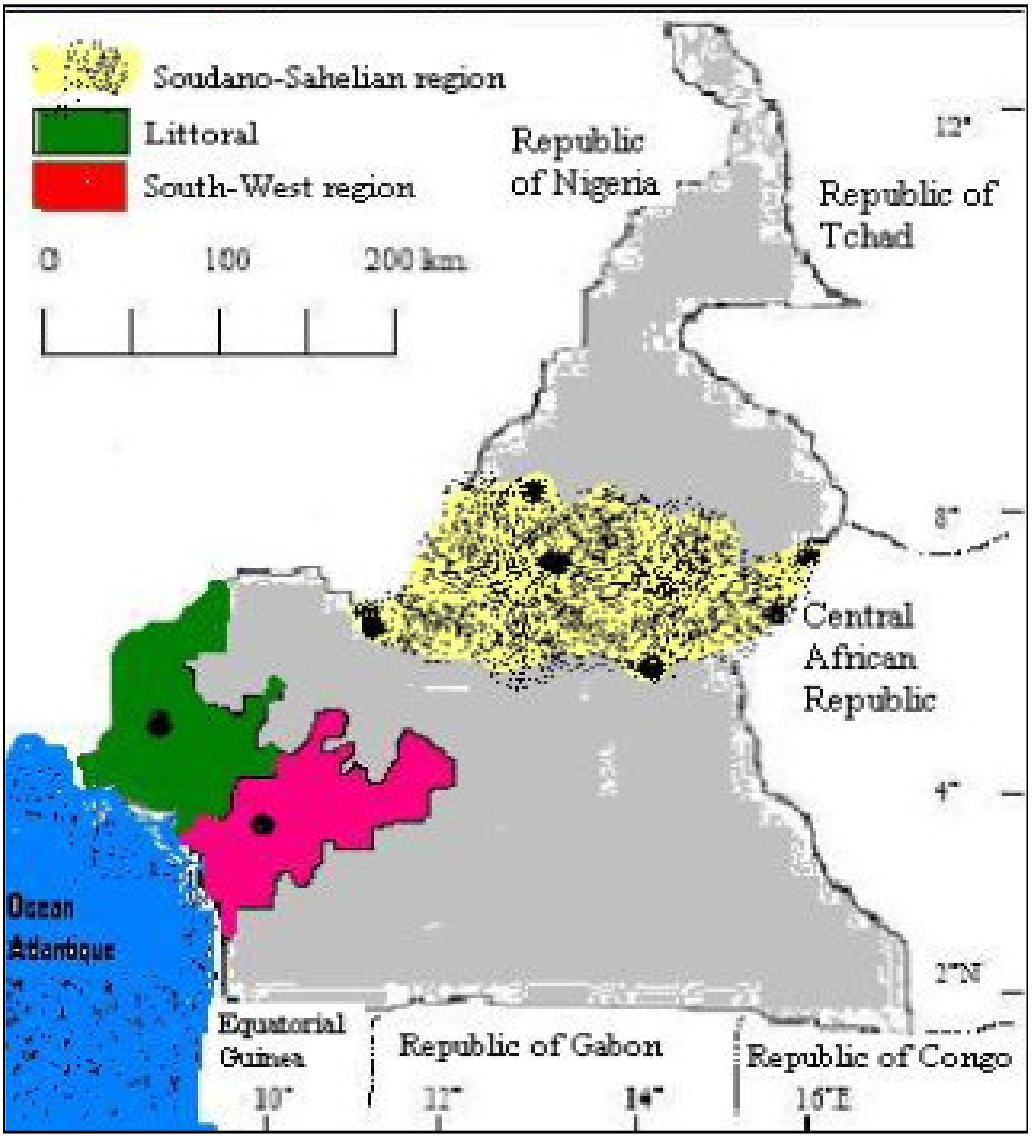

Figure 1. The research areas.

sources of mortality in these regions of Cameroon.

METHODS

The present study was carried out in two ethno-ecological regions of Cameroon, namely the littoral and south west region and the sudano-sahelian ethnoecological region (Figure 1). The littoral region is characterized by cool climate with temperature ranging between 12 - 28°C, while the sudano-sahelian region is a savannah region, characterized by hot climate with temperature varying between 25 - 38°C. More than 70 traditional healers were interviewed in the two regions. The plants listed in the appendix were collected from 10 villages and 4 herbal markets of these two regions. In the littoral region, dominant species sold in the markets were: *Azadirachta indica, Baillonella toxisperma, Dosternia mannii, Enantia chlorantha, Garcinia cola, Garcinia lucida, Newbouldia laevis, Pausinystalia johimbe* and *Prunus africana* (Nkuinkeu et al., 2007), while in the sudano sahelian region, common species were *Afzelia africana, Carissa edulis, Chrysanthellum americanum, Crinum* spp., *Vernonia guineense, Nauclea vandergouchtii* and *Nauclea latifolia* (Mapongmetsem, 2007). The medicinal plants were harvested from places such as open areas, gallery forest, savannah bush, mangroves, farmlands and roadsides. The plant materials were used as dried bunches in open or pre-packed mixtures or as fresh preparations. Consumers generally boil these plants, make them into ointments or mix them with other plants depending on their intended use. The information about herbal medicine is gathered from at least two sources. The first source is the old traditional medicine or oral folklore that is passed on from one generation to the next and the second source is scientific research books or herbal books which are sold in bookstores.

During the period of survey, almost all traditional healers in the research area were supposed to be interviewed. The fresh plants and dried samples that were harvested from various localities have been cross-examined with reference books (Letouzey, 1983, 1986; Adjanohoun et al., 1996; Wilks et Issembé, 2000). The data were

collected through direct interviews with herbalists, traditional healers, old peoples and consumers. During the survey, the market herbal plants were also listed. The popular medicinal herbs used for treatments are characterized by an asterisk, to be less used (*), fair (**) and more (***). A total number of sample plants inventoried are listed in appendix by their local and Latin names, treatment rates, pathology, the mode of preparation, parts used and by the therapeutic indication according to the world health organization (Anonymous, 2006). Voucher specimens, in duplicates were deposited in the Ecologic Museum of Cameroon and the Botany and Ecology laboratory of University of Yaoundé I.

RESULTS

The present study enabled the preparation of an inventory of 614 plants species belonging to 84 families (Table 1). The numbered plants were commonly used to treat more than 225 pathologies or therapeutics indications. Among them, 34 species were sold by herbalists and recommended by main traditional healers to cure 54 local pathologies (Table 2).

The 20 more and recurrent diseases include typhoid, male sexual diseases, malaria, gonococci, gastritis, rheumatism, gastralgia, fever, dysentery, diarrhoea, dermatitis, boils, cough, wounds, syphilis, cyst, sterility in women, sexually transmittable diseases, ovarian cyst and amoebiasis, as showed in (Table 3). 205 plants were used to cure these twenty diseases named above, thus 106 (62%) and 99 (68%) were investigated, respectively, in the sudano-sahelian and Littoral and South-West ethnoecological zones. 68% of the plants inventoried were use in both regions to treat more than twenty important diseases. Approximately 22 and 12 traditional healers, 45 and 28 old peoples and peasants, 12 and 7 sellers were interviewed, respectively, in the south west and sudano-sahelian regions. The comparison of results was based on 12 therapeutic indications and distribution pattern (Table 4 and Figure 2).

