

## Research Article

Available online at [www.journal-advances-developmental-research.com](http://www.journal-advances-developmental-research.com)

### Journal of Advances in Developmental Research

ISSN: 0976-4704 (Print), e-ISSN: 0976-4844 (Online)

J.Adv.Dev.Res. Volume 2, No.1, June 2011

# Ethnobotanical Survey of Plants Used in the Treatment of Haemorrhoids in South-Western Nigeria

Mike O. Soladoye\*, Michael O. Adetayo, Emmanuel C. Chukwuma and Amusa N. Adetunji

\*Corresponding author, Department of Plant Science and Applied Zoology, Olabisi Onabanjo University, P.M.B. 2002, Ago-Iwoye, Ogun State, Nigeria. Email- [naamusa2002@yahoo.co.uk](mailto:naamusa2002@yahoo.co.uk)

## Abstract

Ethnobotanical survey of the plants used in the treatment of Haemorrhoids was carried out in South-Western Nigeria. The herbalists, herb sellers and traditionalists were interviewed by the administration of questionnaires. From the survey, a total of 143 plant species belonging to 58 families were found to be useful for the treatment. The most prominent among these plant families is the Leguminosae family with 22 species, an indication of the utmost importance of this family in the cure of haemorrhoids. Other plant families include Euphorbiaceae (8), Apocynaceae (6), Meliaceae, Compositae and Poaceae with 5 species each. In all, the commonest species in the recipes are *Senna alata* Linn. *Gongronena latifolium* Benth, *Axonopus compressus* Engl. & Diels, *Anogeissus leiocarpus* (D.C) Guil. L & Per, *Pteleiopsis suberosa* Engl. & Diels, *Tetrapleura tetraptera* (Schun & Thonn) Taub, *Khaya spp* and *Allium spp*. All the plants identified in this work have been used severally by the herbalists and adjudged to be efficacious.

**Key words:** Ethnobotany, Haemorrhoids, Medicinal plants, Herbalists, Traditional healers

## Introduction

There is no doubt that plants are very effective in the treatment of diseases and serve as food. The original profession practiced by man includes plant identification, farming and hunting. Traditional medicine is the most ancient method of curing diseases and it has been said that plants are very first and only one true medicine ever used. The traditional medicine in Nigeria is known by many names, like folk medicine, traditional medicine and herbal medicine. A new term 'Tradomedalism' was coined<sup>1</sup> which is a system of treating disease by employment of the agencies and forces of nature.

According to the World Health Organisation<sup>2</sup>, "the traditional healer" is a person who is recognized by the community in which he lives as competent to provide health care by using vegetables, animals, mineral substances and certain other methods based on the social, cultural and religious background as well as on the knowledge, attributes and beliefs that are prevalent in the community regarding physical, mental and social well being and causation of diseases and disability. WHO<sup>3</sup> also defines medicinal plant as any plant which in one or more of its organ contain substance that can be used for the therapeutic purposes or which are precursors for the synthesis of useful drugs.

Nigeria flora has already and will continue to make a great contribution to the health care of Nigerians<sup>4,6</sup>. The indigenous medicinal plants form an important component of the natural wealth of Nigeria. Many indigenous plants have been used by common man since time immemorial for curing of various ailments and thus lessening human suffering without the actual knowledge of the active ingredient which cause relief. The potentialities of some of these plants have been established. Thus the herbalists are now in the vanguard of the campaign for the conservation of floral species through various means<sup>7</sup>. Herbalists have used various plant parts which include stems, leaves, roots, shoot of plant or whole plant to prepare extracts, decoction, concoction, mixtures, creams, soaps, infusions, pastes, macerations, syrup and powders for ingredients of plant(s) subjected to partial combustion used in various manipulation according to herbalists prescriptions to cure several ailments.

About 80% of the western pharmaceuticals have their origin in plants<sup>8</sup>. This means that screening of plants for chemicals to find new pharmaceuticals is rapidly on the increase. Ethnobotanists can now make plants into chemicals that can be used in western medicines. Several nations have set up ethnobotanical facilities to study traditional medicine or specific projects to study the plants used in traditional medicine by various people in the countries<sup>9</sup>.

