Phytotherapy and Women's Reproductive Health: The Cameroonian Perspective

Authors

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Abstract

Approximately 80% of the population in Africa use traditional medicinal plants to improve their state of health. The reason of such a wide use of medicinal plants has been mainly attributed to their accessibility and affordability. Expectation of little if any side effects, of a "natural" and therefore safe treatment regimen, as well as traditional beliefs additionally contribute to their popularity. Several of these plants are used by women to relieve problems related to their reproductive health, during or after their reproductive life, during pregnancy, or following parturition. The African pharmacopoeia thus provides plants used for preventing and/or treating gynecological infections, dysmenorrhea, irregular menstruations, oligomenorrhea or protracted menstruation, and infertility. Such plants may then be used as antimicrobians, emmenagogues, or as suppressors of uterine flow. African medicinal plants are also

Introduction

Traditional societies in Africa and elsewhere have always used herbs to promote health [1]. According to Okoli et al. [2], traditional medical practices on the African continent date as far back as 4000 years and were the sole medical system for health care before the advent of conventional medicine. Even today, traditional medicine is still the predominant means of health care in developing countries where about 80% of their total population depends on it for their well-being [3]. The reason of such a broad use of medicinal plants has been mainly attributed to their accessibility and affordability. Expectation of little if any side effects, of a "natural" and therefore safe treatment regimen, as well as traditional beliefs addititionally contribute to their popularity [3].

used during pregnancy for prenatal care, against fetal malposition or malpresentation, retained dead fetus, and against threatened abortion. Some others are used as anti-fertilizing drugs for birth control. Such plants may exert various activities, namely, anti-implantation or early abortifacient, anti-zygotic, blastocytotoxic, and anti-ovulatory effects. Some herbs could also act as sexual drive suppressors or as a post-coital contraceptive by reducing the fertility index. A number of these plants have already been subject to scientific investigations and many of their properties have been assessed as estrogenic, oxytocic, or anti-implantation. Taking into account the diversity of the African pharmacopoeia, we are still at an early stage in the phytochemical and pharmacological characterization of these medicinal plants that affect the female reproductive system, in order to determine, through in vitro and in vivo studies, their pharmacological properties and their active principles.

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In this traditional system of medicine, plant extracts in forms of concoctions or infusions are used to treat a wide range of diseases. Some of these plants are used in connection with female reproductive health. Throughout history, women have tried to control or enhance their fertility with various levels of societal support. Since then, plant drugs have been used for their effects on reproductive function particularly for suppressing fertility, regulating menstrual cyclicity, relieving dysmenorrhea, treating menopausal symptoms, and breast pain. Plant materials have also been used during pregnancy against fetal malposition. threatened abortion, or amnionitis affecting the newborn [4,5]. The sites of action of fertility and/ or antifertility agents in females comprise the hypothalamus, the anterior pituitary, the ovary, the oviduct, the uterus, and the vagina. Plants in question affect the reproductive system through

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	Name	Family	Plant part used	Extract	Estrogenic effects	Authors
	Brenania brieyi	Rubiaceae	Fruits	Methanolic extract	 Stimulated uterine growth and vaginal epi- thelial proliferation. 	Magne Ndé et al. [12]
Erythi	Erythrina lysistemon	Fabaceae	aceae Stem barks	Ethyl acetate extract	 Stimulated phosphatase alkaline in Ishikawa cells; slightly stimulated uterine growth. 	Tanee et al. [10]
					 Prevented bone loss, increased HDL-choles- terol and decreased triglycerides. 	Njamen et al. [11]
	Millettia conraui	Leguminoseae	Stem barks	Ethyl acetate extract	Increased uterine and vaginal epithelial	Njamen et al. [13]
	Millettia drastica	Leguminoseae	Stem barks	Ethyl acetate extract	heights;	
	Bridellia ferruginea	Leguminoseae	Leaves	Methanolic extract	 stimulated alkaline phosphatase in Ishikawa cells. 	
	Aloe buttneri	Liliaceae	Leaves	Aqueous	 Stimulated uterine growth, increased ovarian 	Telefo et al. [16,
	Dicliptera verticillata	Acantahceae	Leaves		weight;	17]
	Justicia insularis	Acanthaceae	Leaves		increased ovarian and uterine levels;	
	Hibiscus macranthus	Malvaceae	Stem leaves		 increased serum estradiol levels and decreased ovarian cholesterol. 	
	Senecio biafrae	Asteraceae	Leaves	Aqueous	 Puberty onset and stimulation of folliculo- genesis. 	Lienou et al. [18]

estrogenic/anti-estrogenic, anti-inflammatory, analgesic, and antinociceptive activities. Plant extracts with estrogen-like properties in particular have been reported to mostly contain compounds endowed with estrogenic activities. Such compounds commonly known as phytoestrogens should be referred to as plant secondary metabolites with estrogenic activity, as they mimic part of estrogen action through estrogen receptor-mediated mechanisms. In addition, their mechanism of action depends on the levels of endogenous estrogens [6]. The present review aimed to highlight Central African medicinal plants used by women to relieve problems related to their reproductive health during or after their reproductive life, during pregnancy, or following parturition, with an emphasis on plants originating from Cameroon.

Estrogen-like Acitivities of Secondary Metabolites from Some Central African Medicinal Plants

As previously reported [7–9], xenobiotics with estrogenic properties and plant secondary metabolites with this activity in particular preferentially exert their biological activity by: (1) mimicking the action of endogenous estrogens; (2) acting as estrogen antagonists; (3) altering the pattern of synthesis and metabolism of endogenous hormones; and (4) modifying hormone receptor values.

Up to date, a large variety of studies have reported the estrogenic properties of a number of Central African medicinal plants, namely, *Eryhtrina lysistemon* (Fabaceae) [10, 11], *Brenania brieyi* (Rubiaceae) [12], *Millettia conraui* (Leguminosae), *Millettia drastica* (Leguminosae), *Bridelia ferruginea* (Leguminosae) [13], and *Erythrina poeppigiana* (Fabaceae) [14, 15]. A mixture of *Aloe buttneri* (Liliacae), *Justicia insularis* (Acanthaceae), *Hibiscus macranthus* (Malvaceae), and *Dicliptera verticillata* (Acanthaceae) has also been associated with estrogenic properties [16–18]. The body of evidence for the respective estrogenic properties and of the above-cited plants is summarized in **Table 1**.

All the above-listed plant extracts exhibited direct estrogenic effects probably because of the presence of metabolites acting

through either or both of the two estrogen receptors. To continue with the pharmacological characterization of these extracts, extended phytochemical studies are required. In-depth phytochemical studies have already been conducted on some of these plants.

As far as the Erythrina lysistemon extract is concerned, following a phytochemical analysis, alpinumisoflavone and abyssinone V-4'-methyl-ether have been isolated as major estrogenic constituents [19,20]. In the same study, alpinumisoflavone (an isoflavone) and abyssinone V-4'-methyl-ether (a flavanone) were found to be responsible for the estrogenic effects of the crude extract of *Erythrina lysistemon*, as they stimulated uterine growth and/or vaginal proliferation. This estrogenic activity was shown to be estrogen receptor-mediated as both compounds bound both subtypes of the estrogen receptor in a ligand binding assay, although not with the same affinity and preference. Furthermore, alpinumisoflavone and abyssinone V-4'-methyl-ether reduced atherogenic risks by decreasing the two assessed atherogenic parameters, namely, the total cholesterol/HDL-cholesterol ratio and the atherogenic index of plasma in ovariectomized Wistar rats serving as a preclinical model for postmenopausal conditions. In the same study, both compounds were found to decrease serum gonadotrophin levels and to reduce the hot flush activity by increasing the ratio of FSH on LH [19]. Finally, whereas alpinumisoflavone induced clear estrogenic effects both on classical and nonclassical estrogen targets, the flavanone abyssinone V-4'methyl-ether did affect only the vagina (suggesting the safety of treatment with this compound towards the uterus of female rats) and nonclassical estrogen targets such as the lipid metabolism, implying a tissue specific effect.

