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Keywords: *usual, potential, convinced, suspected and threaten medicinal plants.*

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Abstract- Nowadays, more than 80% of the world population is depending on medicinal plants based medicines to satisfy their healthcare needs. Medicinal plants have served as valuable starting materials for drug development. The general objective of the present work was to exploit the strong experience, developed since the antiquity on medicinal plants uses in Cameroon, for their future valorization by the scientific community. The accustomed medicinal plants are species known by traditional healers for the treatment of given diseases. The species which successfully treats or relieved patients are known to be convinced medicinal plants. Those known as suspected medicinal plants are plants used to treat diseases indirectly from their signs, their symptoms or their complications. They have also adopted plants in the treatment of a specific disease by exploiting the similarity between the plant organs form and a body's organs form on one hand and the plant organs color and the patient's color that is, of the eyes and/or of the skin due to a disease on the other hand. The potential medicinal plants, in addition to be used in the treatment of at least three manifestations of a given disease, has an active extract and/or isolated actives ingredients. To reach our objective, data were collected from 1131 informants, belonging to 58 socio-cultural groups of Cameroon. Thirty-six medicinal plants were recorded; 37% of them are suspected; 20 % potential and convinced; 13% suspected, potential and convinced and 13% usual and suspected. Six plants have beneficial and or harmful effects on the environment.

Keywords: usual, potential, convinced, suspected and threaten medicinal plants.

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I. INTRODUCTION

From empirical uses of plants and animals, ethnopharmacological studies have brought to humanity more than 60 % of daily drugs. As a multidisciplinary science, ethnopharmacology has developed original methodologies that combine tradition and modernity and open promising perspectives. The usual medicinal plants are species known by the traditional healers for the treatment of the diseases. The species which successfully treat or relieve a patient are convinced medicinal plants. Meanwhile, some medicinal plants and the environmental threatens that they undergo, are still misunderstood. Traditional healers, especially those of hinterland (Boro or Fulani and Pygmies) do not recognize modern medical terminologies of several diseases. This reason render difficult to carry out an ethnopharmacological survey particularly at sedentary Pygmies of East and South regions of Cameroon, Fulani in mountains and some illiterate old traditional healers. In traditional medicine, the diagnostic is not outright. Nevertheless, traditional healers treat certain pathologies. These treatments are mostly dependent on the experience of the indigenous people who indirectly treat the diseases based on their signs, their symptoms and/or their complications. According to the theory of likeness or aphorisms of positive medicine, some medicinal plants are adopted to the treatment of a specific disease by exploiting the similarity between the form and the color of the plant organs and the patient's color of the eyes and/or of the skin, due to this disease. The interpretation of the diseases' names, of the plants' names, of the plant habitats' names, of the behavior of the animals after consuming a given plant and of the mystic activities, the myths, the histories and the incantations, can permit to identify medicinal uses of plants. In these cases, the species identified are suspected medicinal plants.

More than 200 000 plants species on 300 000 recorded in the world live in tropical countries of America, Africa and Asia. Cameroon, a country of the Congo basin, counts about 10 000 plants species and

only 800 medicinal plants are known (1). The medicinal plants constitute a natural heritage of a great importance for its population health. Since antiquity, man mainly uses plants for his health problems. The exigencies of resistant to be synthesized or resistant to the synthesis like vincristine and vinblastine, the phenomena of microbes' resistance to usual antibiotics and the persistence of incurable diseases reinforce the resort to traditional medicine.