The final recommendation suggested by traditional healers is the use of 2 to 3 months long phytotherapy with *Aloe vera, Lippia multiflora, Ocimum basilicum* and *P. africana* to clean up primarily the body and prevent the collapse of immune system while using subsequent medical therapy. Ranges from 7 – 33 species listed in this study have also been documented by several other researchers in a number of other countries (Thornell and Sandberg, 2007). In addition, about 30 plants in the list were declared in the synopsis of the WHO monographs on medicinal plants of Cameroon (Nkongmeneck et al., unpublished). According to the plant of sudano-sahelian region, 92 of them are used to treat single pathology, while 24 are used in the treatment of two pathologies. Plants used thrice in the treatment were *Bridelia ferruginea* to treat arthritis, snake bite and lumbago; *Gardenia triangacantha* for (lumbago, rate and cough); *Hibiscus sabdarifa* for (amoebiasis, sexual transmitted diseases and anaemia); *Khaya senegalensis* for (rheumatism, arthritis and elephantiasis); *Pilliostigma thonningii* for (male sexual impotence, sterility in women and malaria); *Tamarindus indica* for (sterility n women, dysmenorrhoea and amoebiasis); *Vitellaria paradoxa* for (worms, ulcers and diarrhoea) and *Ximenia Americana* for (dysentery, fibroids and sleep diseases). Three of these plants are used in the treatment of four pathologies, especially *Protea eliotii,* used to treat carious teeth, haemorrhoids, sores and eyes worm diseases, *Hymenocardia acida* for threatened abortion, typhoid, fibroids and male sexual impotence, and *Crossopterix febrifuga* for sterility in women, syphilis, ovarian cyst and threatened abortion;. *Securidaca longepedonculata* is used to treat five pathologies especially, rheumatism, bronchitis, snake bite, gonococci and ovarian cyst. This last plant is widely used in this part of the country due to their several uses. Except plants used in the northern part of the country, those from the littoral and south-west ethnoecological region have their own particularity.

Therefore, 43 of them are used singly in medicine, 60 others have, respectively, two and three usefulness. Apart from these, sixteen plants were used in the treatment of four pathologies. They were *Aframomum melegueta, Ageratum conizoides, Aloe vera, Anthocleista vogelii, A. indica, Cassia occidentalis, Laportea aestuans, Laportea ovalifolia, Piper umbelatum, Starchytarpheta angustifolia, Tapinanthus globiferus, Taraxacum officinale, Uvariodendron connivens* and *Vernonia amygdalina*. Still in this region, 5 different plants were used in the treatment of six pathologies, such as *Alstonia boonei* which is used to treat malaria, worms, fracture, lactation failure, chest pains and diarrhoea; *Bryophyllum pinnatum* for antiseptics, eye and ear infections, boils, abscess, headache and cough; *Ceiba pentandra* used to treat AIDS, chest pains, purgative, heart palpitations, diabetes and gastritis; *G. kola* and *G. lucida* used to treat cough, gastritis, stimulation, gastroenteritis, speed lactation, sleeping sickness and indigestion, flatulence, stimulation, diarrhoea, gastritis and gastralgia. Concerning these five last plants, they are widely used in this part of the region and a part of the *B. pinnatum* which is ruderal, the four others are forest plants and their barks are extremely exploited and sold in and out of the country, except *G. kola* whose fruits are used in medicine because of their high flavonoids rate contents, as well as the plant bark's. These results were also reported by many researchers (Mapongmetsem, 2007; Nkuinkeu *et al*., 2007; Cox, 1991 and Tongo et Ekwalla, 2003).

From the list used in this study, taxa containing exotic species (*Alium cepa, A. indica, B. pinnatum, Caladium bicolour, Capsicum frutescens, Chromolaena odorata, Carica papaya, C. occidentalis, Cassia alata, Cymbopogon cytratus, Lantana camara, Mangifera indica, Ocimum gratissimum, Ricinus communis, Zingiber officinale, Acacia nilotica, Arachis hypogea, H. sabdariffa, Psidium guajava, Cinnamomum verum T. officinale, Solanum melongena, Panax* sp, *Origanum marjorana, Mentha piperita, Valeriana officinalis, Corchorius olitorius)*

Table 1. Check-list of medicinal plants inventoried in the Sudano-sahelian and South-west ethnoecological regions of Cameroon (SW = South-West and Littoral; SS = Sudano-sahelian region).

Scientific names of plants	Families	Vernacular names	Diseases	Parts used	Mode of preparation	Useful frequency	Region
Abrus precatorius	Fabaceae	Disola wombe (Douala)	Cough, catarrh	Fruit, leaves	decoction, infusion	*	SW
Acacia nilotica	Mimosaceae	Gabde(fd)	Gonococci	roots bark	Decoction	***	SS
Acacia polyacantha	Mimosaceae		fibroids, gonococci	stem bark	maceration	**	SS
Acalifa sp.	Euphorbiaceae		toothache, fever, dermatitis	Leaves	Decoction	**	SW
Acanthus montanus	Acanthaceae	Pears testle: Mecholechine (Bakossi)	Abdominal pains, boils, abscess	Leaves	Decoction	***	SW
Acmella caurlirhiza	Asteraceae	Medmekube (Bakossi)	Typhoid, boils, toothache	Fruits	Maceration	**	SW
Adansonia digitata	Bombacaceae	Bolo (fd)	filariasis	Exocarp	powder	***	SS
Aframomum limbatum	Zingiberaceae	Litondo-tondo (Bakweri)	Wounds	Fruit, leaves	Plasters	**	SW
Aframomum melegueta	Zingiberaceae	Alligator pepper; Ketchou (Bangante) Ndôn (Bassa) Ndondo'a Mounda (Douala)	Magnifies the uses of other medicines, typhoid, infected wound, stimulant, amoebiasis	Seeds, leaves, rhizome, fruits, roots	Decoction, powder	***	SW, SS
Afzelia africana	Caesalpiniaceae	Pectohi (fd)	Pharyngitis	seeds	Calcinations and squeeze in water	**	SS
Afzelia bipindensis	Caesalpiniaceae	Boking (Douala); Noempa (Bassa)	Heart ache, ear ache	Bark	Decoction	***	SW
Agelanthus djurensis	Loranthaceae	African mistle toe	Menopause, cancer, fibroids	Leaves	Decoction	**	SW
Ageratum conyzoides	Asteraceae	King grass, libolikane (Mbo), Ewuda nyo na nyo	Headache, night poison, quick delivery, gastritis	Leaves	Decoction	***	SW
Albizia adianthifolia	Mimosaceae	Barzain (boum)	sterility in women	Leaves, bark and roots	Decoction	***	SS
Albizia zygia	Caesalpiniaceae	Esaka (Bakweri)	Boils, diarrhoea, fracture	Stem, leaves	Decoction	**	SW
Alchornea cordifolia	Euphorbiaceae	Dibobonji (Douala), Mokumbukumbu (Oroko)	Toothache, ear ache, excess amniotic fluid	Stem, bark	Decoction	**	SW
Alchornea floribunda	Euphorbiaceae	Jondi-nga (Bakweri)	Anaemia, lumbago, arthritis, hernia, oedema	Stem, leaves	Maceration	**	SW
Allium cepa	Liliaceae	Onion	Sexual weakness, rheumatism	Rhizome	Decoction	***	SW

Table 1. Contd.