Concerning the study on *Erythrina poeppigiana*, crude methanolic and dichloromethane extracts of the stem bark of this plant induced significant estrogenic effects on some classical estrogenic targets, namely the uterus and vagina, following a three-day uterotrophic assay with ovariectomized rats (unpublished observations). Using classic chromatographic methods, five new isoflavones derivatives, namely, 5,4'-dihydroxy-7-methoxy-3'-(3-methylbuten-2-yl)isoflavone, 5,4'-dihydroxy-7-methoxy-3'-

(3-methyl-2-hydroxybuten-3-yl)isoflavone, 3'-formyl-5,4'-dihydroxy-7-methoxyisoflavone, and 5-hydroxy-3"-hydroxy-2", 2"-dimethyldihydropyrano[5",6": 3',4']isoflavone, as well as six known compounds, wighteone, 3'-isoprenylgenistein, isolupabigenin, alpinumisoflavone, erypoegin D, and crystacarpin, most of which are structurally related to the soy isoflavone genistein, were isolated [14]. Ligand binding assays with estrogen receptor- α and $-\beta$ revealed that isoprenyl and dimethylpyrano substituents in ring A reduced the affinity of binding to $ER\beta$ approximately 100-fold compared to genistein; the isoprenyl substituent in ring B was better accommodated, allowing 3'-isoprenylgenistein to bind with ca. 10-fold lower affinity than genistein [14]. As a follow-up study on this plant, the estrogenic properties of the isolated isoflavones derivatives with isoprenyl and/or 7-methoxy substitution were evaluated using estrogen receptor- α and $-\beta$ -dependent reporter gene assays. These compounds are particularly interesting as they represent naturally occurring structural modifications, namely, isoprenylation and/or methoxylation at various positions of the genistein skeleton. These modifications were associated with a statistically significant activation of the ER α - and ER β -dependent reporter gene expression starting from 0.1 nM and resulting in distinct functional properties. For example, the 7-methoxy-3'-isoprenyl and the 7-methoxy-3'-(3-methyl-2-hydroxybuten-3-yl) derivatives induced an ER α - and ER β -coupled luciferase activity at a concentration ten times lower than that of genistein. Conversely, a double prenylation at positions 8 and 3' was found to be associated with an almost complete loss of activity in the ER α -dependent system; but in the ER β expressing system, the effectiveness remained on a statistically significant level, demonstrating an "exclusive ERβselectivity" in U2OS cells [15]. It will be interesting to investigate whether and to what extent these properties translate into in vivo effects, e.g., regarding bone and menopausal health.

Millettia griffoniana is used in traditional medicine in some village communities of Cameroon to treat menopausal disorders among others. Following phytochemistry, the estrogenic activities of some compounds isolated from *M. griffoniana*, namely, griffonianone C, griffonianone E, 7-*O*-geranylformononetin, 4'-*O*-geranylisoquiritigenin, 4'-methoxy-7-*O*-[(E)-3-methyl-7-hydroxymethyl-2,6-octadienyl]isoflavone, and 3',4'-dihydroxy-7-*O*-[(E)-3,7-dimethyl-2,6-octadienyl]isoflavone, could be assessed [21]. Three different ER α -dependent assays revealed weak estrogenic properties of the above-mentioned substances. Griffonianone C was selected for in-depth studies on the modulation of the expression of several estrogen-responsive genes in various organs of ovariectomized rats [22, 23], confirming mild estrogenic properties and excluding the risk of stimulation of uterine proliferation.

Additional research efforts focused on the following four Cameroonian medicinal plants, *Aloe buttneri, Justicia insularis, Hibiscus macranthus*, and *Dicliptera verticillata*. The leaves of these four medicinal plants were mixed in the proportions indicated in traditional medicine and tested for hormonal properties in immature female Wistar rats. This mixture has been shown to significantly increase the weight of the ovaries and uterus, as well as their total proteins levels, and the serum estradiol level at the dose of 94 mg/kg/day. These effects were accentuated in the pubertal period [16,17], probably due to the increase of estrogen receptors expression during puberty. The same authors showed that the acqueous extract from leaves and stem bark of *Senecio biafrae* induced premature puberty onset in immature female Wistar rat after a 30-day period of treatment at the doses of 8,

32, and 64 mg/kg/day, respectively, indicated by an effective folliculogenesis [18].

An experimental endpoint not related to reproduction but to menopausal health is the bone. In this respect, from the Cameroonian medicinal plant *Pterospermum acerifolium*, two phytoceramides were isolated and shown to exhibit estrogenic activities assessed by alkaline phosphatase production in osteoblasts [24].

Cameroonian Medicinal Herbs and Women's Reproductive Health

Women reproductive health does not only comprise fertility control or treatment of infertility problems but also implies genital organ health (prevention and/or treatment of gynecological infections). Many Cameroonian medicinal plants are therefore used as contraceptives (to prevent ovulation or fertilization), abortifacients (to prevent implantation or to push out unwanted conceptus), emmenagogues (to stimulate uterine flow), or oxytocics (to stimulate uterine contractions, particularly to promote labor) [25]. Some other plants are used for vaginal douching to prevent pregnancy or infections [26] or to enhance sexual stimulation of the male partner by drying or tightening the vagina [27,28].

Besides the availability of the present methods of birth control, the population explosion and unintended pregnancies continue to pose major public health issues worldwide. The world population has exceeded 6.43×10^9 [29] and is increasing by 1×10^9 every 12 years. Ninety-five percent of this growth is in the developing nations, and particularly in Africa. In the USA, half of all pregnancies are unintended, which results in more than 1×10⁶ elective abortions annually [30, 31]. This calls for a better method of contraception that is acceptable, effective, and available both in the developed and developing nations. In the African pharmacopoeia, there are an appreciable number of plants endowed with antifertility properties. Antifertility is a term used for the prevention of pregnancy and is often referred to as birth control. The basic aim of antifertility drugs is to prevent conception or fertilization. Though considerable progress has been made for the development of highly effective, acceptable, and reversible methods of contraception among females, options on the male side are still slow and limited [32].

As far as females are concerned, antifertility drugs are those that control ovulation and, if regularly consumed, function as effective contraceptives. For instance, widely known steroidal oral contraceptives are chemicals that control the female menstrual cycle and ovulation.

Natural products traditionally used as remedies for birth control in women could exert various activities: anti-implantation or early abortifacient, anti-zygotic, blastocytotoxic, and anti-ovulation. Some herbs could act as sexual drive suppressors or as postcoital contraceptive by reducing the fertility index [32, 33].

