Asian Journal of Pharmacognosy

Review paper

REVIEW OF PLANTS USED IN THE MANAGEMENT OF FIBROIDS IN SOME SUB-SHARAN AFRICA COUNTRIES

Judith Caroline Ngo Nyobe[1,2,4*], Mahamane Haidara DA[3], Brice Donald Bakoume Bassanak[4*], Serge Bertrand Mboussi[2], Doriane Fernande Kenmoe Kam[1], Emmanuel Mpondo Mpondo[1], Joseph Ngoupaypou[5], Rokia Sanogo[3,6]

[1] *Department of Pharmaceutical Sciences, Faculty of Medicine and Pharmaceutical University of Douala, P.O. BOX 2701 Douala, Cameroon*
[2] *Laboratory of Biotechnology, University Institute of technology, P.O. BOX 8698 Douala, Cameroun.*
[3] *Département d'Enseignement et de Recherche des Sciences Pharmaceutiques, Faculté de Pharmacie (FAPH), Université des Sciences, des Techniques et des Technologies de Bamako (USTTB), Mali*
[4] *Laboratory of Pharmacochemestry of pharmaceutical and galenical natural products, Faculty of Medicine and Pharmaceutical Sciences of University of Douala, P.O. BOX 2701 Douala, Cameroon.*
[5] *Department of Pharmacognosy and Pharmaceutical Chemistry, Faculty of Medicine and Biomedical Sciences, The University of Yaoundé I, Republic of Cameroon* [6] *Faculté de Pharmacie, Université des Sciences des Techniques et des Technologies de Bamako (USTTB), Bamako Mali, Mali.*

*Corresponding author: *njudithcaroline@yahoo.fr*
(accepted April 12, 2026)

ABSTRACT

Context: Medicinal plants represent a promising alternative for the treatment of Uterine fibroids due to their low cost, increasing evidence of therapeutic efficacy and relatively limited side effects. ***Objective:*** to identify plants traditionally used for the management of uterine fibroids in Sub-Saharan ***Methods:*** Literature searches were conducted using databases such as Google Scholar, ResearchGate and PubMed. Africa. ***Results:*** among the most frequently cited species were *Ageratum conyzoides* and *Momordica foetida*. The most represented families were Fabaceae and Asteraceae. ***Conclusion****:* The findings contribute to knowledge harmonization and lay the groundwork for future studies on the antimyomatous potential of medicinal plants in sub-Saharan Africa.

Keywords: medicinal plants, Sub-Saharan Africa, fibroid

INTRODUCTION

Medicinal plants have been used for centuries in the prevention and treatment of various diseases, mainly due to their secondary metabolites with antioxidant, anti-inflammatory, antimicrobial and antitumor properties. Between 1981 and 2010, about 41% of new drugs and 80% of anticancer agents were derived from natural products, underlining their importance in modern therapeutics (Islam *et al.*, 2014).

eISSN-0128-1119

DOI: http://dx.doi.org/10.71221/ajp.100119

In Africa, nearly 80% of the population relies on traditional medicine, particularly plant-based remedies, because of their accessibility, affordability and relative safety (Laboratory of Drug Development, University Joseph Ki-Zerbo, Burkina Faso *et al.*, 2021). Well-studied species include *Euphorbia hirta* (antioxidant), *Momordica charantia* (antibacterial), *Aspilia africana* (anti-inflammatory) and *Curcuma longa* (antimyomatous), illustrating the pharmacological diversity of African flora and its potential relevance for uterine fibroid management (Sharma *et al.*, 2014; Singh *et al.*, sans date). Uterine fibroids are benign smooth muscle tumors of the uterus that affect a large proportion of women of reproductive age. Although often asymptomatic, they can cause heavy bleeding, pelvic pain, infertility and adverse pregnancy outcomes(Lou *et al.*, 2023)(Day Baird *et al.*, 2003).