Allium sativum	Liliaceae	Garlic	Hypertension	Rhizome	Decoction	***	SW
Allophyllus africanus	Sapindaceae		sores	leaves	Powder	*	SS
Aloe Vera	Liliaceae	Aloe; Achang de-chiog (Bakossi)	Malaria, wounds, dermatitis, poisoning	Leaves	Decoction	***	SW
Aloes spp.	Liliaceae		ovarian cyst	leaves	Maceration, Infusion	**	SS
Alsodeiopsis weissenborniana	Icacinaceae	Isangi (Bakweri)	Venereal diseases, headache, fever	Leaves	Infusion	***	SW
Alstonia boonei	Apocynaceae	Wokuka (Bakweri)	Malaria, fracture, worms, lactation failure, chest pains, diarrhoea	Bark, latex, leaves	Decoction	***	SW
Ambligonocarpus andongensis	Mimosaceae	Kassi (Mboum), Yake (Fd)	Hypertension	seeds	Boiling	*	SS
Amorphophallus sp.	Araceae	Si'i (dii)	Male sexual impotence	Whole plant	Cooking with young cock	**	SS
Ampelocissus africana	Vitaceae		dysmenorrhoea	Roots	Decoction	**	SS
Annona senegalensis	Annonaceae	Doukouhi (fd)	Gastritis, snake bite, male sexual impotence	Roots	Decoction	***	SS
Anogeissus leiocarpus	Combretaceae	Cojoli (fd)	Amoebiasis	Stem bark	Powder	*	SS
Anthocleista vogelii	Loganiaceae	Ekoka ngowa (Bakweri)	Diabetes, wounds, inflammations, venereal diseases	Stem bark, leaves	Decoction	**	SW
Arachis hypogea	Fabaceae	Birigi(fd)	cyst	seeds	Cooking	***	SS
Artemisia annua	Asteraceae	Mugwart	Malaria, fatigue	Leaves, stem	Infusion	*	SW
Artocarpus altitis	Moraceae	Bale (Bakweri)	Malaria, typhoid, haemorrhoids	Fruits	Decoction	**	SW
Asparagus africana	Liliaceae		oedema	leaves	Decoction	*	SS
Aspilia africana	Asteraceae	Bwassa (Bakweri)	Fever, worms, backage	Leaves, stem	Decoction	***	SW
Asystasia gangetica	Asteraceae	Esume choug (Bakossi)	Vomiting	Whole plant	Decoction	***	SW

Table 1. Contd.

Azadirachta indica	Meliaceae	Dogoyaro ; Neem	Malaria, mosquito repellent, typhoid, intestinal worms, diabetes	Seeds, leaves, bark	Decoction	***	SW
Baillonella toxisperma	Sapotaceae	Njabe (Oroko)	Related to child birth, rheumatism	Fruit, bark	Decoction	***	SW
Balanites aegyptiaca	Balanicaceae	Tanni (fd)	Goitre	rips fruits	Decoction	**	SS
Begonia sp	Begoniaceae	Njabe (Oroko)	Night poison	Fruit, bark	Decoction	*	SW
Bidens sp	Asteraceae	Black jack; Kodekode (Bakossi)	Periodic fever, malaria	Leaves, branches	Decoction	***	SW
Biophytum sp	Oxallidaceae	Life plant Chual (Bakossi)	cough	Fruit , leaves , bark	decoction	**	SW
Bosweillia dalzielii	Burseraceae		Syphilis	roots bark	Decoction	*	SS
Bridelia ferruginea	Euphorbiaceae	Bouroubouhi (fd)	arthritis, snake bite, lumbago	roots	Decoction	**	SS
Bridelia micrantha	Euphorbiaceae	Bwango (Bakweri)	Dermatitis, conjunctivitis, rheumatism	Whole plant	Powder	**	SW
Bryophyllum pinnatum	Crassulaceae	Yoka (Oroko), Elua-lua (Bakweri)	Antiseptics, ear and eye infections, boils, abscess, headache, cough	Leaves, roots	Maceration	**	SW
Burkea africana	Euphorbiaceae	Hyim (dii)	male sexual impotence, gonococci	roots	Chew directly	*	SS
Caladium bicolor	Araceae	Dinde la bedimo (Douala)	Vaginal inflammation	Leaves, tuber	Decoction	*	SW
Calotropis procera	Asclepiadaceae		scabies	Roots bark	powder mixed with oil	*	SS
Canarium schweinfurthii	Burseraceae	Bush plum; Libel (Bakoko); Wotwa (Bakweri); Héhé (Bassa); Sao eyidi (Douala)	Gastritis, asthma, dermatitis	Leaves, bark, rhizome	Decoction	***	SW
Capsicum frutesens	Solanaceae	African bird pepper	Purgative, enhancer of other herbs, blood circulation,	Fruits	Decoction	**	SW
Carapa procera	Meliaceae	Hom (Bassa)	Rheumatism	Fruits	Decoction	**	SW
Carica papaya	Caricaceae	Pawpaw; Pawpe (Bakossi)	Hypertension, malaria, worm expeller	Whole plant	Decoction	***	SW

Table 1. Contd.

Cassia accidentalis	Caesalpiniaceae	Wonda bedimo (Douala)	Fever, typhoid, laxative, malaria	Seeds, leafy stem	Decoction	**	SW
Cassia alata	Caesalpiniaceae	Ringworm bush Tasba (fd)	Expels worms, eyes worm diseases, fever, fast delivery, yellow fever, haemorrhoids	Leaves, roots	Decoction	***	SW
Ceiba pentandra	Bombacaceae	Boma stick, Nbeum(Mbo); Njobwele(Bakossi); Djôm (Bassa) Bouma, Boumba (Douala)	AIDS, chest pains, purgative, heart palpitations, diabetes, gastritis	Bark, leaves, roots	Decoction	***	SW
Centella asiatica	Apiaceae	Ehiog (Bakossi)	Vomiting, appendicitis	Whole plant	Decoction	**	SW
Cerathoca sesamoïdes	Cerathaceae	Gouboudou (fd)	cyst	whole plant	cooking	*	SS
Chlerodendrum scandens	Verbenaceae	Musono mundene (Douala)	Convulsion	Leafy stem	Decoction	*	SW
Chromolaena odorata	Asteraceae	Acha-casarra	Fresh wounds	Leaves, sap	Plasters	**	SW
Chrysanthellum americanum	Asteraceae		hepatitis, renal lithiasis	aerial parts	Infusion	**	SS
Cinnamomum verum	Lauraceae	Cinnamon	Cough	Bark	Decoction	*	SW
Cissus spp.	Vitaceae	Gadal (fd)	menstrual disorders	roots	Decoction	**	SS
C*itrus medica*	Rutaceae	Lime, lamassi (Bangangte)	filariasis, kidney inflammation, rheumatism	Fruits	Decoction	***	SW
Clausena anisata	Rutaceae	Jumba (Bakweri)	Gastroenteritis	Leaves stem	Decoction	**	SW
Cleome ciliata	Capparaceae	Mbango (Douala)	Irregular menstrual cycle, breast infections, heart ache	Leafy stem	Decoction	***	SW
Coffea robusta	Rubiaceae	Coffee	Change of sex at child birth	Flower	Decoction	**	SW
Cola nitida	Sterculiaceae	Bush cola; Bobe (Bafaw); Ebeu (Bakossi); Mbanga (Bakweri) Garo (Bassa)	Stimulant, worm expeller, gastritis, rheumatism, chest pains	Seed, leaves, bark, roots	Eating	***	SW
Combretum sp.	Combretaceae		Male sexual impotence	roots bark	Powder	*	SS
Commelina benghalensis	Asteraceae	Keyoum (Bikom); Nkoleke (Bakossi)	Ease child birth, ring worms, typhoid, blood clotting, headache	Whole plant	Decoction	**	SW