The general objective of the present work was to exploit the strong experience, developed since the antiquity on medicinal plants uses in Cameroon, for their future valorization by the scientific community.

a) *Detailed botanical prospection and ethnopharmacological thorough preparation*

The survey was conducted nearby 1131 informants from 58 tribes of Cameroon, in a random distribution. Folklore medicinal information on medicinal plants used in the symptomatic treatments of diseases and environmental threatens on the species, were recorded during interviews and discussions, following a semi-structured ethnopharmacological detailed methodology developed in Tsabang N. *et al.* 2015 (2). Samples of recorded plants were collected, dried, identified and confirmed at National Herbarium of Cameroon, and conserved in the Institute of Medical Research and Medicinal Plants Studies. In addition, data for environmental conditions in which lives the recorded species were also collected.

i. *Distribution of interviewers*

The 1131 informants are distributed as follow, according to some social characters: from their environment: 301 city-dwellers and 830 villagers; from academic standard: 727 illiterates and 404 educated (academic standard \geq FSLC: Frist School Living Certificate); from purchasing power: 921 poor people and 210 riches [annual income < 370 US\$ (World Bank)]; from religion : 738 animists, 313 Christians and 80 Muslims; from sex : 394 men and 737 women; from profession : 70 traditional healers, 10 ethnobotanists or botanists, 05 physicians, 07 nurses, 397 housewives, 502 ethnoveterinarians-farmers, 37 cattle breeders, 21 hunters, 20 organic chemistry, 11 physiologists, 06 pharmacists, 25 sellers, 06 shepherds and 14 others; from familial situation: 1046 married, 42 bachelors et 43 widows and widowers; from age brackets : 91 age between 30 and 40 years, 327 age between 41 and 50, 349 age between 51 and 60, 210 age between 61 and 70, 114 age between 71 and 80, and 40 are between 80 and 90. This sample of interviewers presents all the characteristics susceptible to provide more information.

II. RESULTS

a) *Identification of some diseases treated based on their signs, symptoms and complications*

Hepatitis, typhoid, appendicitis, etc. are classified in abdominal diseases. Sickle cell anemia, malaria, typhoid fever, etc., are often confounded in traditional medicine. Diabetes and arterial hypertension are unknown in the hinterland. The cancer, gangrenes, elephantiasis, scrotum, etc., were mystified, regarding their extraordinary complications. Table 1 presents the correspondence between signs, symptoms and complications of suspected diseases, described by a physician; some of these manifestations are treated with suspected medicinal plants. Many of these diseases that include malaria, typhoid fever, sickle cell anemia, hepatitis, have common symptoms which render difficult the application of their symptoms for their diagnostic. Therefore traditional healers can easily confound them. But the strong frequencies of these signs, symptoms and complications in the management of certain pathologies sustain their indirect treatment by traditional healers. The recorded suspected plants must be used to treat at least three of these manifestations. The recorded potential medicinal plants, in addition to treat at least three manifestations of diseases, possess isolated actives ingredients and/or extracts.

Table 1 : Correspondence between signs, symptoms and complications of suspected diseases, medicinal plants and treated manifestations.