Haemorrhoids are normal part of human anatomy which is present in every age group from the new born to the elderly, though with notable differences in the size of the haemorrhoids and whether they are asymptomatic or symptomatic such as bleeding and protrusion<sup>10</sup>. Haemorrhoids also called pile, is caused by increased pressure in the veins of the rectum or anus resulting from straining when trying to have a bowel movement or any activity causing straining, such as heavy lifting. As pressure increases, blood pools in the veins, increases and this causes them to swell thus stretching the surrounding tissue. Haemorrhoids can be inside and/or outside the anus and they are not dangerous<sup>11</sup>. Internal Haemorrhoids may be located near the beginning of the anal canal or close to the anal opening. When it protrudes outside the anal opening, they are referred to as prolapsed haemorrhoids.

About one quarter of all Africans has had haemorrhoids at age 50 and that 50% to 85% of the

World population could be affected by haemorrhoids at some time in their life<sup>12</sup>. Pile affect both sexes but the impact on males appear to be more of concern because of its effect on their sexual performance. This disease appears to be genetically inherited as some children suffer this ailment. Humans are prone to Haemorrhoids because the erect posture of man puts a lot of pressure on the veins in the anal region<sup>13</sup>. Overeating and presence of unassimilated bulk foods are also known to cause haemorrhoids as well as intoxicating liquors, artificial flavoring or spices, white bread, cakes, all other white flour products, fried foods, sugar and all mineral drinks<sup>14</sup>.

The objective of this work was to undertake an in-depth survey of indigenous useful plants of Nigeria around Yoruba land by interacting with several herbalists, herb sellers and traditional healers in an attempt to document information on the plants used in the treatment of haemorrhoids in South-Western Nigeria.

## Experimental

The survey was carried out in Ibadan, Abeokuta, Ijebu-Ode, Ijebu-Igbo, Ago-Iwoye and Lagos all within the area of study, South-Western Nigeria. Some herbalists and herb sellers were consulted and interviewed with the aid of questionnaires. This was done so as to gather enough information about the plant species, recipes, their local names, mode of administration and dosage. In accordance with taxonomic practice, the plants were collected from the wild, pressed and dried. They were then poisoned using mercuric II chloride solution to reduce fungal load. Identification and authentication of the plant specimens was done by the senior author, a plant taxonomist and later confirmed at the Forest Herbarium, Ibadan (FHI). A field note showing the plant's name and description, place and date of collection, name of collector, habit and local names of the plants species was also attached to each herbarium specimen. The specimens were later deposited at the Elikaf Herbarium of Olabisi Onabanjo University, Ago-Iwoye, though this herbarium is not yet internationally recognized as it is not listed in Holmgren & Keuken<sup>15</sup>.

## Results

A total of 144 plant species belonging to 58 different families were gathered from the survey (Table 1). It was discovered that in quite a number