Table 1. Contd

Corchorus olitorius	Tiliaceae	Hausa kene-kene	Childbirth	Leaves	Infusion	**	SW
Cordia sp.	Boraginaceae	Kolkolahi (fd)	Gonococci, ovarian cyst	Roots bark	Decoction	*	SS
Costus afer	Zingiberaceae	Mwandando (Douala)	Conjunctivitis, cough	Leafy stem	Decoction	***	SW
Coula edulis	Olacaceae	Kombea (Bakweri); Omôl (Bassa); Voula (Douala); Bokoumia (Bakundu) Koumoum (Bakoko)	Rheumatism, dermatitis	Fruits	Eating	**	SW
Crinum purpurascens	Amarylidaceae	Linde-la-nganga (Bakweri)	Wounds, dysentery, piles	Tuber	Powder	*	SW
Crinum sp2.	Boraginaceae		Male sexual impotence	whole plant	Cooking with sheep meat	*	SS
Crossopteryx febrifuga	Rubiaceae	Golombi (fd)	Sterility in women, ovarian cyst, threatened abortion, sterility in women, syphilis	Fruits, bark	Powder, maceration	***	SS
Crotalaria sp.	Fabaceae		Gastritis	Roots	Powder	*	SS
Croton longiracemosus	Euphorbiaceae	Bwasaso	Measles, gastritis, dermatitis	Seed and leaves	Decoction	**	SW
Crudia senegalis	Caesalpiniaceae	Enunmba Njou (Douala)	Ear ache, antiseptics	Leaves	Decoction	**	SW
Cucumbita maxima	Cucurbitaceae	melon, monga (Banen)	Aphrodisiac, sexual stimulant	Leaves	Decoction	*	SW
Curcumis sp.	Cucurbitaceae		cyst	Seeds	Cooking	*	SS
Cussonia barteri	Araliaceae		Gonococci	Roots bark	Decoction	**	SS
Cymbopogon citratus	Poaceae	Fever grass; Mehang metea (Bakossi)	Malaria, typhoid, cough, fever	Leaves	Decoction	***	SW
Cynodon dactylon	Poaceae	Bahama grass; Semesm (Bakossi), Nzezong (Bakossi)	Dizziness, hypertension, rib pains	Leaves, bark, roots	decoction	**	SW
Cyperus sp1.	Cyperaceae		Ovarian cyst, sterility in women	whole plant	Decoction	*	SS
Cyperus sp2.	Cyperaceae		Sterility in women	Roots	Cooking with groundnut paste	*	SS
Dacryodes edulis	Poaceae	African plum; Sao (Bakweri) Sas (Bakoko) Sah (Bassa)	Snake bite	Leaves	Plasters	**	SW
Daniellia oliveri	Caesalpiniaceae	Karlahi(fd)	wounds, generalised pains	stem bark	Powder	**	SS
Desmodium sp	Fabaceae	Clover; Pee-mbodeh (Bakossi)	Dysentery, piles	Stem, leaves	Decoction	*	SW
Detarium microcarpum	Caesalpiniaceae	Konkehi (fd)	scabies	roots bark	Powder	*	SS

Table 1. Contd.

Dichrocephala integrifolia	Asteraceae	Esysio-mboug (Bakossi)	Eyes worm diseases, conjunctivitis	Stem, leaves	Decoction	**	SW
Dichrostachys glomerata	Mimosaceae		cyst	Seeds	Cooking	*	SS
Dioscorea bulbifera	Dioscoreaceae	Haap (dii)	Bite, poisoning	Roots, bulbs	Decoction, Powder	*	SS
Diospyros sp	Ebenaceae	Ebony, lamedjem (Mbo)	Madness	Roots	Decoction	***	SW
Dissotis rotundiflora	Melastomataceae	Ewuda wanga (Douala)	Cough, dysentery, conjunctivitis, enteritis, catarrh	Leafy stem	Decoction	***	SW
Dorstenia sp	Moraceae	Manpower; Eseh-emuseh (Bakossi)	Aphrodisiac, sexual stimulant	Root	Eating	**	SW
Drynaria cordata	Polypodiaceae	Chick weed; Echim-ekede (Bakossi)	Malaria, diabetes	Leaves, root	Decoction	***	SW
Ekebergia senegalensis	Meliaceae	Yongodack (dii)	ovarian cyst	bark	Maceration	*	SS
Elaeis guineensis	Arecaceae	Oil palm	Syphilis, gonorrhoea	Young palm leaves	Decoction	**	SW
Eleusine indica	Poaceae	Sinsin (Douala)	wound dressing, cough, fatigue	Whole plant	Decoction	*	SW
Elytraria marginata	Acanthaceae	Mondo ma ngule (Douala)	Wounds	leaves	Powder	*	SW
Emilia coccinea	Asteraceae	Emilia	gastritis, ear ache, convulsion	Leaves	Decoction	***	SW
Enantia chlorantha	Asteraceae	Yellow kanda	Malaria	Bark	Decoction	***	SW
Entada africana	Mimosaceae	Faddewadou(fd)	Dysentery, male sexual impotence	Bark	Sitzbath, Decoction	**	SS
Entandophragma angolense	Meliaceae	Mahogany (boa)	Diarrhoea, bellyache	bark	Decoction	**	SW
Eremomastax speciosa	Acanthaceae	Dibokuboku di mole (Douala)	generalised pains, dermatitis	Leaves	Decoction	***	SW
Eryngium foetidum	Apiaceae	Camwood	abscess, boils	Leaves	Plasters	*	SW
Erythrina excelsa	Fabaceae	Esukusuku (Bakweri)	catarrh, arthritis	Stem, leaves	Decoction	**	SW
Erythrina sygmoidea	Fabaceae		diarrhoea, male sexual impotence	Bark	Sitzbath, Decoction	**	SS
Erythrococca africana	Euphorbiaceae	Kinde (Bakweri)	Gastritis, dysentery	Roots, leaves seeds	Decoction	**	SW
Eucalyptus Camalelulensis	Myrtaceae	Eucalyptus	Cough, catarrh	Leaves	Decoction	*	SW
Eulophia horsfalli	Orchidaceae	Akwo Ikwog (Bakossi)	Bleeding piles	Stem bark	Decoction	*	SW

Table 1. Contd.

Euphobia hirta	Euphorbiaceae	Ewuda manyongo (Douala)	Diarrhoea, gastritis, diabetes, dysentery Rheumatism, amoebiasis	Whole plant	Decoction	***	SW
Fadogia cienkowski	Rubiaceae		male sexual impotence	Stem bark	Powder	*	SS
Fagara xanthoxyloides	Rutaceae	Poussolock (fd)	ulcers	Roots bark	Powder mixed with karity butter	**	SS
Ficus exasperata	Moraceae	Joloso (Douala)	Heart ache, ear ache, poisoning	Leaves	Decoction	***	SW
Ficus platyphylla	Moraceae	Tchekehi (fd)	dysmenorrhoea	Stem bark	Decoction	*	SS
Gambeya africana (Chrysopyllum delevoyi)	Sapotaceae	Yellow leaf, nzoueh nfu (Bamileke)	Malaria, constipation, typhoid	Fruit	Infusion	**	SW
Garcinia kola	Clusiaceae	Bitter cola; Wè (Bassa); Ebongagnagne (Douala); Nya, ejane (Ejagham)	Cough, gastritis, sleeping sickness, stimulant, gastroenteritis, speed lactation	Bark, seeds, roots	Decoction	***	SW
Garcinia lucida	Clusiaceae	Lanõ (Bassa)	Indigestion, flatulence, stimulant, diarrhoea, gastritis, gastralgia	Bark, seeds, leaves	Decoction	***	SW
Garcinia mannii	Clusiaceae	Chewing stick	gastralgia, malaria, laxation, joint pains, cracks in foot	Fruit, leaves, bark, roots, latex	Decoction	**	SW
Gardenia aqualla	Rubiaceae	Baou (toupouri)	Male sexual impotence	Roots bark	Powder	*	SS
Gardenia imperialis	Rubiaceae	Timbaa (dii)	Gonococci, male sexual impotence	Roots bark	Decoction	**	SS
Gardenia triangacantha	Rubiaceae	Bao(toupouri)	Lumbago, rate, cough	Roots	Powder	**	SS
Gnetum africanum	Gnetaceae	Eru	Widlow, ease child birth	Leaves	Decoction	**	SW
Gnidia kraussiana	Thymeaceae		sexual transmitted diseases	roots	Powder	**	SS
Gossypium arboreum	Malvaceae	Cotton leaf	Typhoid	Leaves	Decoction	*	SW
Guibourtia tessmannii	Caesalpiniaceae	King stick	Cancer	Bark	Decoction	***	SW
Guiera senegalensis	Thymeaceae		Hypertension	roots bark	Powder	*	SS

Table 1. Contd.