Birth control is not the sole burden of women as far as their reproductive health is concerned. Many women in Africa still face the problem of infertility. Indeed, infertility, defined as the inability to conceive after one year of regular intercourse, is said to affect 8–14% of couples in European and Eastern countries [34, 35]. In Africa, infertility is a serious reproductive health problem with regional prevalence rates of 30–40% [36]. Infection, which is the most common cause of infertility, affects the physical health of both men and women. Women in particular, also commonly suffer from severe negative social consequences such as stigmatization, ostracism, abuse, and economic deprivation [37–39]. The effective management of infertility therefore has a considerable impact on reproductive health in Africa. Traditional medicinal herbs used to treat female infertility may thus act against urogenital infections, tubal blocage, anovulatory cycles, or premature menopause.

An emmenagogue is an herb which stimulates menstrual bleeding. To provoke menstrual bleedings, emmenagogue herbs may act by stimulating uterine contractions. In the case of pregnancy, emmenagogue herbs might provoke, according to the stage of the pregnancy, abortion or childbirth. These emmenagogue herbs can then be used either to treat amenorrhea, or as oxytocic to hasten labor, or as an abortifacient.

Some other plants are traditionally used against oligomenorrheae or protracted menstruation (menorrhagia). Plants may also help during pregnancy against fetal malposition, threatened abortion, or amnionitis affecting the new born.

In 1996, Adjanohoun et al. [40] catalogued a large number of Cameroonian traditional medicinal plants among which were those used for women's reproductive health. In **• Table 2**, we summarized some of the Cameroonian medicinal plants used for women's reproductive purposes, as compiled from the Cameroonian Pharmacopoeia published by Adjanohoun et al. [40]. In this table, plants are classified according to their traditional use.

Conclusion

The tropical forest continues to provide raw materials for the discovery of new medicinal products in view of the large diversity of its flora. In the African pharmacopoeia, many plants are used for women's reproductive health and particularly for fertility, genital organ health, or for birth control. In this paper, we have reviewed the knowledge on plants traditionally used for women's reproductive purposes mostly in central parts of Africa. A significant number of these plants are found in Cameroon. Among these traditional medicinal herbs, some have already been characterized scientifically, although to a varying degree, and several of their properties are attributed to estrogenic, oxytocic, or anti-implantatory properties. Taking into account the diversity of the Cameroonian pharmacopoeia, there is still a lot to do for the phytochemical and pharmacological characterization of these medicinal plants.

Conflict of Interest

The authors declare no conflict of interest.

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Disorders	Botanical name	Vernacular name	Origin	Part used
Amenorrhea	Acanthospermum hispidum (Asteraceae)	Guirlayi in Fufulde (Cameroon).	Widespread throughout tropical Africa.	Leafy shoot
Breast abscess	Cogniauxia podolaena Baill (Cucurbitaceae)	"Beyeme elok" in Bulu or "Kol ekona ezouo" in Badjoun (Cameroon).	Widespread in Cameroon, Gabon, Congo, and Angola.	Leaves
Cervicitis	<i>Desmodium hirtum</i> (Legu- minoseae-Papilionoideae)	"Sac-sac" in Mgem Mgem (Cameroon).	Found in savanna and pasture lands.	Leaves and stems
Defective lactation	Elephantopus mollis (Asteraceae)	"Akiba" in Bulu or "Toll" in Ewondo (Cameroon).	Found in abandoned cultivated land and in fringing forest.	Stem bark
	<i>Zanthoxylum gilletii</i> De Willd (Rutaceae)	"Bongo" in Ewondo (Cameroon).	Forest regrowths, young secondary forests, from Si- erra Leone to Angola and Sudan.	Barks
Dys- menorrhea	Acanthus montanus (Acanthaceae)	"Ndole elok" in Ewondo or "Ngick" in Bassa (Cameroon).	Forest region plants occurring from Benin to Angola.	Whole plant
	Aloe buettneri (Liliaceae)	"Kagbayi" in Bamoun, "Lah-Ndih" in Bana, "Gassa" in Bandjoun, or "Adjan nkom" in Eton (Cameroon).	Savanna species, growing preferably in rocky areas. Found from Mali to the Central African Republic, Congo, and Angola to Malawi.	Leaves
	Aloe vera (Liliaceae)	"Kouovut" or "Nschahsoure" in Bamoun (Cameroon).	Probably native of the Mediterranean region; propagated by rhizome.	Leaves
	Anonidium mannii (Annonaceae)	"Mombou kombo" in Kaka.	A species of forest undergrowth. It is also found in Ghana, Nigeria, and Democratic Republic of Congo.	Bark
	Begonia schaeferi (Begoniaceae)	"Woyamowo" in Bana (Cameroon).	Found in forests, by streams.	Leaves
	Centella asiatica (Apiaceae)	"longion diep" in Bamenda (Cameroon).	Widely distributed in tropical Africa, Asia, and Aus- tralia. West Africa-East Africa.	Stem and leaves
	Cissus quadrangularis (Vitaceae)	"Coeur" in Bafut, "Ndieh gap" in Bamoun, "Thor-Ngehkue" in Bana, "Nkohsat" in Bagangte, or "Nyo" or "Njel" in Bassa (Cameroon).	Widespread in the drier parts of Africa, Arabia, and India.	Fresh stem
	Clerodendrum volubile (Verbenaceae)	"Tughlen" in Babungo (Cameroon).	Secondary forests, gallery forests, and along streams.	Bark

Table 2 Summary of Cameroonian medicinal plants and their traditional use for women's reproductive health (compiled from the Cameroon Pharmacopoeia, by Adjanohoun et al. [40]).