Signs, symptoms and complications of diseases described by a physician	Diseases' manifestations known and treated by traditional healers	Suspected or potential plants used to treat diseases' manifestations	Suspected diseases treated
Fever 8 to 30 days after infection, headaches, muscles or joints' pains, weakening, vomiting, diarrhea, cough, and typical cycles varying with fever, shivering, cool sweat and intense transpiration: this is an access malaria. <i>Plasmodium falciparum</i> multiplication and red cells or erythrocytes explosion (anemia), cerebral malaria with the blood vessels irrigating the brain infected by <i>Plasmodium falciparum</i> that attack the blood red cells. It is often fatal if the treatment is not well follow up.	Headaches, muscles or joints' pains, weakening, vomiting, cough, shivering, cool, sweat and intense transpiration, anemia.	<i>Annickia chlorantha</i> , <i>Nauclea diderricii</i> (fever, headaches, shivering, yellow vomiting); <i>Rauvolfia vomitoria</i> , <i>Nauclea latifolia</i> (headaches, joints' pains, shivering, vomiting, fever); <i>Morinda lucida</i> , <i>Azadirachta indica</i> (fever, yellow vomiting, splenomegaly, anemia)	Malaria
Anorexia, fatigue, mild fever, muscle or joint aches, nausea and vomiting, pain in your belly; some people have other issues, such as: dark urine, light-colored stools, jaundice (yellowing of the skin and whites of the eyes), itchy feeling, mental changes, such as stupor (being in a gaze) or coma and bleeding inside your body.	Anorexia, fatigue, mild fever, muscle or joint aches, nausea and vomiting, jaundice, itchy feeling	<i>Anchomanes difformis</i> (anorexia, mild fever, muscle and joints aches); <i>Azadirachta indica</i> (nausea, vomiting, dark urine, jaundice and anorexia)	Hepatitis
Anemia , Red blood cells usually live for about 120 days before they die and need to be replaced. Occurrences of varied in intensity pain (crises), are a major symptom. Pain develops when sickle-shaped red blood cells block blood flow through tiny blood vessels to the chest, abdomen and joints; Pain in bones; Hand-foot syndrome : Swollen hands and feet may be the first signs in babies. Frequent infections : damage spleen (organ that fights infection). This may make patient more vulnerable to infections, such as pneumonia. Delayed growth : A shortage of healthy red blood cells can slow growth in infants and children and delay puberty in adolescents. Vision problems, Abdominal swelling, Fever that is the first sign of an infection. Pale skin or nail beds. Yellow tint to the skin or whites of the eyes. Any signs or symptoms of stroke : one-sided paralysis or weakness in the face, arms or legs, confusion, trouble walking or talking, sudden vision problems or unexplained numbness and a headache.	Anemia, intensity pain (crises), Swollen hands and feet, Delayed growth, Abdominal swelling, Fever , confusion, trouble walking or talking, sudden vision problems, headache.	<i>Fagara tessmannii</i> (anemia, pains, swollen feet and hands, yellow tint)	Sickle cell anemia
Early illness : fever that starts low and increases daily, possibly reaching as high as 40.5 C, headache, weakness and fatigue, muscle aches, sweating, dry cough, anorexia, weight loss, abdominal pain, diarrhea or constipation, Rash, extremely swollen abdomen. Later illness : patients who don't receive treatment, may become delirious, lie motionless and exhausted with their eyes half-closed in what's known as the typhoid	Subsisted fever, headache, weakness and fatigue, muscle aches, sweating, dry cough, anorexia, abdominal pain, extremely swollen abdomen.	<i>Gossypium arboreum</i> , <i>G. barbadense</i> , <i>G. hirsutum</i> and <i>G. herbaceum</i> (fever, sweating, anorexia, headache, fatigue, diarrhea, abdominal pains)	Typhoid fever