The Global Burden of Disease study estimated that 226.05 million women were living with fibroids in 2019, with an increasing trend since 1990 (Lou *et al.*, 2023). Cohort studies based on ultrasonography report a cumulative incidence of about 70% in women overall and over 80% in women of African descent (Day Baird *et al.*, 2003). A systematic review confirmed this high burden and indicated that prevalence varies according to diagnostic methods and study populations, with women of African ancestry consistently at higher risk (Stewart *et al.*, 2017). In sub-Saharan Africa, a scoping review reported highly heterogeneous prevalence rates across countries and age groups, reflecting both the substantial disease burden and disparities in access to ultrasound screening (Morhason-Bello et Adebamowo, 2022). For instance, a hospital-based study in Cameroon found a prevalence of 16.8% among pregnant women, underscoring the significance of fibroids in this setting (Egbe *et al.*, 2018).

Current management includes myomectomy, hysterectomy, uterine artery embolization and medical therapies. While effective, these approaches are often associated with recurrence, adverse effects, high cost, or irreversible infertility, which limit their applicability in low- and middle-income countries ((Nantinda *et al.*, 2025). These constraints highlight the need for safe, affordable and culturally acceptable alternatives. Ethnobotanical studies have documented the use of numerous medicinal plants for fibroid management in sub-Saharan Africa, particularly species with antiproliferative, antioxidant, and anti-inflammatory activities (Adebisi, 2019, (Nantinda *et al.*, 2025) Families such as Fabaceae, Asteraceae, Annonaceae and Lamiaceae are frequently reported, with leaves most often used, typically as decoctions *(Organisation Ouest Africaine de la Santé, 2013).*

However, existing studies remain fragmented and lack comprehensive integration of ethnobotanical and pharmacological data. The present review therefore aimed to identify medicinal plants traditionally employed against uterine fibroids in Benin, Burkina Faso, Cameroon and Nigeria and to synthesize pharmacological evidence supporting their use.

By consolidating current knowledge, this work seeks to provide a scientific basis for future investigations and to promote the valorisation of African plant resources with potential antimyomatous properties, This is to provide resources that can accompany conventional treatments to make them more bearable and cheaper.

MATERIALS AND METHODS

A bibliographic search was conducted from August to September 2024, which was the period dedicated to data collection. The research was

eISSN-0128-1119

DOI: http://dx.doi.org/10.71221/ajp.100119

conducted using specialized search engines to identify ethnobotanical surveys reporting plants traditionally used in the management of uterine fibroids in sub-Saharan Africa, because of the hight prevalence of fibroids in tropical Africa (Day Baird *et al.*, 2003). To optimize data retrieval, different keyword combinations were applied, including *plants* + *medicinal* + *fibroids* and *phytotherapy* + *fibroids* + *sub-Saharan Africa*, with appropriate synonyms. Retrieved articles were screened and only those meeting the following criteria were retained: (i) written in English and/or French; (ii) conducted in sub-Saharan African countries; and (iii) providing explicit information on plant species, plant parts used, preparation methods and routes of administration. Studies not meeting these criteria, ethnobotanical survey journals and articles written in other languages were excluded (Tow *et al.*, 2021).

Ethnobotanical dataThe plants used in the treatment of fibroids are numerous, in this list there is only those used in Benin, Burkina Faso, Cameroon and Nigeria and presenting enough data for their preparations to be reproducible, thus the Table 1 (appendix) presents the plants used in the treatment of fibroids in some countries of sub-Saharan Africa.