Table 2 Continued

Disorders	Botanical name	Vernacular name	Origin	Part used
Dysmenor-	Emilia coccinea	"Alonvu" in Bulu, "Thohi" in Fufulde, or "Mahomambio" in Bassa (Cameroon)	Frequently found on roadsides, in sunny parts of the	Fresh
	Entandrophragma cylin- dricum (Meliaceae)	"Sbicha" in Banyangi, or "Assie" in Ewondo (Cameroon).	Species common in Guinean forest.	Bark
	Gardenia aqualla (Rubiaceae)	"Digale" in Fufulde (Cameroon).	Hills in West Africa, in Ubangi-Shari, Sudan, and Kenya.	Roots
	Gouania longipetala (Rhamnaceae)	"Konteh" in Lamso or "Sobomissile" in Badjoue (Cameroon).	Frequent in forest regrowth and in forest margins.	Fresh leaves
	Khaya senegalensis (Meliaceae)	"Dalehi" or "Kalei" in Fufulde (Cameroon).	Sudano-Zambezian and sahelian region species, widespread from Senegal to Uganda.	Bark
	Morinda lucida (Rubiaceae)	"Akeng" in Ewondo (Cameroon).	Forest region species, widespread from Guinea to Congo. It is more abundant in secondary formations.	Bark
	Ozoroa pulcherrima (Anacardiaceae)	"Korewinabae" in Fufulde (Cameroon).	Sudano-Zambezian species, widespread from Guinea to Cameroon, in Central African Republic, in Ethiopia, and in the Sudan.	Roots
	Picralima nitida (Apocynaceae)	"Bamborutuk" in Maka (Cameroon).	Species occurring in African forest regions, spread through Côte d'Ivoire to Democratic Republic of Congo and Uganda.	Fruits
	Piper umbellatum (Piperaceae)	"Mbubua" in Bana, "Mbebueh" in Badjoun, "Aboo Medjan" in Ewondo or "Abomejang" in Bulu, "Mbobou" in Balesing or "Bobong ngoh" in Kaka (Cameroon).	Heliophile species, widespread from Guinea to Cameroon and Angola.	Whole plant
	Polyalthia suaveolens (Annonaceae)	"Afoumengen" in Mankon (Cameroon).	Primary forest, beside the river from Sierra Leone to Ghana.	Bark
	Rauvolfia vomitoria (Apocynaceae)	"Medzanga medzanga" in Ewondo, "Ikwadongdongui" in Bassa, or "Sebal" in Fufulde (Cameroon).	Guinea-Congolese species, widespread in secondary formations; it grows in fringing forests and small groves of the Sudano-Guinean region.	Root bark
	Sansevieria trifasciata (Agavaceae)	"Lah-Njue" in Bana or "Bascori" in Fufulde (Cameroon).	Usually found around dwellings from Sierra Leone to Democratic Republic of Congo.	Leaves
	Setaria megaphylla (Poaceae)	"Akwo kwo" in Bakossi, "Kiwawa" in Lamso, or "Dikok" in Bakundu (Cameroon).	Species very common in forest zones; marshy places in forest, widespread in tropical and southern Africa and tropical America.	Leaves
	Tylophora cameroonica (Asclepiadaceae)	"Babambe", "Babambi", or "Zarawolhi" in Fufulde (Cameroon).	Paleotropical plant; widespread through inter-tropi- cal Africa mostly in dry regions.	Leaves
	Zehneria scabra (Cucurbitaceae)	"Njombe" or "Kwandalempa" in Maka, "Bohgwei" in Lamso (Cameroon).	Savanna, rocky and ruderal plains. Equatorial Africa from Nigeria to Angola.	Roots
Irregular menstrua- tion	<i>Basella alba</i> (Basellaceae)	"Ndore" in Bafut, "Laire gapou" in Fufulde, "Kefuveyit" in Oku, "Nnab" in Metta, or "Loh" in Bagangte (Cameroon).	West Africa to Asia, West Indies and East Africa; cultivated in vegetable gardens.	Aerial parts
	Clerodendrum umbellatum (Verbenaceae)	"Nganwi" in Bafut, "Binyem" or "Dion" in Bassa, "Elok dibi" in Ewondo, or "Dor nkol" in Kaka (Cameroon).	Roadsides, swampy places.	Leaves
	Eremomastax speciosa (Acanthaceae)	"Banguimoh" in Bafut, "Ekunte" in Bakossi, "Mejama Njombe" or "Maijai ma njombe" in Bakweri, "Essan dja" in Yebekolo, "Noni" in Mbo, or "Purple leaf" in Pidgin (Came- roon).	Widespread in tropical Africa.	Fresh leaves
	Harungana madagas- cariensis (Hypericaceae)	"Toune" in Bamoun, "Ntone" in Bayang, or "Tiotinton" in Esso (Cameroon).	Sun-loving secondary forest species widely spread in all intertropical Africa, Madagascar, and Mas-	Roots

	Eremomastax speciosa (Acanthaceae)	"Banguimoh" in Bafut, "Ekunte" in Bakossi, "Mejama Njombe" or "Maijai ma njombe" in Bakweri, "Essan dja" in Yebekolo, "Noni" in Mbo, or "Purple leaf" in Pidgin (Came- roon).	Widespread in tropical Africa.	Fresh leaves
	Harungana madagas- cariensis (Hypericaceae)	"Toune" in Bamoun, "Ntone" in Bayang, or "Tiotinton" in Esso (Cameroon).	Sun-loving secondary forest species widely spread in all intertropical Africa, Madagascar, and Mas- careigne islands.	Roots
	Khaya senegalensis (Meliaceae)	"Dalehi" or "Kalei" in Fufulde (Cameroon).	Sudano-Zambezian and sahelian region species, widespread from Senegal to Uganda.	Stem bark
	Milicia excelsa (Moraceae)	"Abang" in Ewondo, "Abang Iroko" in Mvele "Chou-lak" in Bagangte, "Mmat" in Bayang (Cameroon).	Plant growing in dense forests and forest galleries as well as savanna regions. Found from Côte d'Ivoire to Cameroon, Gabon to Democratic Republic of Con- go, Mozambique, and Angola.	Bark
	Vernonia conferta (Asteraceae)	"Mbet mbu" in Bagante (Cameroon).	Secondary forest from Cameroon through Central Africa to Uganda and Angola.	Bark
Menorrha- gia/pro-	Amaranthus hybridus (Amaranthaceae)	"Majouohe" in Balessing (Cameroon).	Commonly found cultivated or as a weed.	Leaves
tracted menstrua-	Ampelocissus penthaphylla (Vitaceae)	"Nkweeti" in Lamso (Cameroon).	Abundant in wooded savanna extending from Senegal to Mozambique.	Leaves
tion	Aspilia africana (Asteraceae)	"Kigavir" or "Kighair" in Lamso (Came- roon).	Secondary formation species, occurring from Senegal to Cameroon.	Leaves
continued				