state; In addition, life-threatening complications often develop at this time. In some people, signs and symptoms may return up to two weeks after the fever has subsided.	Headaches, sexual weakness, obesity, dizziness, gangrene, physical asthenias, lumbago, cramps, and reduce visual acuity, excessive transpiration, redoubtable complications like: left ventricular hypertrophy, occlusion of a blood vessel (infarction) and in the brain (cerebral softness), kidney insufficiency, vascular cerebral accidents.	Headaches, sexual weakness, obesity, dizziness, physical excessive transpiration, cramps, kidney insufficiency	<i>Laportea ovalifolia</i> (sexual weakness, dizziness, cramps, obesity) <i>Morinda lucida</i> (headache, visual acuteness, kidney insufficiency, physical and sexual asthenias)	Diabetes and hypertension
Hypertension, nocturnal diarrhea, limbs' numbness, calves' lesions, fecal and urinary incontinence, nails' break, hair fall, fungal infections, Physical and sexual asthenias	Hypertension, nocturnal diarrhea, limbs' numbness, fungal infections.	Hypertension, nocturnal diarrhea, limbs' numbness, fungal infections.	<i>Momordica charantia</i> (fecal urinary incontinence, fungal infection,)	Diabetes
Diabetes, abundant micturition, muscles' weakness, cardiac palpitations, ears' buzzing, edema, excess salt, insomnia, dysuria, nasal bleedings,	Diabetes, abundant micturition, muscles' weakness, cardiac palpitations, ears' buzzing, edema, excess salt, insomnia, nasal bleedings,	abundant micturition, , ears' buzzing, edema, excess salt, insomnia, nasal bleedings.	<i>Halilea inermis</i> , <i>Halilea stipulosa</i> , <i>Asystasia gangetica</i> (abundant micturition, edema, insomnia)	Hypertension
Tiredness, breathlessness and looking pale (due to a lack of red blood cells); frequent infections (due to a lack of white blood cells) and unusual bleeding or bruising (due to a lack of platelets).	Tiredness, breathlessness and looking pale (due to a lack of red blood cells); frequent infections (due to a lack of white blood cells) and unusual bleeding or bruising (due to a lack of platelets).	Tiredness, breathlessness, looking pale and unusual bleeding.	<i>Aloe vera</i> , <i>Aloe buttneri</i> (tiredness, looking pale, bleeding)	Cancer: leukaemia
Weight loss, anorexia, feeling very full after a small meal, nausea or vomiting, enlarged liver, felt as a mass under the ribs on the right side, an enlarged spleen, felt as a mass under the ribs on the left side, pain in the abdomen or near the right shoulder blade, swelling or fluid build-up in the abdomen; itching; yellowing of the skin and eyes (jaundice), fever, enlarged veins on the belly, and abnormal bruising or bleeding. In case of chronic hepatitis or cirrhosis patients may feel worse than usual. Hypercalcemia due to hormonal production by liver), nausea, confusion, constipation, weakness, or muscle problems. Low blood sugar levels (hypoglycemia), fatigue or fainting; Breast enlargement (gynecomastia) and/or shrinkage of the testicles in men; high counts of red blood cells (erythrocytes) which can cause someone to look red and flushed and high cholesterol levels.	Weight loss, anorexia, feeling very full after a small meal, nausea or vomiting, enlarged liver, felt as a mass under the ribs on the right side, an enlarged spleen, felt as a mass under the ribs on the left side, pain in the abdomen or near the right shoulder blade, swelling or fluid build-up in the abdomen; itching; yellowing of the skin and eyes (jaundice), fever, enlarged veins on the belly, and abnormal bruising or bleeding. In case of chronic hepatitis or cirrhosis patients may feel worse than usual. Hypercalcemia due to hormonal production by liver), nausea, confusion, constipation, weakness, or muscle problems. Low blood sugar levels (hypoglycemia), fatigue or fainting; Breast enlargement (gynecomastia) and/or shrinkage of the testicles in men; high counts of red blood cells (erythrocytes) which can cause someone to look red and flushed and high cholesterol levels.	Anorexia, feeling very full after a small meal, nausea or vomiting, enlarged liver, pain in the abdomen, itching, jaundice, constipation, weakness	<i>Moringa oleifera</i> , <i>Moringa stenopetala</i> (Anorexia, weight loss, nausea, enlarged abdomen, vomiting, mass in the abdomen, constipation, weakness, fatigue)	Liver cancer

b) *Similarities of colors and forms*

Due to the yellow color of *Anacardium occidentale* fruits, 33 informants with age between 80 and 90 used them to treat jaundice; the reddish color of tubers and petioles of *Betavulgaris* make this species used by 54 housewives against anemia and the treatment was also known by 10 riches; the twin fruits of *Voacanga africana* because of its similarity in form with the testicles, are used by 39 villagers and 66 citizens to treat the testicular edema; *Schumanniophyton magnificum* because of its names Tsid Modo or Tsid Meki in Ewondo, that means somebody's blood defender, this plant was adopted for malaria treatment. This information was collected nearby 378 informants. The form of snack of *Entada gigas*' stem makes the linkage that was in the origin of its seeds use to prevent and to cure snack bites. This information was given by 16 Pygmies; According to 71 informants, the fruits consumption of *Momordica charantia* by certain pregnant mammals has oriented early people to use them for delivering; For 677 informants, the red color of the decoction of many species that include *Eremomastax speciose*, *Hibiscus sabdariffa* and *Hypoetes verticillaris* has orientated the indigenous people to use these plants against anemia. The yellow bark of *Annickia chlorantha* and the yellow color of the decoction of *Senna alata* make the two plants used in the treatment of hepatitis by 55 informants.