**Table 1.** Medicinal plants used by the traditional healers in the treatment of haemorrhoids in South-Western Nigeria.

| S. No. | Family           | Botanical names                                  | Vernacular names | Plant parts used |
|--------|------------------|--|------------------|------------------|
| 1      | Amaranthaceae    | <i>Amaranthus spinosus</i> Linn                  | Tete elegun      | Root             |
| 2      | Amaranthaceae    | <i>Amaranthus viridis</i> Linn                   | Tete abalaye     | Whole plant      |
| 3      | Amaranthaceae    | <i>Celosia argentea</i> Linn                     | Sokoyokoto       | Leaves           |
| 4      | Amaryllidaceae   | <i>Curculigo pilosa</i> Engl                     | Bara             | Fruit            |
| 5      | Anarcadiaceae    | <i>Anarcadium occidentale</i> Linn               | Kaju             | Bark             |
| 6      | Anarcadiaceae    | <i>Mangifera indica</i> Linn                     | Mabgoro          | Stem bark        |
| 7      | Apocynaceae      | <i>Spondias monbin</i> Linn                      | Iyeye            | Leaves           |
| 8      | Annonaceae       | <i>Enantia chlorantia</i> Oliv                   | Awopa/Osun pupa  | Bark             |
| 9      | Annonaceae       | <i>Mondora myristica</i> (Geatn) Dunal           | Sasangbaku       | Fruit            |
| 10     | Annonaceae       | <i>Uvaria afzelii</i> SC. Elliot.                | Gbogbonise       | Root             |
| 11     | Annonaceae       | <i>Xylopia aethiopica</i> (Dunal) A. Rich        | Eeru-lamo        | Fruit            |
| 12     | Apocynaceae      | <i>Alstonia boonei</i> De Wild                   | Awun/ahun        | Bark             |
| 13     | Apocynaceae      | <i>Funtamia elastica</i> (Preuss.) Stapf.        | Ire              | Bark             |
| 14     | Apocynaceae      | <i>Hunteria umbellata</i> (K. Schum) Haller. F.  | Erin             | Stem bark        |
| 15     | Apocynaceae      | <i>Picalima nitida</i> (Stapf)                   | Abere            | Fruit            |
| 16     | Apocynaceae      | <i>Rauvolfia vomitoria</i> Afzel Stirp. Med.     | Orira/Asofeyeje  | Stem bark        |
| 17     | Apocynaceae      | <i>Strophanthus hispidus</i> D.C                 | Sagbere          | Bark             |
| 18     | Araceae          | <i>Colocasia esculentum</i>                      | Koko             | Leaves           |
| 19     | Aristolochiaceae | <i>Aristolochia ringens</i> Vahl                 | Akogun           | Root             |
| 20     | Asclepiadaceae   | <i>Calotropis procera</i> R.B                    | Bomubomu         | Leaves           |
| 21     | Asclepiadaceae   | <i>Gongronena latifolium</i> Benth               | Madunmaro        | Root             |
| 22     | Bignoniaceae     | <i>Newbouldia laevis</i> P. Beauv                | Akoko            | Leaves           |
| 23     | Bombacaceae      | <i>Adansonia digitata</i> Linn                   | Ose              | Bark             |
| 24     | Bombacaceae      | <i>Bombax buonopozense</i> P. Beauv              | Ponpola          | Bark             |
| 25     | Boraginaceae     | <i>Heliotropium indicum</i> Linn                 | Origun           | Whole Plant      |
| 26     | Bromeliaceae     | <i>Ananas comosus</i> (Linn.) Merr               | Ope oyinbo       | Unripe plant     |
| 27     | Caricaceae       | <i>Carica papaya</i> Linn                        | Ibepa/Pawpaw     | Leaves           |
| 28     | Combretaceae     | <i>Anogeissus leiocarpus</i> (D.C) Guil. L & Per | Ayin             | Stem bark        |
| 29     | Combretaceae     | <i>Pteleiopsis suberosa</i> Engl. & Diels        | Okuku            | Stem bark        |
| 30     | Combretaceae     | <i>Terminalia catappa</i> Linn                   | Furutu           | Bark             |
| 31     | Combretaceae     | <i>Axonopus compressus</i> Engl. & Diels         | Idi              | Stem bark        |
| 32     | Compositae       | <i>Acanthospermum hispidum</i> D.C               | Dagunro-gogoro   | Leaves           |
| 33     | Compositae       | <i>Aspilia africana</i> (Pers.)                  | Yunyun           | Leaves           |
| 34     | Compositae       | <i>Bidens pilosa</i> Linn                        | Abeere oloko     | Root             |
| 35     | Compositae       | <i>Chromolaena odorata</i> (Linn.) K.R.          | Akintola         | Leaves           |
| 36     | Compositae       | <i>Vernonia amygdalina</i> Linn                  | Ewuro            | Leaves           |
| 37     | Connaraceae      | <i>Brysocarpus coccineus</i> Schum & Thonn       | Amuje wewe       | Bark             |
| 38     | Connaraceae      | <i>Cnestis ferruginea</i> D.C                    | Omu-aja          | Flower           |
| 39     | Crassulaceae     | <i>Bryophyllum pinnatum</i> (Lam) oken           | Baara            | Fruit            |
| 40     | Cucurbitaceae    | <i>Citrullus colocynthis</i> (Linn) Schard       | Baara            | Fruit            |
| 41     | Cucurbitaceae    | <i>Momordica charantia</i> Schum & Thonn.        | Ejirin wewe      | Leaves           |
| 42     | Cucurbitaceae    | <i>Luffa cylindrical</i> (Linn) M.J. Roem        | Ara oyinbo       | Root             |
| 43     | Discoreaceae     | <i>Dioscorea alata</i> Linn.                     | Isu              | Tuber            |
| 44     | Euphorbiaceae    | <i>Alchornea cardofolia</i> Muel.                | Epo              | Leaves           |
| 45     | Euphorbiaceae    | <i>Bridelia ferruginea</i> Benth                 | Ira              | Bark             |
| 46     | Euphorbiaceae    | <i>Croton zambesicus</i> Linn                    | Ajekobale        | Leaves           |
| 47     | Euphorbiaceae    | <i>Jatropha curcas</i> Linn.                     | Lapalapa funfun  | Leaves           |
| 48     | Euphorbiaceae    | <i>Jatropha gossypifolia</i> Linn.               | Lapalapa pupa    | Leaves           |
| 49     | Euphorbiaceae    | <i>Jatropha multifida</i> Linn.                  | Ogege            | Leaves           |
| 50     | Euphorbiaceae    | <i>Manihot esculenta</i> Crantz.                 | Gbaguda          | Leaves           |
| 51     | Euphorbiaceae    | <i>Ricinus communis</i> Linn.                    | Laa              | Leaves           |
| 52     | Guttiferae       | <i>Mesua ferrea</i> Linn.                        | -                | Leaves           |
| 53     | Hypericaceae     | <i>Harungana madagascariensis</i> Lam. Ex Poir.  | Amuje/Elepo      | Bark             |
| 54     | Hypoxidaceae     | <i>Curculigo pilosa</i> (Schum & Thonn) Engl.    | Epakun           | Rhizome          |
| 55     | Iridaceae        | <i>Gladiolus daleni</i> Van. Geel.               | Baka             | Rhizome          |
| 56     | Lamiaceae        | <i>Occimum gratissimum</i> Linn                  | Efinrin nla      | Leaves           |
| 57     | Lamiaceae        | <i>Occimum basilicum</i> linn                    | Efinrin wewe     | Leaves           |
| 58     | Caesalpinoideae  | <i>Caesalpina bonduc</i> (Linn.) Roxb.           | Ayo              | Leaves           |
| 59     | Caesalpinoideae  | <i>Senna absus</i> Linn.                         | Akorere          | Leaves           |
| 60     | Caesalpinoideae  | <i>Senna alata</i> Linn.                         | Asunwon oyinbo   | Leaves           |
| 61     | Caesalpinoideae  | <i>Senna fistula</i> Linn                        | Aidan tooro      | Bark             |
| 62     | Caesalpinoideae  | <i>Senna occidentalis</i> Linn.                  | Rere             | Leaves           |
| 63     | Caesalpinoideae  | <i>Senna podocarpa</i> Guil. & Perr.             | Asunwon ibile    | Leaves           |
| 64     | Caesalpinoideae  | <i>Senna sieberiana</i> D.C                      | Aidantooro       | Stem bark        |
| 65     | Caesalpinoideae  | <i>Senna tora</i> Linn.                          | Eru-asan-undegbe | Leaves           |