Table 2 Continued

Disorders	Botanical name	Vernacular name	Origin	Part used
Menorrha- gia/pro-	Dyschoriste perrottetii (Acanthaceae)	"Nse net" in Lamso (Cameroon).	Plant found in tropical Africa from Senegal to Angola and from Ethiopia to South Africa.	Leaves
tracted menstrua- tion	Prunus africana (Rosaceae)	"Bakiva" in Banyangi or "Kepa", "Kira", "Kilum", and "Win wan" in Lamso (Came- roon).	Widely distributed on the mountains.	Leaves
	Senecio biafrae (Asteraceae)	"Nsob" in Bakossi, "Nduwane" in Bana, or "Nboh" or "Borh nja nkom" in Lamso (Cameroon).	Cocoa plantation, fallows, roadsides.	Leafy twig
	Sonchus angustissimus (Asteraceae)	"Bankar", "Kirah", or "Mborvingua" in Lamso (Cameroon).	High savanna.	Stem and leaves
	Spilanthes africana (Asteraceae)	"Ntossi" in Badjoue or "Shishur sheshiv" in Lamso (Cameroon).	A plant of wet lands. It is found in countries of West and Central Africa.	Leaves
Oligo- menorrhea	Asystasia gangetica (Acanthaceae)	"Basu ebu" in Ejagham (Cameroon).	Widespread throughout the tropics.	Soft aerial parts
Uterine hemorrhage	Setaria megaphylla (Poaceae)	"Akwo kwo" in Bakossi, "Dikoko" in Bakun- du, "Kiwawa" in Lamso, or "Mekoapkoap" in Vomvom (Cameroon).	Species very common in forest zones; marshy places in forests, widespread in tropical and southern Africa and tropical America.	Leaves and stems
Vaginitis	Cissus quadrangularis (Vitaceae)	"Coeur" in Bafut, "Ndieh gap" in Bamoun, "Thor-Ngehkue" in Bana, "Nkohsat" in Bagangte, or "Nyo" or "Njel" in Bassa (Cameroon).	Widespread in the drier parts of Africa, Arabia, and India.	Leafy twig
Vulvo- vaginitis	Capsicum frutescens (Solanaceae)	"Olene" in Badjoue, "Hehoy" in Banen, "Ondondo ndodo" in Bulu, "Ndondon" in Ewondo, or "Shishur Shengamri" in Lamso (Cameroon).	Pantropical species growing in secondary forma- tions, in the field, and sometimes cultivated.	Aerial parts and fuits
	Clerodendrum umbellatum (Verbenaceae)	"Nganwi" in Bafut, "Binyem" in Bassa, Elok dibi" in Ewondo (Cameroon)	Roadsides, swampy places.	Tops of the plant
	<i>Detarium microcarpum</i> (Leguminoseae-Caesalpi- noideae)	"Nkwazi" in Bakoko (Cameroon).	Woodland species, widespread in all the Sudano- Zambesian region of Africa.	Bark
	Dichrocephala integrifolia (Asteraceae)	"Chemambor" in Bafut, "Yieri" in Bamoun, "Tchitchiani" in Fefea, "Abiabi" in Bikom, "Esosombuog" in Bakossi, or "Tape" in Fufulde (Cameroon).	A weed of high ground.	Tops of the plant
Imperforate vagina	Euphorbia hirta (Euphorbiaceae)	"Ndo" in Babungo, "Pengmey" in Bafaji, Mpemeu" in Bamoun, "Tenkwuvue" in Bana, Ewuda manyongo" in Douala, "Okoul bifes" in Ewondo, or "Endemhi" in Fufulde (Cameroon).	Wild species, growing in various areas, along roads particularly on waste grounds and in old cultivations; pantropical.	Leaves
	<i>Hilleria latifolia</i> (Phytolacaceae)	"Akange" in Bafut, "Essumba" in Kaka (Cameroon).	Common in forest stations, banana plantations, palm groves, and outskirts of villages.	Roots
Leucorrhea	Ageratum conyzoides (Asteraceae)	"Eshing" in Akono, "Mobangtu" in Bali, "Mejottefu" in Bamoun, "Ogaate" or "Ok- pati" in Bulu, "Nyat elok" or "Okpati" in Ewondo, and "Nde das se" in Sanaga (Cameroon).	Widespread in Africa.	Leaves
	Alchornea cordifolia (Euphorbiaceae)	"Enzezam aboe" in Bulu, "Diboybonji" in Douala, "Aboe" in Ewondo, "Mbienchie" in Bafang, or Bambemi" in Hausa (Came- roon).	Widespread in tropical Africa.	Leaves
	Commelina thomasii (Commelinaceae)	"Gougouot" in Bamoun (Cameroon).	Secondary lowland rain forest, persisting in farms and plantations.	Leaves
	Dichrocephala integrifolia (Asteraceae)	"Chemambor" in Bafut, "Yieri" in Bamoun, "Tchitchiani" in Fefea, "Abiabi" in Bikom, "Esosombuog" in Bakossi, or "Tape" in Fufulde (Cameroon).	A weed of high ground.	Tops of the plant
	Hibiscus sabdariffa (Malvaceae)	"Mejue" in Bakossi, "Fouchi" in Bamoun, "Ewouda maya" in Douala, "Okro'o" in Kwen, or "Essan" in Mvele (Cameroon).	Widely cultivated in the tropics.	Leafy twig
	Spanthodea campanulata (Bignoniaceae)	"Vivet" in Bamoun, "Kilulone" in Lamso, "Evovone" in Bulu, "Fowara" in Kwen, or Bolabola" in Vomvom (Cameroon)	Mainly fringing forests.	Leaves

continued

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Disorders	Botanical name	Vernacular name	Origin	Part used
Infertility (primary and	Asystasia deciplens (Acanthaceae)	"Nzuae" in Bakossi and "Mborfen" in Lamso (Cameroon).	Swampy rain forest areas.	Tops of the plant
secondary)	Asystasia macrophylla (Acanthaceae)	"Telofe" in Kaka (Cameroon).	Found in Cameroon, Nigeria, Gabon, and Equatorial Guinea.	Leaves
	Hibiscus asper (Malvaceae)	"Ejimuwae" in Bakossi (Cameroon).	A savanna species which is widespread in all intertropical Africa.	Whole plant
	Hibiscus vitifolius (Malvaceae)	"Kiwuoy" in Lamso (Cameroon).	Widespread in tropical Africa.	Tops of the plant
	lpomoea mauritiana (Convolvulaceae)	"Ndongo Yagisse" in Yambassa (Cam- eroon).	Pantropical species, common in various plant for- mations in sub-Saharan Africa.	Tuber
	Klainedoxa gabonensis (Irvingiaceae)	"Boukoko" in Banka (Cameroon).	Found in forests.	Stem bark
	Lasianthera africana (Icacinaceae)	"Badjimbo" in Bassa (Cameroon).	Found in secondary forests.	Fresh leaves
	Laportea aestuans	"Nduru likund" in Bassa, "Karara" in Hausa,	Pantropical plant, widespread in humid regions.	Whole
	(Urticaceae)	and "Kimbin" in Oku.	Found in wastelands and on farms.	plant
	(Cucurbitaceae)	Nzec-zeneng in Boesi, Njil Ngoue in Bamenda, or "Bohghwei" in Lamso (Cameroon).	cultivations.	Leary twig
	Myrrianthus arboreus (Moraceae)	"Sanpute" in Bounde or "Loco'o" in Kaka (Cameroon).	Species frequent enough in primitive or secondary forests, fringing forests, or clearings of Guineo-Con- golese dense forest area.	Fresh leaves
	Pennisetum purpureum (Poaceae)	"Nto obwet" in Bamoun, "Sinsung" in Bana, "Lekop" in Bassa, and "Kikhiai" or "Mjee" in Lamso (Cameroon).	Forest zone species, spread in Africa, now intro- duced in other tropical regions.	Leaves
	Pistia stratiotes (Araceae)	"Lah-chie" in Bana (Cameroon).	Pantropical aquatic floating species growing through intertropical Africa.	Leaves
	Premna quadrifolia (Verbenaceae, Boragina- ceae)	"Mua-Ndong-dong" in Bakossi and "Nfesai" in Lamso (Cameroon).	Guinea-Congolese species which is found in secondary formations. Widespread from Guinea to Cameroon.	Leafy twig
	Raphidophora africana (Araceae)	"Wonya" in Banka (Cameroon).	A plant found along the west and central coast land of Africa.	Leaves
	Ricinus communis (Euphorbiaceae)	"Mejang" or "Mijang" in Bamoun, "Lamdji" in Bana, and "Shinjang" in Lamso (Came- roon).	Introduced species, widely cultivated in tropical countries, now pantropical.	Castor oil extracted from <i>Ricinus</i> <i>communis</i> seeds
	<i>Sida acuta</i> (Malvaceae)	"Chubepa" in Bateh, "Zeyssim" in Bulu, and "Saldori" or "Calori" in Fufulde (Cameroon).	Pantropical wild species, growing of roadsides and in wastelands.	Leaves
	Solanum torvum (Solanaceae)	"Elam-tam" or "Ngaleni sumembre" in Ba- kossi and "Ngunmbia" in Kaka (Cameroon).	A very common weed throughout the tropics.	Fruits
	Trichilia gilgiana (Meliaceae)	"Tuba" in Banka (Cameroon).	Species frequent in the wetter types of lowland rain forest. Extends from South Nigeria to Democratic Republic of Congo, and Cabinda.	Bark
	Terminalia superba (Combretaceae)	"Nkwombo", "Nkwonda", or "Nkwondo" in Bamoun, "Nguie" in Bamungo and "Akom" in Bulu (Cameroon).	Dense humid forest species, widespread from Guinea to Democratic Republic of Congo.	Stem bark
	Zenheria scabra (Cucurbitaceae)	"Kwandalempa" or "Njombe" in Maka and "Bohgwei" in Lamso (Cameroon).	Savanna, rocky and ruderal plains. Equatorial Africa from Nigeria to Angola.	Roots
Pelvic abscess/	<i>Acacia polyacantha</i> (Legu- minoseae-Mimosoideae)	"Ngombo" in Ewondo (Cameroon).	Species growing in humid regions, from Senegal to Nigeria as well as in eastern and southern Africa.	Stem bark
pelvic in- flammatory disease	Cogniauxia podolaena (Cucurbitaceae)	"Kol eona ezouo" in Badjoun, "Fui Gbain" in Bali, "Kon-afu" in Banwa, and "Beyeme elok" in Bulu (Cameroon).	Species widespread in Gabon, in Cameroon, and in Congo, found also in Angola.	Roots
	Drymaria cordata (Caryophylaceae)	"Chkerre" in Bakossi, "Mgou-minque" in Bana, "Ntoh" in Banwa, "Hissona'si" in Bas- sa, and "Oyang" or "Oyanga" in Ewondo (Cameroon).	Widely dispersed in the tropics and subtropics.	Whole plant
	Hibiscus sabdariffa (Malvaceae)	"Mejue" in Bakossi, "Fouchi" in Bamoun, "Ewouda maya" in Douala, "Okro'o" in Kwen, and "Essan" in Mvele (Cameroon).	Widely cultivated in the tropics.	Aerial parts
	Leea guineensis	"Totonn" in Bassa (Cameroon).	Plant growing in humid places; found in the forest	Leaves
	(Leeaceae)		region galieries throughout tropical Africa.	