c) *Environmental threatens and benefits*

Anacardium occidentale is an important fruit tree in Far North of Cameroon. However, 66 informants recognize that many biotic factors, especially insects threatened its production. Fifty informants say that *Azadirachta indica* presents harmful and beneficial effects on both animal and vegetal biodiversity. Seventy five people know that this plant improves human health. Twenty seven housewives use *Moriga oleifera* seeds to purify well water. According to nine cattle breeders, this species is much resisted to drought and that explains the use of its leaves to feed animals in dry season. *Aloe* spp are planted by 919 indigenous people to fight against drought, because these herbs are xerophytic, succulent and desiccation-tolerant.

The information on the ethnopharmacological data preparation and the precision of plants' habitats, for convinced, usual and suspected or potential medicinal plants are presented in table 2.

Table 2 : Description of all the recipes in the treatment of all the recorded diseases

Plants, families, Common names, Vernacular names and dialect, Types of plants and Morphological type of plant	Part used	Methods of preparation	Route of administration	Posology, duration of treatment and secondary effects
1- <i>Rauvolfia vomitoria</i> (Apocynaceae) Menzanga-Menzanga (Beti); Aton (Bamileke-Yemba), Sebal (Fufuide, Fulani); Suspected medicinal plant; Shrub in mountain forests, Tree in fallow lands of forest regions.	Root bark	Decoction of 1.5 g of root bark per kg of body weight in 3 liters of water for 15 min.	Orally	Malaria: Take 250 ml of decoction, 2 times a day, for 5 days. The long time use and the strong doses can provoke gastric ulcers (10).
2- <i>Nauclea latifolia</i> (Rubiaceae); Gueleden (Bafia), Usual, suspected and convinced medicinal plant; Savana shrub	Leaves	Decoction of 100 g of leaves in 3 liters of water, for 25 min.	Orally	Malaria: Take 250 ml of decoction three times a day, for a week.
3- <i>Nauclea diderricii</i> (Rubiaceae); Akodok (Bety), Ntomba (Pygmies Baka); Suspected medicinal plant; Secondary forest tree.	Bark	Decoction of 40 g of powder of bark, in 1.5 liter of water, for 10 min	Orally	Malaria: Drink 250 ml of decoction, 3 times a day.
4- <i>Morinda lucida</i> (Rubiaceae) Nime (Medumba, Nde), Akeng (Ewondo); andikeng (Bassa), Akyang (Fang); Kikengue, Koua Kengue (Baya); Potential and convinced medicinal plant (3); Tree of secondary forest and old fallow lands.	Leaves	Decoction of 1,5 g of dry leaves and 1,5 g per kg body weight in 4 liters of water, for 15 min.	Orally	Malaria (leaves), diabetes and Hypertension (bark): Drink 250 ml of decoction 3 times daily, for a week.