Ha*rungana madagascariensis*	Hypericaceae	Wotolongo (Bakweri), Bourgal (fd) Tolongo (Douala)	Haemorrhoids, colds, dysmenorrhoea, gonococci, typhoid poisoning, diarrhoea	Bark leaves	Decoction	***	SW, SS
Helianthus annuus	Asteraceae	Sun flower	Piles	Leaves, flowers	Decoction	*	SW
Hibiscus rosa-sinensis	Malvaceae	Hibiscus	Diarrhoea, dysentery	Leaves	Decoction	*	SW
Hibiscus sabdariffa	Malvaceae	Foléré (fd)	Amoebiasis, anaemia, sexual transmitted diseases	fruits petals	Decoction and mixture	**	SS
Hibiscus surattensis	Malvaceae	Eyema njo (Bakweri)	Palpitation, gastralgia	Leaves, flower	Decoction	**	SW
Hymenocardia acida	Euphorbiaceae	*Nde nde (gbaya)* Samatahi (fd), Nde nde(gbaya)	threatened abortion, typhoid, fibroids, male sexual impotence	Wood leaves	Coal Decoction	***	SS, SW
Hyphaene thebaica	Arecaceae	Goriba(fd)	Hypertension	Fruits	Eating	*	SS
Impatiens sp	Basalminaceae	Morumerume(Oroko)	Infertility, dysmenorrhoea	Stem, Leaves	Decoction	**	SW
Imperata cylindrica	Poaceae	To'o(dii)	gonorrhoea	Roots	Decoction	**	SS
Impomea sp.	Convolvulaceae	Sope-ahente (Bakossi)	Colds	Leaves,	Powder	*	SW
Isoberlinia docka	Caesalpiniaceae		food intoxication	Bark	Decoction	*	SS
Jateorhiza macrantha	Menispermaceae	Limoni (Bakweri)	Dysmenorrhoea	Stem	Decoction	*	SW
Jatropha curcas	Euphorbiaceae	Big nut	rheumatism dermatitis wounds, syphilis	Stem, sap	Maceration	***	SW
Kalanchoe creneta	Crassulaceae	Edibe dibe (Douala)	Ear painful, Pneumonia, nose bleeding	Leaves	Juice Infusion	**	SS, SW
Khaya senegalensis	Meliaceae	Dalehi (fd)	Rheumatism, arthritis, elephantiasis	Seeds	Oil extract	**	SS
Kigelia africana	Bignoniaceae	Motimbilimbi (Bakweri)	Waist pain, breast infection	Fruit	decoction	***	SW
Laccosperma opacum	Arecaceae	Likokoko (Bakweri)	Rheumatism, cough, fracture	Vines	Decoction	*	SW
Lactuca taraxasifolia	Asteraceae		ovarian cyst	Whole plant	Decoction	*	SS
Lannea microcarpa	Anacardiaceae		Elephantiasis	Stem bark	Powder mixed with Khaya oil	*	SS
Lantana camara	Verbenaceae	Mbonja satan (Douala)	Ear ache, filariasis	Leafy stem	Decoction	**	SW

Table 1. Contd.

Laportea aestuans	Urticaceae	Tatue (Bakweri)	Anaemia, low calcium, fibroids, dermatitis	Leaves, tem, roots	Decoction	**	SW
Laportea ovalifolia	Urticaceae	Tolobanji (Douala)	Poisoning, fontanels, flatulence, tongue pains	Leafy stem	Decoction	**	SW
Leea guineensis	Leeaceae	Lingala (Bakweri)	abdominal pains, malaria	eaves, stem, seeds, flower	Decoction	**	SW
Leonotis spp	Lamiaceae	Modewart	Dysentery, filariasis, fever	leaves	Decoction	*	SW
Lepidium meyenii		yarro	Rheumatism	leaves	Maceration	**	SW
Leptadenia hastata	Asclepiadaceae		sexual transmitted diseases, dermatitis, diabetes	roots	Decoction	*	SS
Leucaena leucocephala	Caesalpiniaceae	Esum-achad (Bakossi)	Ease conception	leaves, fruits	Decoction	*	SW
Lippia multifora	Verbenaceae	Ebanda jeka (Douala)	Fever, typhoid	leaves	Decoction	**	SW
Lippia rugosa	Verbenaceae	Gossohi(fd)	Rheumatism, typhoid	leaves	Decoction	*	SS
Lophira alata	Ochnaceae	Ironwood; mbongossi (Douala) Hos (Bassa); Boko (Balung, Bakundu); Djomgi (Bakweri)	Stops vaginal discharge	bark	Decoction	**	SW
Lophira lanceolata	Ochnaceae	Kofia (Gbaya)	diarrhoea, ovarian cyst	bark	Decoction	*	SS
Macaranga occidentalis	Euphorbiaceae	Ewowo (Bakweri)	Stomach wash for pregnant women	Stem, leaves	Decoction	***	SW
Mangifera indica	Anacardiaceae	Mangoro (Douala) Mangro (fd)	Rheumatism Typhoid	bark	Decoction	***	SW, SS
Markhamia lutea	Bignoniaceae	Igwe (Boyo)	Syphilis	leaves	Decoction	**	SW
Maytenus senegalensis	Celastraceae		oedema	roots	Powder	*	SS
Melanthera scandens	Asteraceae	Wakasa wakasa (Douala)	Gastralgia, appendicitis	Leafy stem	Decoction	**	SW
Mentha piperita	Lamiaceae	Mint	Carminative (stomach upset)	leaves	Decoction	*	SW
Microglossa sp	Asteraceae	Ekeble (Bakossi)	Enema for babies, gastralgia	Leaves	Decoction	*	SW
Milicia excelsa	Moraceae	Iroko	Generalised pains, typhoid, malaria	bark	Decoction	***	SW
Mimosa ruidica	Mimosaceae	Muko iyo musadi (Douala)	Dermatitis, sexual weakness	Leafy stem	Decoction	**	SW

Table 1. Contd.