Data analysis

In view of the results obtained, there is different families of plants used to treat fibroids, Fabaceae, Asteraceae, Annonaceae, Lamiaceae, Curcubitaceae Euphorbiaceae, Lamiaceae, Arecaceae are the most used families with respectively

DISCUSSION

Medicinal plants, whose therapeutic properties are well documented, play a central role in the management of gynaecological conditions within African communities, where they serve as a first-line, accessible form of care rooted in local knowledge. This review highlights several species that exhibit antitumor, antiproliferative, antioxidant and anti-inflammatory activities relevant to the management of uterine fibroids. The collected data including safety information, signals of symptomatic efficacy and pharmacological evidence of mechanisms of action support the relevance of using these traditional preparations, notably as herbal teas, in community practice. The aim is not to replace conventional treatments, but to harness this plant potential to develop improved preparations that could strengthen existing care. These results therefore provide a solid basis for the promotion and reasoned integration of plant-based products into the therapeutic arsenal, subject to rigorous oversight to ensure quality and safety.

CONFLICT OF INTEREST DISCLOSURE

The authors of this study declare that they have no conflict of interest.

DECLARATION OF HONOR

We declare on our honour that our research is not fake and make up.

AI ASSISTANCE DISCLOSURE

eISSN-0128-1119

DOI: http://dx.doi.org/10.71221/ajp.100119

The authors used [ChatGPT/GPT-5] to improve the clarity and readability of the manuscript. The authors carefully reviewed and edited the content to ensure accuracy and take full responsibility for the final text.

REFERENCE

Chinonye, I.I. *et al.* (2022) « Chemical And Medicinal Properties of Xylopia Aethiopica Harvested from The South Eastern Nigeria », *Chemical & Pharmaceutical Research*, 4(1). Disponible sur: https://doi.org/10.33425/2689-1050.1027.

Day Baird, D. *et al.* (2003) « High cumulative incidence of uterine leiomyoma in black and white women: Ultrasound evidence », *American Journal of Obstetrics and Gynecology*, 188(1), p. 100-107. Disponible sur: https://doi.org/10.1067/mob.2003.99.

Egbe, T.O. *et al.* (2018) « Uterine fibroids in pregnancy: prevalence, clinical presentation, associated factors and outcomes at the Limbe and Buea Regional Hospitals, Cameroon: a cross-sectional study », *BMC Research Notes*, 11(1), p. 889. Disponible sur: https://doi.org/10.1186/s13104-018-4007-0.

Fidyt, K. *et al.* (2016) « β-caryophyllene and β-caryophyllene oxide—natural compounds of anticancer and analgesic properties », *Cancer Medicine*, 5(10), p. 3007-3017. Disponible sur: https://doi.org/10.1002/cam4.816.

Houmenou, V. *et al.* (2017) « Etude ethnobotanique des plantes utilisées dans le traitement de la stérilité féminine dans les départements de l'Ouémé et du plateau au Sud Bénin », *International Journal of Biological and Chemical Sciences*, 11(4), p. 1851. Disponible sur: https://doi.org/10.4314/ijbcs.v11i4.34.

Islam, M.S. *et al.* (2014) « Use of dietary phytochemicals to target inflammation, fibrosis, proliferation, and angiogenesis in uterine tissues: Promising options for prevention and treatment of uterine fibroids? », *Molecular Nutrition & Food Research*, 58(8), p. 1667-1684. Disponible sur: https://doi.org/10.1002/mnfr.201400134.

Laboratory of Drug Development, University Joseph Ki-Zerbo, Burkina Faso *et al.* (2021) « Uterine Fibroids Management by a Popular Traditional Practitioner in Bobo-Dioulasso, Burkina Faso », *Austin Journal of Women's Health*, 8(3). Disponible sur: https://doi.org/10.26420/austinjwomenshealth.2021.1057.

Lou, Z. *et al.* (2023) « Global, regional, and national time trends in incidence, prevalence, years lived with disability for uterine fibroids, 1990–2019: an age-period-cohort analysis for the global burden of disease 2019

eISSN-0128-1119

DOI: http://dx.doi.org/10.71221/ajp.100119

study », *BMC Public Health*, 23(1), p. 916. Disponible sur: https://doi.org/10.1186/s12889-023-15765-x.

de Morais, E.F. *et al.* (2024) « The Anticancer Potential of Kaempferol: A Systematic Review Based on In Vitro Studies », *Cancers*, 16(3), p. 585. Disponible sur: https://doi.org/10.3390/cancers16030585.