5- and 6- <i>Aloe buttneri</i> or <i>Aloe barteri</i> (Liliaceae); Lelang (Yemba-Dschang), Ladielcheu (Fefe), Niate (Bassa); Suspected medicinal plants; Cultivated Herb.	Leaves	Infuse 200 g of bulb of onion, cut into small pieces, in 2 liters of water, for 24 hours.	Orally	Leukemia: Drink 250 ml infusion, 4 times a day, for a week.
7- <i>Zanthoxylon tessmannii</i> (Rutaceae); Bongo (Bety), Bolongo (Pygmies Baka), Djou Souatomo (Badjougé); Usual and suspected medicinal plant; Secondary forest tree.	Bark	Decoction of 100 g of bark, in 3 liters of water, for 15 min.	Orally	Sickle cell anemia: Drink 250 ml of decoction, 3 times daily, for 7 days.
8- <i>Moringa oleifera</i> or <i>Moringa stenopetala</i> (Moringaceae); Common name: Moringa (French); Suspected medicinal plant (4) Cultivated small tree.	Leafy stems or leaves	Decoction of 100 g of leafy stems or leaves, in 2 liters of water, for 15 min.	Orally	Liver cancer: Drink 250 ml of decoction, 3 times daily, for 7 days.
9- <i>Hallea inermis</i> (Rubiaceae); Koli, Harhandelo (Fuluidé), Har (Kotoko), Kabé, Diaye, Diéya (Haoussa); Usual and Potential medicinal plant (5); Steppe and Savannahs Sudano Sahel Shrub	Bark	Decoction of 200 g of stem bark in 3 liters of water, for 20 min.	Orally	Hypertension: Drink 250 ml of decoction, 3 times a day, for a week.
10- <i>Halleastipulosa</i> (Rubiaceae); Adjoboian, Afopzam (Boulou), Ohambé (Bassa), Elolom (Ewondo), Etokakpa (Ejagh, Balong and Oroko); Suspected medicinal plant; Tree of swamping forest.	Stem Bark	Decoction of 200g of stem bark in 4 liters of water, for 30 mn.	Orally	Hypertension: Drink 250 ml of decoction, 3 times daily, for 7 days.
11 et 12- <i>Gossypium arboreum</i> , <i>G. barbadense</i> and <i>G. hirsutum</i> (Malvaceae); Tree cotton (English); Usual and suspected medicinal plants; Shrub planted in Gardens.	Stem bark	Decoction of 200 g of stem bark in 4 liters of water, for 30 mn.	Orally	Typhoid fever: Drink 250 ml of decoction, 3 times daily, for 7 days.
13- <i>Anacardium occidentale</i> (Anacardiaceae); Cashew tree (English); Suspected medicinal plant; Soudano-Sahel Tree (Far North)	Stem Bark	Decoction of 200g of stem bark in 4 liters of water, for 30 mn.	Orally	Jaundice: Drink 250 ml of decoction, 3 times daily, for 7 days.
14- <i>Voacanga africana</i> (Apocynaceae); Common name: Voacanga (French); Eyllonjongi (Douala) Suspected medicinal plant; Savannah shrub.	Stem Bulb	Decoction of 100 g of stem and 100 g of cut bulb in 4 liters of water, for 15 min.	Orally	Testicular edema: Drink 250 ml of decoction, 2 times daily, for a week.