|     |                  |  |                   |                |
|-----|------------------|--|-------------------|----------------|
| 66  | Caesalpinoideae  | <i>Dalbergieuna welwitshii</i> (Bak.) Bal.       | Paran             | Root           |
| 67  | Caesalpinoideae  | <i>Detarium microcarpum</i> Guill. & Perr        | Ogbogbo           | Bark           |
| 68  | Caesalpinoideae  | <i>Dialium guineense</i> Wild.                   | Awin              | Leaves         |
| 69  | Caesalpinoideae  | <i>Hymenostegia afzelii</i> (Oliv.) Harms        | Arigbodigbo       | Bark           |
| 70  | Mimosoideae      | <i>Acacia nilotica</i> (Linn.) Wild ex. Del.     | Booni             | Fruits         |
| 71  | Mimosoideae      | <i>Acacia sieberiana</i> D. C.                   | Sie               | Root           |
| 72  | Mimosoideae      | <i>Albizia lebbeck</i> (Linn.)                   | Igbagbo           | Root           |
| 73  | Mimosoideae      | <i>Calliandra haematocephala</i> Linn.           | Tude              | Root           |
| 74  | Mimosoideae      | <i>Mimosa pudica</i> Linn.                       | Patanmo           | Leaves         |
| 75  | Mimosoideae      | <i>Parkia biglobosa</i> (Jacq) Benth.            | Iru               | Fruit pod      |
| 76  | Mimosoideae      | <i>Tetrapleura tetraptera</i> (Schun & Thonn)    | Aidan             | Pod            |
| 77  | Papilionoideae   | <i>Abrus precatorius</i> Linn.                   | Oju-ologbo        | Leaves         |
| 78  | Papilionoideae   | <i>Cajanus cajan</i> (Linn) Millsp.              | Otile             | Leaves         |
| 79  | Papilionoideae   | <i>Crotolaria retusa</i> Linn.                   | Korpo             | Root           |
| 80  | Liliaceae        | <i>Allium ascalonicum</i> Linn.                  | Alubosa elewe     | Leaves         |
| 81  | Liliaceae        | <i>Allium sativum</i> Linn.                      | Ayu               | Bulb           |
| 82  | Liliaceae        | <i>Aloe vera</i> Linn.                           | Aloe vera         | Root           |
| 83  | Loranthaceae     | <i>Viscum album</i> Linn.                        | Afomo             | Leaves         |
| 84  | Loranthaceae     | <i>Anthocleista djalonensis</i> A. Chev.         | Sspo              | Bark           |
| 85  | Lythraceae       | <i>Lawsonia inermis</i> Linn                     | Lali              | Leaves         |
| 86  | Malvaceae        | <i>Abutilon mauritianum</i> (Jacq.) Medic.       | Furu              | Root           |
| 87  | Malvaceae        | <i>Gossypium barbadense</i> Linn                 | Owu               | Root           |
| 88  | Malvaceae        | <i>Hibiscus sabdarriffa</i> Linn.                | Isapa             | Leaves         |
| 89  | Meliaceae        | <i>Azadirachta indica</i> A. Juss                | Dogoyaro          | Bark           |
| 90  | Meliaceae        | <i>Entandrophragma cylindricum</i> Sprague       | Arinje            | Bark           |
| 91  | Meliaceae        | <i>Khaya cylindricum</i> (Descr.) A Juss.        | Ijebo             | Bark           |
| 92  | Meliaceae        | <i>Khaya grandifoliola</i> C.D.C                 | Oganwo            | Bark           |
| 93  | Meliaceae        | <i>Khaya senegalensis</i> (Descr.) A. Juss       | Oganwo            | Bark           |
| 94  | Menispermaceae   | <i>Chasmanthera dependes</i> Hocst.              | Ato               | Roots          |
| 95  | Menispermaceae   | <i>Cessampelos mucronata</i> A. Rich             | Jenjoko           | Leaves         |
| 96  | Menispermaceae   | <i>Stephania dinklagei</i> Lour.                 | Gbejedi           | Bark           |
| 97  | Moraceae         | <i>Antiaria Africana</i> Engl.                   | Oro               | Leaves/fruits  |
| 98  | Moraceae         | <i>Ficus capensis</i> Thumb                      | Opoto             | Root           |
| 99  | Moraceae         | <i>Ficus exasperata</i> Vahl.                    | Epin              | Root           |