Morhason-Bello, I.O. et Adebamowo, C.A. (2022) « Epidemiology of uterine fibroid in black African women: a systematic scoping review », *BMJ Open*, 12(8), p. e052053. Disponible sur: https://doi.org/10.1136/bmjopen-2021-052053.

Mukaila, Y.O., Ajao, Abdulwadud Abiodun et Ajao, Abdulwakeel Ayokun-nun (2023) « A review of the ethnopharmacological significance of *Momordica foetida* Schumach. (Cucurbitaceae: Cucurbitales) », *Egyptian Journal of Basic and Applied Sciences*, 10(1), p. 45-54. Disponible sur: https://doi.org/10.1080/2314808X.2022.2149014.

Nantinda, C. *et al.* (2025) « Ethnobotany, floristic and phytochemical studies of medicinal plants used to treat uterine fibroids in Mbarara City, Uganda », *Phytomedicine Plus*, 5(1), p. 100729. Disponible sur: https://doi.org/10.1016/j.phyplu.2025.100729.

PHARMACOPEE DE L'AFRIQUE DE L'OUEST | Organisation Ouest Africaine de la Santé (2013). Disponible sur: https://www.wahooas.org/web-ooas-prod/fr/publications-et-recherches/pharmacopee-de-lafrique-de-louest (Consulté le: 29 janvier 2026).

S. Brojendro Singhna *et al.* (2013) « Ethnobotany, phytochemistry and pharmacology of Ageratum conyzoides Linn (Asteraceae) », *Academic Journals*, 7. Disponible sur: https://doi.org/10.5897/JMPR012.897.

Sharma, N. *et al.* (2014) « Evaluation of the Antioxidant, Anti-Inflammatory, and Anticancer Activities of Euphorbia hirta Ethanolic Extract », *Molecules*, 19(9), p. 14567-14581. Disponible sur: https://doi.org/10.3390/molecules190914567.

Singh, A. *et al.* (sans date) « Assessment its Antioxidant, Antimicrobial and Anti- Inflammatory Potential of Momordica Charantia ».

Stewart, E. *et al.* (2017) « Epidemiology of uterine fibroids: a systematic review », *BJOG: An International Journal of Obstetrics & Gynaecology*, 124(10), p. 1501-1512. Disponible sur: https://doi.org/10.1111/1471-0528.14640.

Tow, W.-K. *et al.* (2021) « Flavonoid Composition and Pharmacological Properties of Elaeis guineensis Jacq. Leaf Extracts: A Systematic Review »,

eISSN-0128-1119

DOI: http://dx.doi.org/10.71221/ajp.100119

Pharmaceuticals, 14(10), p. 961. Disponible sur: https://doi.org/10.3390/ph14100961.

Wang, H. *et al.* (2023) « β-Sitosterol as a Promising Anticancer Agent for Chemoprevention and Chemotherapy: Mechanisms of Action and Future Prospects », *Advances in Nutrition*, 14(5), p. 1085-1110. Disponible sur: https://doi.org/10.1016/j.advnut.2023.05.013.

Yamada, A.N. *et al.* (2013) « Anti-inflammatory Activity of *Ocimum americanum* L. Essential Oil in Experimental Model of Zymosan-Induced Arthritis », *The American Journal of Chinese Medicine*, 41(04), p. 913-926. Disponible sur: https://doi.org/10.1142/S0192415X13500614.

Zhou, Y. *et al.* (2017) « Vascular flora of Kenya, based on the Flora of Tropical East Africa », *PhytoKeys*, (90), p. 113-126. Disponible sur: https://doi.org/10.3897/phytokeys.90.20531.

eISSN-0128-1119

DOI: http://dx.doi.org/10.71221/ajp.100119

eISSN-0128-1119

DOI: http://dx.doi.org/10.71221/ajp.100119

APPENDIX

Table I: plants used in the treatment of fibroids.