Table 2 Continued

Disorders	Botanical name	Vernacular name	Origin	Part used
Pelvic abscess/ pelvic in-	Mammea africana (Clusiaceae)	"Houng abodzog" in Bassa and "Abot zok" or "Houng abodzog" in Ewondo (Came- roon)	Species found in the forest. Distributed from Sierra Leone to Uganda and Angola.	Stem bark
flammatory	Pintadeniastrum africanum	"Atui" in Beti and Fang "Tombou" in Kaka	Tree found in dense, humid forests, Found in	Stem bark
disease	(Leguminoseae-Mimosoi- deae)	and "Mpie" in Maka (Cameroon).	Cameroon, Sierra Leone, Angola, and Uganda.	Stembark
Premature menopause	Hemizygia welwitschii (Lamiaceae)	"Sokri" in Gnem gnem.	Growing in clumps in dry stony grassland.	Leaves
Tubal	Eleusine indica (Poaceae)	"Lisingesinge" in Bakweri, "Ngongui" in	Species spread in all tropical regions; widespread in	Leaves
blockage		Bassa and Douala (Cameroon).	all regions of tropical Africa.	
	Icacina tricantha	"Koul issi" or "Moudici" in Bassa, and "Byem	Undergrowth species of the forest region, usually	Root
	(lcacinaceae)	elok" in Bulu (Cameroon).	growing in secondary formations.	tubers
	Phyllanthus muellerianus (Euphorbiaceae)	"Riribo" in Futulde (Cameroon).	Forest species widespread in all intertropical Africa.	Roots or leaves
	Solanum aculeastrum (Solanaceae)	"Sircerka" in Bana, and "Kijah", "Kilum", or "Kira" in Lamso (Cameroon).	Found in Cameroon, tropical East Africa, and Angola.	Fruits
Urinary tract	Afromomum melegueta	"Koge" or "Mbong" in Bakossi, "Nbongo" in	Forest region plant, common in all intertropical	Grains and
infection	(Zingiberaceae)	Bassa or "Ndong" in Ewondo, and "Soc	Africa, often cultivated.	rhizome
		kwa" in Bagante (Cameroon).		
	Alchornea laxiflora	"Eholo" in Bakossi and "Josos" in Bakweri	Widespread in central, eastern, and southern	Leaves
	(Euphoibiaceae)	(Cameroon). "Telofe" in Kaka (Cameroon)	Ecundin Cameroon Nigeria Cabon Equatorial	
	(Acanthaceae)		Guinea.	Leaves
	Calotropis procera (Asclepiadaceae)	"Bambambi" in Fufulde (Cameroon).	Paleotropical plant, widespread through intertropi- cal African mostly in dry regions.	Roots
	Cissus quadrangularis	"Coeur" in Bafut, "Ndieh gap" in Bamoun,	Widespread in the drier parts of Africa, Arabia, and	Stem
	(Vitaceae)	"Thor-Ngehkue" in Bana, "Nkohsat" in	India.	
		Bagangte, or "Nyo" or "Njel" in Bassa (Cameroon).		
	Combretom hispidum	"Amiomlo" in Badjoue (Cameroon).	Fallows, semideciduous forests, clearings in the	Leaf
	(Combretaceae)		evergreen forests, widespread from Guinea to Angola.	
	Commelina congesta (Commelinaceae)	"Nkoleke" in Bakossi (Cameroon).	Found in forests, sometimes in open.	Leaves
	Desmodium adscendens	"Pepeur" in Bakossi, "Owondo bekone" in	Species widespread in Guinea, Cameroon,	Leaves
	(Leguminoseae-Papilionoi- deae)	Bulu (Cameroon).	extending to Zimbabwe. It exists in tropical America. In Gabon, it is found in the forest regions and the	
	5 11 11	«M · N· D · «M · N· D	edges of the savanna.	
	Enantia chlorantha (Annonaceae)	"Menjap" in Banyagi, "Mto'o" in Bulu, "Upon" in Ewondo, and "Mpolo'o" in Sanaga (Cameroon).	Dense humid forest plant, spread through Nigeria into Gabon.	Stem bark
	Eremomastax speciosa	"Tankebi" in Mbo. "Purple leaf" in Pidgin.	Widespread in tropical Africa.	Leaves
	(Acanthaceae)	"Essan dja" in Yebekolo, and "Ekunte" in		
		Bakossi (Cameroon).		
	Euphorbia laterifolia (Euphorbiaceae)	"Lahmbeuh" in Bagangte (Cameroon).	Species usually planted as hedges. It grows from Sierra Leone to Cameroon.	Whole plant
	Khaya senegalensis	"Dalehi" or "Kahi" in Fufulde (Cameroon).	Sudano-Zambezian and sahelian region species,	Stem bark
	Lapotera ovalifolia	"Anelembu" or "Talambo don" in Bakossi	Widespread abundant on sandy and clay soils	Leaves and
	(Urticaceae)	"Kilikion" in Bassa, and "Sogo" in Emankon (Cameroon).	macspread, abandant on sandy and elay sons.	bark
	Mondia whitei	"Djiri", "Katagora", or "Eleli" in Fufulde	Widely distributed in tropical Africa, from Guinea	Roots
	(Periplocaceae)	(Cameroon).	through Cameroon to East Africa.	
	Raphidiocystis mannii	"Nduh" in Bakossi (Cameroon).	Cameroon.	Leaves
	(Cucurbitaceae)			
	Spilanthes filicaulis	"Ehe ngui" in Bamenji, "Gniguep" in	Plant growing in humid places, along the roads and	Leaves
	(Asteraceae)	Bamena, "Odongdong-si" in Ewondo, "Leuk ngeub" in Bagangte, and "Ondodosi" in Bulu (Cameroon)	near dwelling houses. It is found in all the forest re- gions of Africa.	
	Tragia benthami	"Tulebuo" in Bakossi, "Mbepaa" in Bana,	Secondary bushes in Cameroon, Sudan, Uganda,	Leaves and
	(Euphorbiaceae)	and "Sas" in Ewondo (Cameroon).	Democratic Republic of Congo, and Angola.	roots
	Zehneria scabra	"Njombe" in Maka and "Bohgwei" in Lamso	Savanna, rocky and ruderal plains. Equatorial Africa	Roots
	(Cucurbitaceae)	(Cameroon).	from Nigeria to Angola.	