| 100 | Moraceae         | <i>Treculia Africana</i> Decne.                  | Afon              | Leaves         |
| 101 | Moringaceae      | <i>Moringa oleifera</i> Lam.                     | Ewe igbale        | Leaves         |
| 102 | Musaceae         | <i>Musa paradisiaca</i> Linn                     | Ogede Agbagba     | Leaves         |
| 103 | Myrtaceae        | <i>Eugenia aromatica</i> Linn                    | Kanafuru          | Flower         |
| 104 | Myrtaceae        | <i>Eugenia caryophyllus</i> (Spreng.)            | Kanafuru          | Unopened fruit |
| 105 | Myrtaceae        | <i>Psidium guajava</i> Linn.                     | Gilofa            | Root           |
| 106 | Nyctaginaceae    | <i>Boerhavia diffusa</i> Linn                    | Etiponla          | Whole plant    |
| 107 | Olacaceae        | <i>Olex subscorpiodea</i> Oliv.                  | Ifon              | Root           |
| 108 | Palmae (Araceae) | <i>Cocos nucifera</i> Linn.                      | Agbon             | Leaves & juice |
| 109 | Palmae (Araceae) | <i>Elaeis guineense</i> Jacq.                    | Epo               | Shaft of seeds |
| 110 | Palmae (Araceae) | <i>Raphia hookeri</i> Mann. & Wended             | Oguro             | Juice          |
| 111 | Periplocaceae    | <i>Mondia whiteii</i> (Hook. f) Sheel            | Isirigun          | Root           |
| 112 | Periplocaceae    | <i>Parquetina nigrescens</i> (Afzel) Bullock.    | Ogbo              | Root           |
| 113 | Piperaceae       | <i>Piper guineense</i> Schum & Thonn             | Iyere             | Flower         |
| 114 | Piperaceae       | <i>Peperomia pellucida</i> (Linn.) H.B. & K      | Rinrin            | Whole plant    |
| 115 | Poaceae          | <i>Bambusa vulgaris</i> Linn.                    | Oparun            | Leaves         |
| 116 | Poaceae          | <i>Cymbopogon citratus</i> (D.C) Stapf.          | Kooko-oba         | Leaves         |
| 117 | Poaceae          | <i>Cynodon dactylon</i> (Linn.) Pers.            | Koriko bamubu     | Whole plant    |
| 118 | Poaceae          | <i>Pennisetum purpureum</i>                      | Esun              | Leaves         |
| 119 | Poaceae          | <i>Zea mays</i> Linn.                            | Suku-agbado       | Fruit cob      |
| 120 | Polygalaceae     | <i>Carpolobia lutea</i> G. Don.                  | Osunsun           | Leaves         |
| 121 | Polygalaceae     | <i>Securidaca longipedunculata</i> Frer.         | Ipeta             | Bark           |
| 122 | Portulacaceae    | <i>Talinum triangulare</i> (Jacq) Wild           | Gbure             | Root           |
| 123 | Rubiaceae        | <i>Canthium subcordatum</i> D.C                  | Igi-elere         | Bark           |
| 124 | Rubiaceae        | <i>Nauclea latifolia</i> Smith.                  | Egbesi            | Bark           |
| 125 | Rutaceae         | <i>Clausena anisata</i> (Will.) Hook.f. ex Benth | Atabari-obuko     | Root           |
| 126 | Rutaceae         | <i>Citrus aurantifolia</i> (Christm.) Swingle.   | Osan wewe         | Juice          |
| 127 | Sapindaceae      | <i>Allophylus africanua</i> P. Beauv             | Ekan ehoro        | Whole plant    |
| 128 | Sapindaceae      | <i>Cardiospermum halicacabum</i> Linn.           | Shaworo           | Leaves         |
| 129 | Sapotaceae       | <i>Chrysophyllum albidum</i> Linn.               | Agbalumo          | Bark           |
| 130 | Sapotaceae       | <i>Synsepalum dulcificum</i> (Radlk.) Engl.      | Agbayun           | Leaves         |
| 131 | Solanaceae       | <i>Capsicum annum</i> Linn.                      | Ata ijosi         | Fruits         |
| 132 | Solanaceae       | <i>Nicotiana tabacum</i> Linn.                   | Taba              | Leaves         |
| 133 | Solanaceae       | <i>Solanum torvum</i> Sw.                        | Igbayanrin-elegun | Leaves         |
| 134 | Sterculiaceae    | <i>Cola acuminata</i> (P. Beauv.) Schott & Endl. | Obi abata         | Bark           |