Botanical Family	Name of the Plant	Used Part	Preparation Method	Reference
Acanthaceae	*Acanthus montanus*	Leafy stem	Decoction in water	(Noumi, 2010)
Amaryllidaceae	*Allium ascalonicum*	Tuber	Decoction with fermented corn water	(Adebisi, 2019)
Anacardiaceae	*Antrocaryon klaineanum*	Bark	Decoction	(Noumi, 2010)
	Lannea acida	Stem bark, roots	Decoction	(Coulidiaty *et al.*, 2021)
Annonaceae	*Cleistopholis patens*	Bark	Decoction	(Adomou *et al.*, 2012)
	Enantia chlorantha	Stem bark	Decoction	(Noumi, 2010)
	Uvaria chamae	Bark	Macération in water for 3 days + decanting	(Adebisi, 2019)
	Xylopia aethiopica	Seed/pod	Cutting into pieces + maceration in water for 3 days	(Adebisi, 2019)

eISSN-0128-1119

DOI: http://dx.doi.org/10.71221/ajp.100119

Botanical Family	Name of the Plant	Used Part	Preparation Method	Reference
Apocynaceae	*Baissea axillaris*	Pod	Decoction with fermented corn water	(Adebisi, 2019)
	Mondia whitei	Fruits	Decoction with fermented corn water	(Adebisi, 2019)
Arecaceae	*Cocos nucifera Linn*	Root	Cutting into pieces + maceration in water for 3 days	(Adebisi, 2019)
	Elaeis guineensis	Seed	Ingestion	(Adebisi, 2019)
	Acmella caulirhiza	leafy plants	Pounding + mixing with palm oil/alcohol, divided into 2 doses	(Noumi, 2010)

eISSN-0128-1119

DOI: http://dx.doi.org/10.71221/ajp.100119

Botanical Family	Name of the Plant	Used Part	Preparation Method	Reference
	Ageratum conyzoides L.	Young plants	Grinding + mixing with palm kernel oil	(Noumi, 2010)
	Aspilia Africana (Pers)	Leaf	Ingestion	(Noumi, 2010)
	Conyza floribunda kunth	1 handful of leaves	Grinding into powder + rock salt + water, shaping into balls	(Noumi, 2010)
	Galinsoga ciliata (Raf). Blake	1 handful of leafy stems	Grinding into powder + rock salt + water, shaping into balls	(Noumi, 2010)
Bignoniaceae	*Kigelia africana* (lam)	Bark	Maceration of fermented corn water + salt	(Adebisi, 2019)

eISSN-0128-1119

DOI: http://dx.doi.org/10.71221/ajp.100119

Botanical Family	Name of the Plant	Used Part	Preparation Method	Reference
	Kigelia africana	Bark	Decoction with fermented corn water	(Adebisi, 2019)
	Newbouldia laevis (P. Beauv.) Seeman Bureau	Leaves	Maceration of fermented corn water + salt	(Adebisi, 2019)
	Spathodea campanulata	1 handful of leaves	Decoction with a leaf of *Triumfetta cordifolia* in water	(Noumi, 2010)
	Heliotropium indicum	Bark	Cutting into pieces + decoction in water	(Adebisi, 2019)

eISSN-0128-1119

DOI: http://dx.doi.org/10.71221/ajp.100119

Botanical Family	Name of the Plant	Used Part	Preparation Method	Reference
Calophyllaceae	*Mammea africana*	250 mg stem bark	Infusion in hot water	(Noumi, 2010)
Caricaceae	*Carica papaya*	Leaf	Infusion	(Noumi, 2010)
Chenopodiaceae	*Trona*	Pod	Decoction with fermented corn water	(Adebisi, 2019)
Clusiaceae	*Mammea Africana*	Stem bark	Decoction	(Noumi, 2010)
Combretaceae	*Pteleopsis hylodendron*	Stem bark	Maceration in water or local alcohol	(Noumi, 2010)
Commelinaceae	*Palisota hirsuta*	Bark	Cutting into pieces + decoction in water	(Adebisi, 2019)