15- <i>Schumanniohyton magnificum</i> (Rubiaceae); Suspected medicinal plant; Tsid Modo (Ewondo), small secondary tree of forest.	Stem Bark	Decoction of 200g of stem bark in 4 liters of water, for 30 mn.	Orally	Malaria: Drink 250 ml of decoction, 2 times daily, for a week.
16- <i>Laportea ovalifolia</i> (Tiliaceae); Vernacular names: Tolioli, Itoil (Oroko), Sasalako (Bassa), Sassangulu (Pygmies),Kinhiemou (Wiekum), Kinshai (Banso), Dandi (Bagweri); Potential and convinced plant (6); Understored herb of open forests distributed from South region to North-West region	Aerial parts	Decoction of 100 g of aerial part in 2 liters of water, for 15 min.	Orally	Diabetes and Hypertension: Drink 250 ml of decoction, 2 times daily, for a week.
17- <i>Momordica charantia</i> (Cucurbitaceae); Lebokenan (Bamileke); Usual, Potential and convinced medicinal plant (7-8); Post-cultivated Creeping Herb	Aerial parts	Decoction of 100 g of aerial part in 2 liters of water, for 15 min.	Orally	Diabetes: Drink 250 ml of decoction, 2 times daily, for a week. Delivering: A pinch of fresh seeds pasta introduced in the vagina.
18- <i>Asystasia gangetica</i> (Acanthaceae) Common name: Nelaneli; Usual and convinced medicinal plant (9); Post-cultivated Herb.	Aerial parts	Decoction of 100 g of aerial part in 2 liters of water, for 15 min.	Orally	Hypertension: Drink 250 ml of decoction, 2 times daily, for a week.
19- <i>Entada gigas</i> (Mimosaceae); Common names: monkey-ladder, sea bean or Sea Heart (English); Suspected medicinal plant; forests woody big liana.	Seeds	Macerate 80 g of fresh pounded seeds in 4 liters of water.	Orally	Snack bite: Drink 250 ml of macerate, 4 times a day for one week.
20- <i>Vernonia glabra</i> (Asteraceae); Anfugsa (Kom); Suspected medicinal plant; Woody herb of Mountains from Limbe to Ngaoundere	Leaves	Maceration of 100 g of leaves in 3 liters of water, for at least 2 hours.	Orally	Diabetes: Drink 250 ml of maceration, 3 times a day, for 5 days.
21- <i>Hibiscus sabdariffa</i> (Malvaceae) Common name: Roselle Vernacular names: Folare (Moufor, Fufule); Potential medicinal plant (10); Cultivated Herb of Sudano Sahel	Leaves	Boil 50g of leaves in 1 liters of water, for 15 mn.	Orally	Anemia: Drink 250 ml of decoction, 3 times per day, for 3 days.
22, 23;24 & 25- <i>Eremomastax speciosa</i> , <i>Hypoetes verticillaris</i> , <i>Annickia chlorantha</i> (Annonaceae) and <i>Sennaalata</i> ; Respective vernacular names : Apouetzem (Bamiiieke-Dschang), Ndouetlefo (Bamileke), Npol, Nfol (Eton and Ewondo), Ngom N'tann (Bet); Usual medicinal plants;	Leaves Leaves Bark Leaves	Decoction of 1.5 g of plant 22 leaves, of plant 23 leaves, of plant 24 bark and of plant 25 leaves, per kg of body weight in 12 liters of water for 20 min.	Orally	Anemia and Hepatitis: Take 250 ml of decoction, 2 times a day, for 5 days for Anemia and 4 times per day for 3 weeks for Hepatitis. The long time use and the strong doses can provoke gastric ulcers.
26- <i>Moringa oleracea</i> (Moringaceae) Common name: Murungai; Usual, Potential and convinced medicinal plant (11); Shrub to small tree of Sahel zone	Leaves or stem back	Decoction of 1.5 g of leaves or 1.5 bark stem bark per kg of body weight in 3 liters of water for 20 min.	Orally	Hypertension: Take 250 ml of decoction, 2 times a day, for 5 days.
27- <i>Voacanga thouarsii</i> (Apocynaceae) Eyolla njongi (Douala); Potential medicinal plant (12); Shrub of savannahs and small tree in forests	Stem bark	Decoction of 200g of stem bark in 4 liters of water, for 30 mn.	Orally	Hypertension: Drink 250 ml of decoction, 3 times daily, for a week.
28- <i>Anchomanes diformis</i> (Araceae); Kabad (Ewondo) Suspected medicinal plant; Understore Herb	Tuber	Decoction of 1.5 g of tuber per kg of body weight in 3 liters of water for 20 min.	Orally	Hepatitis: Take 250 ml of decoction, 2 times a day, for 7 days.
29- <i>Azadirachta indica</i> (Meliaceae) Nom common: Nime (French); Vernacular name: Nim (Moundang), lim (Toupouri); Convinced and potential medicinal plant (13); Tree native of India	Stem bark	Decoction of 1.5 g of stem bark per kg of body weight in 3 liters of water for 20 min.	Orally	Malaria, Diabetes, Hepatitis: Take 250 ml of decoction, 2 times a day, for 7 days.
30- <i>Phyllanthus amarus</i> (Phyllanthaceae); Aloum (Ewondo); Potential and convinced plant (14-15); Tree of South to North-West region of Cameroon forests	Aerial parts	Decoction of 1.5 g of aerial parts per kg of body weight in 3 liters of water for 20 min.	Orally	Diabetes: Take 250 ml of decoction, 2 times a day, for 7 days.