Momordica balsamina	Cucurbitaceae	Ndombondany (Bakweri)	Chest pains, side pain, rashes	Leaves	Decoction	**	SW
Morinda lucida	Rubiaceae	Ewoka (Bakweri)	Stomach wounds	Stem, bark, leaves, roots	Decoction	**	SW
Mormodica charantia	Cucurbitaceae	Nyangala nindene (Douala)	calms contraction pains at child birth	Fruit, stem, leaves	Decoction	**	SW
Mormodica foetida	Cucurbitaceae	Ndume (Bakossi)	threatened abortion, gastralgia	Leaves	Decoction	*	SW
Mucuna stans	Fabaceae		Ovarian cyst	Roots	Decoction	*	SS
Musa paradisiaca	Musaceae	Banana	vomiting, gastritis	Leaves	Decoction	**	SW
Musanga cecropiodes	Cecropiaceae	Lisengi (Bakweri)	generalised pains, cough	Stem	Decoction	**	SW
Neoboutonia manii	Euphorbiaceae	Ebwebwe(Bakweri)	Wounds, gastritis	Bark, leaves	Decoction	*	SW
Nephrolepis biserrata	Davaliaceae	Senja mengu (Douala)	lower abdominal pains	Frond	Decoction	*	SW
Nephthytis sp.	Araceae		cyst	tubers	Maceration	*	SS
Nicotiana tabacum	Solanaceae	Tobacco, ndabah (Bamileke)	headache, dermatitis, stimulant	Leaves	Plasters	***	SW
Ochna afzelii	Ochnaceae		wounds	roots	Decoction	*	SS
Ocimum basilicum	Apiaceae	Cotimagin	Delayed menstruation, indigestion, mosquito bites	Leaves, flowers	Decoction	**	SW
Ocimum gratissimum	Apiaceae	Masepu	Gastritis, fever, frontal headache, constipation, conjunctivitis	Leaves, stem, flowers	Decoction	**	SW
Olax sp.	Olacaceae		ovarian cyst	whole plant	Decoction	*	SS
Origanum marjorana		Majolene	Stress, colds	Leaves	Fumigation	*	SW
Palisota hirsuta	Commelinaceae	Liembemba (Bakweri)	Conjunctivitis, gastralgia, boils	Stem	Decoction	**	SW
Panax sp	Panaceae	Ginseng	Epilepsy, irregular menstrual cycle	Roots	Maceration	***	SW
Parkia biglobosa	Mimosaceae	Nounouhi (fd)	Ascariasis, syphilis	Leaves	Decoction	**	SS
Paullinia pinnata	Sapindaceae		Rheumatism	Leaves	Decoction	***	SS
Pausinystalia johimbe	Rubiaceae	Yohimbe	Constipation, stimulant, sexual weakness	Bark	Maceration	***	SW

Table 1. Contd.

Pennisetum purpureum	Poaceae	Elephant grass, likoko (Bakweri), sison (Baba 1)	Epilepsy	Leaves, stem	Maceration	*	SW
Pennisetum sp.	Poaceae	To'o (gbaya)	Syphilis	Rhizomes	Maceration	*	SS
Pentaclethra macrophylla	Mimosaceae		Cardio-vascular disease, gonorrhoea	Fruit	Maceration	**	SW
Persea americana	Lauraceae	Avocado (pear)	antihelmintic	Bark, leaves	Maceration	***	SW
Phyllanthus muellerianus	Euphorbiaceae	Tidui (gbaya)	Rheumatism, gonococci	leaves	Decoction	**	SS
Piliostigma thonningii	Caesalpiniaceae	Barkehi (fd)	male sexual impotence, sterility in women, malaria	Stem bark	Powder	**	SS
Piper guineensis	Piperaceae	Bush pepper; Ndong (Bakossi); Idoko (Bakweri); Lobo (Douala); Lobé (Malimba)	Cough, stimulant, enema	Whole plant	Maceration	***	SW
Piper umbellatum	Piperaceae	Ekongo (Oroko), Dibakuboku la wonja (Douala)	Change of sex at child birth, piles, breast infection, calm birth pains	Flower, leaves	Decoction	***	SW
Plectranthus decurrens	Lamiaceae	Etangloh (Bakossi)	Enema for pregnant women, ease delivery	Whole plant	Decoction	**	SW
Plectranthus glandulosus	Lamiaceae	Esosa-maija (Bakweri)	dermatitis, venereal diseases, bellyache	Leaves, sap	Plasters	**	SW
Portulaca oleracea	Portulacaceae	Nyukutu nyukutu	Frontal headache, poisoning	Leafy stem	Decoction	*	SW
Protea eliotii	Proteaceae	Levrehi (fd)	carious teeth, haemorrhoids, sores, eyes worm diseases	Bark	Decoction in mouth bath, Fumigation	**	SS
Prunus africana	Rosaceae	Pygeum	Malaria, gastralgia, chest pains, heart burn, madness	Bark	Decoction	***	SW
Pseudarthria kotschyi	Fabaceae		scabies, sexual transmitted diseases	Roots bark	Powder	*	SS
Psidium guajava	Myrtaceae	Guava tree	Wounds, diarrhoea Typhoid	Leaves	Plasters Decoction	***	SW, SS
Psorospermum febrifugum	Hypericaceae	Saiwaki (fd)	Syphilis	Roots bark	Decoction	*	SS
Pterocarpus erinaceus	Fabaceae		Amoebiasis	Stem bark	Decoction	**	SS

Table 1. Contd.

Pterocarpus sp1.	Fabaceae		Ovarian cyst	Roots	Maceration	*	SS
Pycnanthus angolense	Myristicaceae	Esamba (Bakweri)	Fever, toothache	Stem, bark, leaves	decoction	**	SW
Pycnostachys pallisfusca	Lamiaceae		Syphilis	roots bark	Decoction	*	SS
Rauvolfia vomitoria	Apocynaceae	Abude or nhimpaah (Bakossi)	Typhoid, antihelmintic, heart ache	Leaves	Decoction	***	SW
Rauwolfia macrophylla	Apocynaceae	Kanja (Bakweri)	heart ache, infectious diseases	Bark, roots	Decoction	**	SW
Ricinus communis	Euphorbiaceae	Lingatuma – Bakweri (castor)	Sterility in women	Leaves, stem, roots, fruits	Decoction	**	SW
Rinorea dentata	Violaceae	Lindu (Bakweri)	Headache, diarrhoea	Fruits ,stem	Decoction	*	SW
Sclerocarya birrea	Anacardiaceae	Edi (fd)	Dermatitis, diabetes	leaves	Decoction	*	SS
Scoparia dulcis	Scropariaceae	Jomboa (Bakweri)	Sores, stroke, measles, sexual weakness	Leaves, branchlets	Maceration	**	SW
Securidaca longepedonculata	Polygalaceae	Alahi (fd)	Rheumatism, bronchitis, snake bite, gonococci, ovarian cyst	leaves, roots	Decoction	***	SS
Selaginella myosurus	Selaginellaceae	Tunda (Douala)	headache	Whole plant	Maceration	*	SW
Selaginella vogelii	Selaginellaceae	Abude (Bakossi)	Kidney problems	Whole plant	Maceration	*	SW
Senna occidentale	Caesalpiniaceae	Tasba(fd)	Abscess	leaves	plasters	**	SS
Senna sanqueana	Caesalpiniaceae		fibroids, threatened abortion	Stem bark	Maceration	*	SS
Setaria megaphylla	Papilionnaceae	Lingongi (Bakweri)	Wounds, eczema	Leaves	Powder	*	SW
Sida javanensis	Verbenaceae	Soffo	Ease delivery, liver disorders, boils	Fruit, leaves	Decoction	*	SW
Sida rhombifolia	Malvaceae	Douza (dii)	leucorrhoea	whole plant	Decoction	*	SS
Solanecio biafrae	Solanaceae	Kalavanje (Bakweri)	Rheumatism, cough	Leaves	Decoction	**	SW
Solanum gilo	Solanaceae	Nginge nisadi (Douala)	migraine	Whole plant	Decoction	**	SW
Solanum incanum	Solanaceae	Tangalanga (Douala)	poisoning, heart ache, lower abdominal pains	Leaves	Decoction	**	SW
Solanum macrocarpon	Solanaceae	Anchiye	diarrhoea, fever	Leaves	Decoction	*	SW
Solanum melongena	Solanaceae	Garden eggs	Waist pain	Fruits, leaves	Decoction	*	SW

Table 1. Contd.