eISSN-0128-1119

DOI: http://dx.doi.org/10.71221/ajp.100119

Botanical Family	Name of the Plant	Used Part	Preparation Method	Reference
Convolvulaceae	*Ipomoea involucrata*	Handful of leaves	Decoction in water	(Noumi, 2010)
Cucurbitaceae	*Citrullus lanatus*	Fruits	Decoction with fermented corn water	(Adebisi, 2019)
	Cucumis metuliferus	Fruit	Decoction	(Adomou *et al.*, 2012)
	Momordica charantia L	Leafy stem	Infusion	(Noumi, 2010)
	Momordica foetida foetida Schum & Thonn	2 m of leafy stem	Infusion in hot water	(Noumi, 2010)
Dichapetalaceae	*Dichapetalum gabonense* Engl.	Root	Decoction	(Noumi, 2010)

eISSN-0128-1119

DOI: http://dx.doi.org/10.71221/ajp.100119

Botanical Family	Name of the Plant	Used Part	Preparation Method	Reference
Dioscoreaceae	*Dioscorea reflexa Hook F.*	Seed	Crushing + maceration in local alcohol	(Adebisi, 2019)
Euphorbiaceae	*Croton oligandrum* Pierre.	50 mg stem bark	Maceration in water or local alcohol	(Noumi, 2010)
	Euphorbia hirta L.	Stem barl	Crushed and rolled into a ball	(Noumi, 2010)
	Jatropha curcas Linn.	Bark	Cutting + pounding + sieving + taking with local alcohol	(Adebisi, 2019)
	Macaranga barteri	Leaves	Maceration with local alcohol	(Adebisi, 2019)
	Ricinus communis	Fruits	Maceration of fermented corn water + salt	(Adebisi, 2019)

eISSN-0128-1119

DOI: http://dx.doi.org/10.71221/ajp.100119

Botanical Family	Name of the Plant	Used Part	Preparation Method	Reference
Fabaceae	*Cassia occidentalis*	Leaves	Decoction in water	(Noumi, 2010)
	Cylicodiscus gabunensis	50 mg stem bark	Macération dans l'eau ou alcool local	(Noumi, 2010)
	Desmodium velutinum	Leaves	Maceration in water for 3 days + decanting	(Adebisi, 2019)
	Guibourtia tessmannii	Bark	Mix with rock salt powder + water, shape into balls	(Noumi, 2010)
	Piptadeniastrum africanum	Stem bark	Decoction in water	(Noumi, 2010)
	Senna alata	Leaves	Cutting + pounding + sieving + taking with local alcohol	(Adebisi, 2019)
	Tetrapleura tetraptera	Pod	Decoction with fermented corn water	(Adebisi, 2019)

eISSN-0128-1119

DOI: http://dx.doi.org/10.71221/ajp.100119

Botanical Family	Name of the Plant	Used Part	Preparation Method	Reference
	Cassia sieberiana	Stem bark, roots	Powder mixed in cold water	(Coulidiaty *et al.*, 2021)
	Erythrophleum guineense	Stem bark	Infusion	(Noumi, 2010)
	Tetrapleura tetraptera Taub	Stem bark	Decoction	(Noumi, 2010)
Lamiaceae	*Clerodendrum volubile*	young plants	Pounding + mixing with palm oil/alcohol, divided into 2 doses	(Noumi, 2010)
	Mentha piperita	Leafy plant	Mixed in alcoholature (odontol)	(Noumi, 2010)
	Ocimum americanum	leafy stems	Pounding + mixing with palm oil, shaping into balls	(Noumi, 2010)