III. DISCUSSIONS

Previous studies on many of the recorded plants have confirmed their traditional uses and/or their local people's traditional knowledge on environment. On *Anacardium occidentale*, 262 insect species were recorded and identified. The most important insects attacking this plant are *Apate terebrans*, *Eteoryctis gemoniella*, *Helopeltis schoutedeni* and *Helopeltis anacardii*, which are respectively wood-borer, leaf-miner, and mirid-bugs and distortion of young leaves. Fortunately beneficial insect species that are predators, parasitoids, pollinators and vertebrate predators live also in *A. occidentale* trees (16). *Azadirachta indica* trees are bioactive for man diseases (17) and possess beneficial and harmful effects on biodiversity. For beneficial effects, *A. indica* trees are much ameliorated plants by its valued nitrogen-fixing role. Also, the crop fields where these trees are planted, various insect-pests are destroyed. The bioactive compounds accomplish beneficial effects which interrupts the life cycle of handful living organisms. But the bad consumption of seed oil affected dangerously children by provoking nausea, diarrhea, vomiting, drowsiness, respiratory difficulty, seizures, enlarged liver, general discomfort and die (18-19). Sheep, goats, guinea pigs, avian and aquatic species are also intoxicated by neem (20-23).

Moringa oleifera plays important roles in the environment such as cyanobacterial removal, purifying water, crop fertilizers, and possible toxicity in its medicinal uses. In the natural water treatment processes seed powder is flocculants which remove color, turbidity and organic matter; the seeds are also coagulants which remove cyanobacteria. The sludge left over from the water purification can be used as a bio-compost for other crops. On the contrary to artificial coagulants and flocculants, the seeds of *M. oleifera* plant are non-toxic, biodegradable and therefore less harmful to the environment. In a dry area of Far North, *Moringa oleifera* tree by growing fast and well, plays a role in the fight against desertification that is partially caused by climate change. The presence of long taproot makes this plant resistant to the drought condition of this region. It is also used to combine soil erosion in the region where strong winds and long dry spells occur simultaneously (24-26). *Aloe buttneri* plants possess fat water-storing leaves. A particularly devastating form of human usage of inselbergs is large-scale extracting due to an increasing demand for granite, iron and gneiss for construction purposes. *Aloe buttneri* can lead to their complete eradication at the landscape level as it is observed around Yaounde town on hills where the extinction of this species was rapid (27).

IV. CONCLUSION

Six plants have beneficial and/or harmful effects on the environment. Suspected and potential medicinal plants represent respectively thirty-seven percent (37 %) and three percent (3 %) of recorded medicinal plants. The application of indirect methods of identification of medicinal plants has permitted to add 40 % of new medicinal uses for this study. Therefore the results of this study represent an important baseline data for the design and implementation of strategies for plants protection and their sustainable uses. The thorough application of these methodologies can reveal important suspected and potential medicinal plants in several sociocultural groups of Africa. Further work is however required to fully understand the similarities of color and/or forms of plant organs and human organs. Increasing methods on how to collect indigenous environmental knowledge in the field is demonstrating a solid base from which successful environmental threats' fight should be achieved.

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