Solenostemon monostachyus	Lamiaceae	Dimayn (Douala)	Ease child birth, frontal headache	Leafy stem	decoction	**	SW
Sorghum bicolor	Poaceae		cyst	whole plant	powder	*	SS
Spathodea campanulata	Bignoniaceae	Echib (Bakossi)	Crooked eye problem	Leaves	Decoction	**	SW
Spilantes filicaulis	Asteraceae	Eye for fowl	Poisoning, eczema, cancer	Whole plant	Decoction	***	SW
Stanfieldiella imperforata	Commelinaceae	Esa koka (Bakweri)	Wound dressing, antihelmintic, headache	Leaves	Powder	**	SW
Starchytarpheta angustifolia	Verbenaceae	Blue verbena	Laxative, fever, cough, toothache	Leaves	Decoction	*	SW
Sterospermum kuntianum	Bignoniaceae	Golombi (fd)	male sexual impotence, gonococci	Roots bark	Powder	*	SS
Strychnos spinosa	Loganiaceae	Moratouta (fd)	male sexual impotence	Bark	Powder	**	SS
Symphitium officinalis		Confrey	Diabetes, gastritis, rheumatism	Leaves	Decoction	*	SW
Syzyzium guineense var. *macrocarpum*	Myrtaceae	Assora (fd), Kelu (gbaya)	male sexual impotence	Roots bark	Powder	*	SS
Tamarindus indica	Caesalpiniaceae	Djabbe (fd)	sterility in women, dysmenorrhoea, amoebiasis	Leaves, fruits	Powder	***	SS
Tapinanthus bangwensis sur Boswellia dalzielli	Loranthaceae	Yotéré	snake bite	Leaves and stem	Powder mixed with oil	**	SS
Tapinanthus bangwensis sur Gardenia sp.	Loranthaceae	Yotéré (fd)/	snake bite	Leaves and stem	Powder mixed with oil	**	SS
Tapinanthus bangwensis sur Tamarindus indica	Loranthaceae	Yotere (fd) /Djabbe	sexual transmitted diseases	Leaves and stem	Powder from 3 plants mixed	***	SS
Tapinanthus globiferus	Loranthaceae	Lisua-la-kote (Bakweri)	Convulsion, diabetes, arthritis, antidote	Leaves, flower	Decoction	***	SW
Tapinanthus sp1./sur *Isoberlinia docka*	Loranthaceae		sterility in women	Whole plant	Maceration	*	SS
Tapinanthus sp2./sur *Piliostigma thonningii*	Loranthaceae	Yotere/barkehi (fd0	cyst	Whole plant	Powder	*	SS
Tapinanthus sp3.	Loranthaceae	Yotere	cyst	Seeds	Cooking	*	SS
Tapinanthus sp4./sur *Crossopteryx febrifuga*	Loranthaceae	Yotere (fd)/Rhimajoga (fd)	threatened abortion	Whole plant	Make nodes with *Sida acuata*	*	SS

Table 1. Contd.

Taraxacum officinale	Asteraceae	Dandelion	Liver disorders, kidney problems, spleen problems, diuretic	Whole plant	Decoction	***	SW
Telfairia occidentalis	Cucurbitaceae	Okongobong	Typhoid, dermatitis	leaves	Decoction	*	SW
Tephrosia sp.	Fabaceae		menstrual disorders	bark	Maceration	*	SS
Terminalia avicennioides	Combretaceae	Gbakoa (gbaya), Koulahi (fd)	sexual transmitted diseases	roots bark	Powder from 3 plants mixed	*	SS
Terminalia glaucescens	Combretaceae	Koulahi (fd)	haemorrhoids, diarrhoea	leaves, bark	Sitzbath, Decoction	**	SS
Tetrapleura tetraptera	Mimosaceae	Esekeseke (Bakweri)	stimulates lactation, convulsion, gastralgia	Fruit, stem	Decoction	***	SW
Thaumatococcus daniellii	Marantaceae	Eteve (Bakweri)	Liver disorders, laxative	Leaves, fruits	Decoction	*	SW
Tragia volubilis	Euphorbiaceae	Itambi (Bakweri)	Urethritis, abortion enema, infertility, generalised pains, antimicrobial diseases	Stem, leaves	Decoction	***	SW
Treculia africana	Moraceae	Bwembi (Bakweri); Bofem (Bafaw); Ofino, mfin (Ejagham)	dermatitis	Leaves, bark	Powder	*	SW
Trichilia emetica	Meliaceae		Amoebiasis, sexual transmitted diseases	roots bark	Decoction and mixture	**	SS
Trichilia rubescens	Meliaceae	Eveve (Bakweri)	Antiparasitic diseases, fever, gonorrhoea, enema, antiseptics	Bark, stem	Decoction	***	SW
Triumfetta tomentosa	Tiliaceae	Evangua (Bakweri)	stomach wash after childbirth	leaves	Decoction	*	SW
Uapaca spp	Euphorbiaceae	Jososo (Bakweri)	Wounds, diarrhoea	Leaves , stem	Powder	*	SW
Urena lobata	Malvaceae		wounds	leaves	Powder	*	SS
Uvariodendron connivens	Annonaceae	Ekenju (Bakweri)	dermatitis, liver disorders	Fruits, seeds	Decoction	*	SW
Uvariodendron connivens	Annonaceae	Ekenju (Bakweri)	bronchial congestion, inflammation of bladder	Fruits, seeds	Decoction	*	SW

Table 1. Contd.

Valeriana officinalis		Valerian	Nervous disorders, epilepsy, hysteria	Leaves	Decoction	**	SW
Vernonia amygdalina	Asteraceae	Bitter leaf	piles, poor digestion, poisoning, diabetes	Leaves	Decoction	***	SW
Vernonia sp.	Asteraceae		ovarian cyst	Roots	Infusion	*	SS
Vernonia stellullifera	Asteraceae	Efanja (Bakweri)	stops miscarriage, dysentery, tetams	Whole plant	Decoction	**	SW
Vigna unguculata	Fabaceae		cyst	seeds	Cooking	*	SS
Vitellaria paradoxa	Sapotaceae	Karehi (fd)	worms, ulcers, diarrhoea	bark	Decoction	**	SS
Voacanga africana	Apocynaceae	Voacanga	Treats madness, gonorrhoea	Leaves, seeds	Decoction	***	SW
Voanzou subterana	Fabaceae		threatened abortion	whole plant	Make nodes with *Sida acuata*	*	SS
Waltheria americana	Olacaceae	Kapapi (fd)	wounds, gonococci	Roots	Decoction of powder	*	SS
Ximenia americana	Olacaceae	Mii (gbaya)	Dysentery, fibroids, sleep diseases	Roots	Infusion	***	SS
Zea mays	Fabaceae	Maize	Worm expeller, bladder problems	Seed, silk	Decoction	**	SW
Zingiber officinale	Zingiberaceae	Ginger	rheumatism	Roots	Decoction	***	SW
Ziziphus mucronata	Rhamnaceae	Djaabe (fd)	Bilharziosis	Roots bark	Decoction	*	SS

represent about 5-10% of the total inventories. These include forest species (21%), sahelian and savannah species (8.42%), some widespread, widely cultivated plants (60%) and several species like *A. conizoides* and *Commelina benghallensis* which are unknown in origin (Letouzey, 1986).

Various herbs could be used to cure the same disease under one common name. Hence to reach the exact and right herb type and to prevent any misunderstanding or misuse of the herbal plants, herbalists and medicinal healers need to know the original Latin names of these herbs and ask accordingly before any purchase. It's clear that the non similarity of climate and environmental conditions (especially in the sudano-sahelian region) can change the biological properties of some plants, as well as the ecosystem or ecology of the plant. This is why a plant such as *A. melongeta* used in the South-west to magnify the use of other medicines, to treat typhoid and infected wounds, is used in the sudano-sahelian region to treat amoebiasis. The same remark is made of *A. indica* as it being used in the south-west to treat typhoid, intestinal worm and child birth. The leaves are used in the sahelian region to treat diabetes. Another change of properties could be found with *Euphorbia hirta, Harungana madagascariensis, Jatropha curcas, Kalanchoe crenata* and *Psidium guajava.* Table 3 shows clearly that in these two regions, the plants were used mainly for pathologies of the digestive, respiratory, male and female sexual, nervous, musculo-skeletal, skin system disorders, child diseases, eyes and ear pains, snake bite and sexually transmitted diseases.