Table 2 Continued

Disorders	Botanical name	Vernacular name	Origin	Part used
Amnionitis affecting the newborn	Ageratum conyzoides (Asteraceae)	"Eshing" in Akono, "Mobangtu" in Bali, "Mejottefu" in Bamoun, "Ogaate" or "Ok- pati" in Bulu, "Nyat elok" or "Okpati" in Ewondo, and "Nde das se" in Sanaga (Cameroon).	Widespread in Africa.	Whole plant
	Cleome rutidosperma (Capparaceae)	"Amborrenja" in Bafut, "Macomagniaga" in Bassa, "Mephomonze" in Bouda, and "Mbango" in Douala (Cameroon).	Species growing in all of tropical Africa.	Whole plant
	Commelina benghalensis (Commelinaceae)	"Nkwa" in Bafut, "Ngungwet" in Bamoun, and "Kaalep" in Bassa (Cameroon).	A weedy plant of open cultivated and wasted ground, also in savanna.	Whole plant
	Eleusine indica (Poaceae)	"Lisingesinge" in Bakweri, "Ngongui" in Bassa, and "Ngongui" in Douala (Cam- eroon).	Species spread in all tropical regions; widespread in all regions of tropical Africa.	Flowering plant
	Euphorbia hirta (Euphorbiaceae)	"Okoul bifes" in Ewondo, "Mpemeu" in Bamoun, "Ewuda manyongo" in Douala, and "Endemhi" in Fufulde (Cameroon).	Wild species, growing in various areas, along roads particularly on waste grounds and in old cultivation.	Whole plant
	Portulaca oleracea (Portulacaceae)	"Kepingoup" or "Koupugoup" in Bamoun, "Derdegue" in Mvele, and "Nyukutu nyu- kutu" in Douala (Cameroon).	Cosmopolitan and ruderal species.	Whole plant
	Triplotaxis stellulifera (Asteraceae)	"Mudike musadi" in Douala, "Ntsam ntsam" in Ewondo, and "Jogue" in Maka (Cameroon).	Weed widespread in the clearings of forest regions from Liberia to Gabon and in Uganda.	Whole plant
	Gossypium barbadense (Malvaceae)	"Menekong" in Babungo (Cameroon).	Species native in America and now widely cultivated in all tropical countries.	Leaves
Dystocia	Aloe buettneri (Liliaceae)	"Lapapegue" in Badenkop, "Kagbayi" in Bamoun, "Lah-Ndih" in Bana, and "Adjan nkom" in Eton (Cameroon).	Savanna species, growing preferably in rocky areas. Found from Mali to the Central Africa Republic, Con- go, Angola, and Malawi.	Whole plant
	Aloe vera (Liliaceae)	"Kouovut" or "Nchahsoure" in Bamoun	Probably native of the Mediterranean region;	Whole
	Ampelocissus bombysiana (Vitaceae)	"Apoumigea" in Mankon (Cameroon).	African species of the Sudano-Guinean region, found from Guinea to Congo.	Leaves
	Annona senegalensis (Annonaceae)	"Saske" in Fufulde (Cameroon).	Savanna plant recorded from Senegal to Nigeria. Found also in the Central African Republic, Sudan, and Cape Verde.	Leaves
	Basella alba (Basellaceae)	"Ndore" in Bafut, "Potouye" in Fufulde, and "Loh" in Bagante (Cameroon).	West Africa to Asia, West Indies and East Africa.	Leaves and stems
	Buchholzia coriacea (Capparaceae)	"Ngale" in Bassa (Cameroon).	Humid, dense forest species, growing in the under- growth, found from Guinea to Congo.	Leaves
	Cissus quadrangularis (Vitaceae)	"Coeur" in Bafut, "Ndieh gap" in Bamoun, "Nkohsat" in Bagante, "Sango-di" in Bang- wan, and "Njel" in Bassa (Cameroon).	Widespread in the drier parts of Africa, Arabia, and India.	Leafy stem
	Hibiscus rosa-sinensis (Malvaceae)	None.	Native to tropical Asia, the hibiscus is widely cultivated in all tropical regions of the world as ornamentals.	Leaves
	Momordica foetida (Cucurbitaceae)	"Nyako" in Bassa and "Engokom" or "Oyale zom" in Bulu (Cameroon).	Forest edges and clearings; margins of swamp and riverine forests and of secondary thickets, also a weed and colonizer of disturbed ground and of old cultivations. Widely distributed in tropical Africa and in South Africa.	Leafy twig
	Piptadeniastrum africanum (Leguminoseae-Mimosoi- deae)	"Atui" in Beti and Fang, "Tombou" in Kaka, and "Mpie" in Maka (Cameroon).	Tree found in dense, humid forests. Found in Cameroon, Sierra Leone, Angola, and Uganda.	Stem bark
	Terminalia glaucescens (Combretaceae)	"Ogalu" in Sanaga (Cameroon).	Savanna tree. Widespread from Guinea, Cameroon, and Sudan.	Stem bark
	Vernonia guineensis (Asteraceae)	"Ibilihi" in Fufulde and "Shiji shokum" or "Whislishuch" in Lamson (Cameroon).	Widespread from Mali to Nigeria and spreading to the Sudan.	Fresh leaves
Fetal	Senecio biafrae	"Nsob" in Bakossi, "Nduwane" in Bana, and	Cocoa plantation, fallows, roadsides.	Tops
Fetal mal- presentation	(Asteraceae) Piper umbellatum (Piperaceae)	"Mbubua" in Lamso (Cameroon). "Mbubua" in Bana, "Mbebueh" in Band- joun, "Me bout" in Bagangte, "Mbobou" in Baleing, and "Aboo medjan" in Ewondo and Bulu (Cameroon)	Heliophile species, widespread from Guinea to Cameroon and Angola.	Leaves