eISSN-0128-1119

DOI: http://dx.doi.org/10.71221/ajp.100119

Botanical Family	Name of the Plant	Used Part	Preparation Method	Reference
	Ocimum americanum L.	leaves	Pounding + mixing with palm oil, shaping into balls	(Noumi, 2010)
	Solenostemon monostachyus	Leaves	Grinding + mixing with palm kernel oil	(Noumi, 2010)
Lauraceae	*Persea americana*	Stem bark	Decoction	(Noumi, 2010)
Liliaceae	*Aloe spp.*	leaves	Maceration in odontol	(Noumi, 2010)
Malvaceae	*Cola acuminata*	stem bark	Decoction with a leaf of *Triumfetta cordifolia* in water	(Noumi, 2010)

eISSN-0128-1119

DOI: http://dx.doi.org/10.71221/ajp.100119

Botanical Family	Name of the Plant	Used Part	Preparation Method	Reference
	Sida pilosa	Leaves	Grinding + decoction in local alcohol	(Adebisi, 2019)
	Triumfetta cordifolia	leaves	Used to infuse decoction water	(Noumi, 2010)
Marantaceae	*Haumania danckelmaniana*	leaves	Pounding + mixing with palm oil, shaping into balls	(Noumi, 2010)
Melastomataceae	*Dissotis rotundifolia (Sm.)*	leafy stem	Mixed with rock salt and rolled into a ball	(Noumi, 2010)
Meliaceae	*Azadirachta indica*	bark, leaf, root	Decoction	(Adebisi, 2019)
	Trichilia emetica	stem bark, roots	Powder mixed in cold water	(Coulidiaty *et al.*, 2021)
	Musa nana	fruits	Cutting + pounding + sieving + taking with local alcohol	(Adebisi, 2019)
Olacaceae	*Olax subscorpioidea*	Bark	Cutting into pieces + decoction in water	(Adebisi, 2019)
	Ongokea gore	stem bark	Decoction in water	(Noumi, 2010)

eISSN-0128-1119

DOI: http://dx.doi.org/10.71221/ajp.100119

Botanical Family	Name of the Plant	Used Part	Preparation Method	Reference
Pandaceae	*Microdesmis puberula*	Root	Decoction with fermented aloeiscorn water	(Adebisi, 2019)
Piperaceae	*Piper guineense Schumach.*	Fruits	Decoction with fermented corn water	(Adebisi, 2019)
	Piper umbellatum	Leaves	Steaming under hot, pressed ashes	(Noumi, 2010)
Pluteaceae (Fungi)	*Volvariella esculenta*	bark	Boiling with fermented corn water	(Adebisi, 2019)
Polygalaceae	*Securidaca longepedunculata Fers*	stem bark, roots	Decoction	(Coulidiaty *et al.*, 2021)
	Portulaca oleracea	leafy stems	Pounding + mixing with palm oil, shaping into balls	(Noumi, 2010)
Rubiaceae	*Hallea stipulosa*	stem bark	Maceration in water or local alcohol	(Noumi, 2010)
Rutaceae	*Araliopsis soyauxii*.	stem bark	Maceration in water or local alcohol	(Noumi, 2010)
Sapindaceae	*Blighia sapida*	Bark	Maceration in local alcohol for 3 days	(Adebisi, 2019)
Sapotaceae	*Baillonella toxisperma*	Stem bark	Decoction	(Noumi, 2010)

eISSN-0128-1119

DOI: http://dx.doi.org/10.71221/ajp.100119

Botanical Family	Name of the Plant	Used Part	Preparation Method	Reference
Solanaceae	*Solanum aethiopicum*	Bark	Cutting + pounding + sieving + taking with local alcohol	(Adebisi, 2019)
	Solanum lycopersicum L.	Leaves	Decoction in water	(Noumi, 2010)
Vitaceae	*Cissus petiolate* Hook.	Leafy stem	Maceration	(Noumi, 2010)
Zingiberaceae	*Aframomum melegueta K. Schum*	Fruit	Maceration in water or local alcohol	(Noumi, 2010)

eISSN-0128-1119

DOI: http://dx.doi.org/10.71221/ajp.100119