Conclusion

In conclusion, the comparison of the treatments between these regions, showed a decreased incidence of gastralgia, fever, boils and cough in the sudano-sahelian region and increased incidence of the male sexual diseases, gonococci, sexually transmitted diseases,

Table 2. Plants sold in herbal markets according to the ethnoecological region.

Plants	SS	SW	Total
Aframomum flavum	-	1	1
Aframomum melegueta	-	4	4
Afzelia africana	1	-	1
Ageratum conyzoides	-	4	4
Alchornea cordifolia	2	-	2
Aloe vera	-	4	4
Azadirachta indica	-	4	4
Baillonella toxisperma	-	2	2
Bersama abyssinica	-	1	1
Carica papaya	-	3	3
Carissa edulis	1	-	1
Cassia alata	-	5	5
Centella asiatica	2	-	2
Chrysanthellum americanum	3	-	3
Crinum spp.	2	-	2
Dosternia mannii	-	2	2
Enantia chorantha	-	1	1
Eremomastax speciosa	-	2	2
Garcinia cola	-	6	6
Garcinia lucida	-	6	6
Lippia multiflora	-	2	2
Nauclea latifolia	2	-	2
Nauclea vandergouchtii	1	-	1
Newbouldia laevis	-	1	1
Ocimum basilicum	-	3	3
Pachypodanthium staudtii	-	1	1
Panax sp	-	2	2
Pausinystalia johimbe	-	3	3
Prunus africana	-	5	5
Pseudospondia microcarp	-	1	1
Pycnanthus angolense	-	2	2
Solanum melongena	-	1	1
Vernonia amygdalina	-	4	4
Vernonia guineense	1	-	1

ovarian cyst, amoebiasis, rheumatism and typhoids (Table 3). Contrary to the south-west region, there is an increased incidence of skin problems (dermatitis), cough and malaria that are related to a humid climate and other different environmental conditions due to the proximity of the forest, which can improve the development of pathogens. The percentage of male sexual disorders, gonococci, sexually transmitted diseases and sterility in women of the northern part of the country implies that the increase may also be related to the population with less educational development, ancestral tradition, poverty and social reasons.

The problems of digestive diseases are also recurrent in the two regions. The higher number of plants (126) used to treat this pathology can be related to the fact that These cities received immigrants from the less developed cities and that they have rather poor hygienic conditions with regard to food and water. The world health report indicated that this problem appeared in less developed countries of the world.

Following the listed results, the fact that the causes of mortality were mostly malaria and related sexual disorders with a low rate of cancer, hypertension and diabetes which are in the list of clinical world diseases was concluded. This fact led to the thought that the herbal/cheap cures for these numbered diseases might have been deliberately exchanged with the chemical/ expensive ones, or just carelessly overlooked.

Table 3. Ethnobotanical uses focusing in the treatment of major diseases in the survey areas.

Diseases	SS E	(%)	LSW E	(%)	Number of plants used	(%)
Amoeabiasis	8	5	-	-	8	5
Boils	-	-	7	2	7	2
Cough	1	1	9	2	10	3
Cyst	9	5	-	-	9	5
Dermatitis	-	-	15	4	15	4
Diarrhoea	4	2	9	2	13	2
Dysentery	2	1	5	1	7	1
Fever	-	-	8	2	8	2
Gastralgia	-	-	9	2	9	2
Gastritis	2	1	12	3	14	1
Gonococci	11	6	-	-	11	6
Malaria	1	1	6	1	7	1
Male sexual diseases	15	9	-	-	15	3
Ovarian cyst	12	7	-	-	12	7
Rheumatism	6	3	7	2	13	3
STD	7	4	-	-	7	4
Sterility in women	8	5	-	-	8	5
Syphilis	7	4	-	-	7	4
Thyphoids	8	5	9	2	17	5
Wounds	5	3	3	1	8	3

SSE = Soudano-sahelian ethnoecological region; LSWE = Littoral and South-West ethnoecological regions.

Table 4. Comparison of the two ethnoecological regions of Cameroon.

Therapeutic indications	SSE (%)	LSWE (%)	Total
Child diseases	-	15 (3)	15
Digestive diseases	35 (10)	91 (21)	126
Eyes worm pains	-	2 (-)	2
Female sexual diseases	46 (26)	29 (6)	75
Male sexual diseases	15 (9)	11 (2)	26
Musculo-skeletal diseases	8 (5)	26 (6)	34
Nervous diseases	-	20 (4)	20
Others diseases	26 (15)	178 (41)	204
Respiratory diseases	-	24 (5)	24
Skin and cutaneous diseases	12 (7)	47 (11)	59
Snake bite	6 (3)	1 (-)	7
STD	26 (15)	6 (1)	32

SSE = Sudano-sahelian ethnoecological region; LSWE = Littoral and South-West ethnoecological regions.

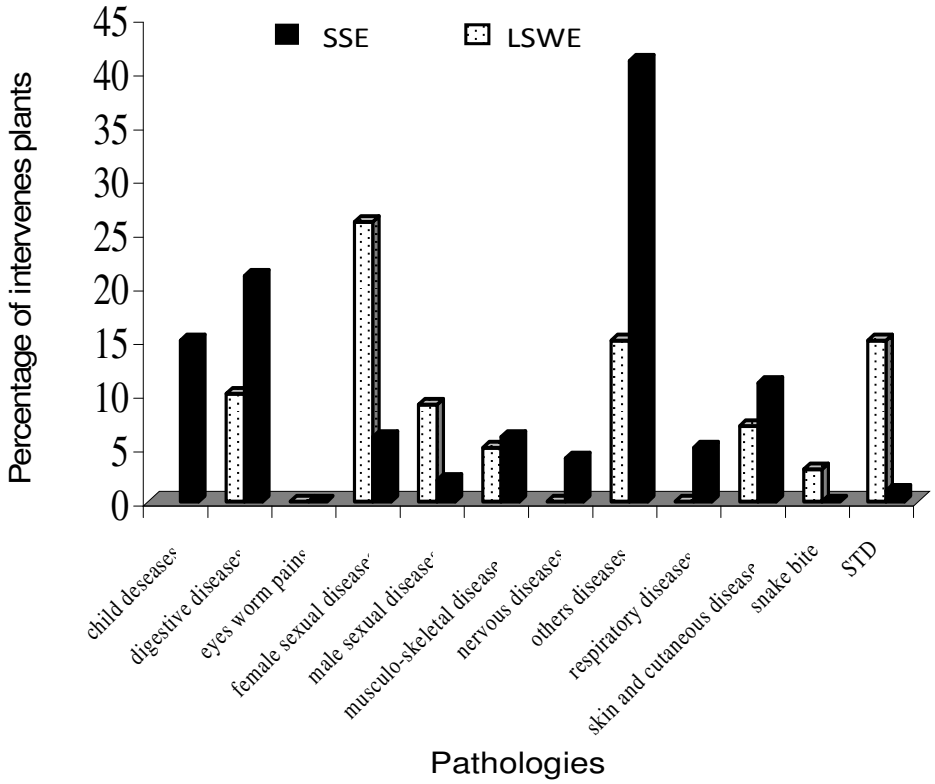

Figure 2. Distribution patterns of plants number and pathologies according to the Ethnoecological region.

ACKNOWLEDGEMENTS

We would like to thank all traditional healers of our study areas and others who have provided us with the various herbal samples and information. The CEN is also thanked for its financial support.

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