Disorders **Botanical name** Vernacular name Origin Part used "Nzo-zunang" in Babesi, "Suka" in Bassa, Intrauterine Abrus precatorius Species of secondary formations of forest regions Leaves "Nkwelnutie" in Bassa, and "Bellerni" in death/ extended into savanna. It grows in all intertropical (Leguminoseaeretained Papilionoideae) Fufulde (Cameroon). Africa and also in other parts of the tropical world. dead fetus Terminalia glaucenscens "Ogalu" in Sanaga (Cameroon). Savanna tree. Widespread from Guinea, Cameroon, Stem bark (Combretaceae) and Sudan. Commelina benghalensis "Nkwa" in Bafut, "Ngungwet" in Bamoun, Lactation A weedy plant of open cultivated and wasted Leafy twig failure (Commelinaceae) and "Kaalep" in Bassa (Cameroon). ground, also in savanna. Crinum zeylaninum "Laansi" in Bana, "Black mbongie" in Savanna species growing in humid stations. It is Bulb (Amaryllidaceae) Banen, "Lilan li ngond" in Bassa, and "Gawidespread in all intertropical Africa. dal-salma" in Fufulde (Cameroon). "Gelude" or "Guelogi" in Fufulde Sudano-sahelian species, widespread from Senegal Guiera senegalensis Leaves (Combretaceae) to Sudan, abundant in the fallow lands on sandy (Cameroon). soils. Widespread in Cameroon. "Atchiti" in Bulu, "Njim njim" in Bassa, Placenta Bidens pilosa (Asteraceae) Leafy twig retention and "Fouwan" or "Yiere" in Bamoun (Cameroon). Tetrapleura tetraptera "Telele" in Badjoue and "Djetk" or "Essissa" Guinea-Congolese species, widespread over all in-Root tuber (Leguminoseaein Ewondo (Cameroon). tertropical Africa, growing mostly in secondary for-Mimosoideae) mations. Poly-Ageratum conyzoides "Eshing" in Akono, "Mobangtu" in Bali, Widespread in Africa. Whole "Mejottefu" in Bamoun, "Ogaate" or "Okhydramnios (Asteraceae) plant pati" in Bulu, "Nyat elok" or "Okpati" in Ewondo, and "Nde das se" in Sanaga (Cameroon). Cleome rutidosperma "Amborrenja" in Bafut, "Macomagniaga" Species growing in all of tropical Africa. Whole in Bassa, "Mephomonze" in Bouda, and plant (Capparaceae) "Mbango" in Douala (Cameroon). Whole Commelina benghalensis "Nkwa" in Bafut, "Ngungwet" in Bamoun, A weedy plant of open cultivated and wasted (Commelinaceae) and "Kaalep" in Bassa (Cameroon). ground, also in savanna. plant Eleusine indica "Lisingesinge" in Bakweri, "Ngongui" in Species spread in all tropical regions; widespread in Flowering (Poaceae) Bassa, and "Ngongui" in Douala (Camerall regions of tropical Africa. plant oon). Euphorbia hirta "Okoul bifes" in Ewondo, "Mpemeu" in Wild species, growing in various areas, along roads, Whole (Euphorbiaceae) particularly on waste grounds and in old cultivation. Bamoun, "Ewuda manyongo" in Douala, plant and "Endemhi" in Fufulde (Cameroon). Portulaca oleracea "Kepingoup" or "Koupugoup" in Bamoun, Cosmopolitan and ruderal species. Whole (Portulacaceae) "Derdegue" in Mvele, and "Nyukutu nyuplant kutu" in Douala (Cameroon). Triplotaxis stellulifera "Mudike musadi" in Douala, "Ntsam Weed widespread in the clearings of forest regions Whole (Asteraceae) ntsam" in Ewondo, and "Jogue" in Maka from Liberia to Gabon and in Uganda. plant (Cameroon). Gossypium barbadense "Menekong" in Babungo (Cameroon). Species native in America and now widely cultivated Leaves (Malvaceae) in all tropical countries. Hibiscus surattensis "Molong" or "Chwenanton" in Bouda Widespread in the topics of the old world; from Tops (Malvaceae) (Cameroon). Senegal to East Africa. Postpartum Cogniauxia podolaena "Kol ekona ezouo" in Badjoun, "Fui gbain" Species widespread in Gabon, Cameroon, and Tuber in Bali, "Kon-afu" in Banwa, and "Beyeme hemorrage (Cucurbitaceae) Congo; found also in Angola. elok" in Bulu (Cameroon) Frenandoa adolfi-frederici "Ndjuewe" in Badjoue (Cameroon). Species widespread in Cameroon, Central African Bark Republic, Gabon, and Democratic Republic of (Bignoniaceae) Congo. Widespread from Cameroon to Democratic Heisteria zimmereri "Ebarekoul" in Badjoue (Cameroon). Bark (Olacaceae) Republic of Congo. Tetrapleura tetraptera "Telele" in Badjoue and "Djetk" or "Essissa" Guinea-Congolese species, widespread over all of Fruit (Leguminosaein Ewondo (Cameroon). intertropical Africa, growing mostly in secondary Mimosoideae) formations. Whole Prenatal care Basella alba (Basellaceae) "Ndore" in Bafut, "Potouye" in Fufulde, and West Africa to Asia, West Indies and East Africa. "Loh" in Bagangte (Cameroon). plant Spurious Emilia praetermissa "Etukelehe" in Noni (Cameroon). Species frequently found in the savanna and fallow Aerial parts labor pains (Asteraceae) post-forests. Eremomastax speciosa "Tankebi" in Mbo, "Purple leaf" in Pidgin, Widespread in tropical Africa. Aerial parts "Essan dja" in Yebekolo, and "Ekunte" in (Acanthaceae)

Bakossi (Cameroon).

Table 2 Continued

Table 2 Continued

Disorders	Botanical name	Vernacular name	Origin	Part used
Threatened abortion	Bidens pilosa (Asteraceae)	"Atchiti" in Bulu, "Njim njim" in Bassa, and "Fouwan" or "Yiere" in Bamoun (Cameroon).	Widespread in Cameroon.	Leaves
	Borreria ocymoides (Rubiaceae)	"Enore" in Ashon (Cameroon).	Frequent in secondary bush. Tropical Africa.	Whole plant
	Clerodendrum speciosissi- mum (Verbenaceae)	"Legkefen" in Babungo and "Dibielog" in Ewondo (Cameroon).	Introduced ornamental plant with no precise habitat	Fresh leaves
	Justicia insularis (Acanthaceae)	"Lang" in Bakoko, "Esumejom" in Bakossi, "Ngnwangmekop" in Bassa, and "Efi" in Ejagem (Cameroon).	Ruderal species. Widespread elsewhere through in- tertropical Africa.	Whole plant
	Hibiscus sabdariffa (Malvaceae)	"Mejue" in Bakossi, "Fouchi" in Bamoun, "Ewouda maya" in Douala, "Okro'o" in Kwen, or "Essan" in Mvele (Cameroon).	Widely cultivated in the tropics.	Leaves and stems
	Mammea africana (Clusiaceae)	"Houng abodzog" in Bassa and "Abot zok" or "Houng abodzog" in Ewondo (Camer- oon).	Species found in the forest. Distributed from Sierra Leone to Uganda and Angola.	Stem bark
	Nauclea pobeguinii (Rubiaceae)	"Banochi" in Hausa (Cameroon).	Fringing forest species, growing mainly in forest re- gions. Extending from Senegal to Nigeria, Cameroon, and Zimbabwe.	Bark
	Peperomia pellucida (Piperaceae)	"Eborbo" in Bakossi, "Njel" in Bassa, "Ido- kamokwe" in Bakweri, and "Ewonda doret" in Douala (Cameroon).	Pantropical species, ruderal, occurring especially around dwelling locations.	Whole plant
	Piper guineense (Piperaceae)	"Enore" in Ashon (Cameroon).	Humid dense forest species, dispersed from Guinea to Uganda.	Fruits
	Vernonia ampla (Asteraceae)	"Mako" in Bandjoun, "Merke" in Bana, "Shiji" in Lamso (Cameroon).	Found in clearings of upland forests; rare species, recorded only from Guinea and Sierra Leone.	Shoots

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