|     |               |  |              |           |
|-----|---------------|--|--------------|-----------|
| 135 | Sterculiaceae | <i>Cola nitida</i> (Vent.) Schott. & Endl. | Obi abata    | Bark      |
| 136 | Sterculiaceae | <i>Waltheria indica</i> Linn.              | Epo          | Leaves    |
| 137 | Tiliaceae     | <i>Grewia pubescens</i> P. Beauv.          | Afoforo igbo | Leaves    |
| 138 | Ulmaceae      | <i>Trema orientalis</i> Linn.              | Afoforo      | Leaves    |
| 139 | Umbelliferae  | <i>Centella asiatica</i> Linn.             | Atare obuko  | Root      |
| 140 | Urticaceae    | <i>Urtica dioica</i> Linn.                 | Fuya-fuya    | Leaves    |
| 141 | Verbenaceae   | <i>Clerodendron splendens</i> G. Don.      | Dagba        | Leaves    |
| 142 | Verbenaceae   | <i>Vitex doniana</i> Linn.                 | Ori          | Juice/oil |
| 143 | Zingiberaceae | <i>Aframomum melegueta</i> K. Schum.       | Atare        | Seed pod  |
| 144 | Zingiberaceae | <i>Zingiber officinale</i> Rosc            | Ataile       | Rhizome   |

of the plants species, the fruits, seeds, leaves and bulbs of the plants have been found to be efficient in the treatment of haemorrhoids. The most prominent species in the recipes are *Senna alata* Linn, *Gongronena latifolium* Benth, *Axonopus compressus* Engl. & Diels, *Anogeissus leiocarpus* (D.C) Guil. L & Per, *Pteleiopsis suberosa* Engl. & Diels, *Tetrapleura tetraptera* (Schun & Thonn) Taub, *Khaya spp* and *Allium spp*. Plants identified in this work have been tested by the herbalists and according to them are quite efficacious. Table 2 shows the species distribution in each of the families. Figure 1 is a Pie-chart showing the percentage occurrence of the families. Leguminosae have the highest occurrence of plant species with 22 (Caesalpiniodeae - 12, Mimosoideae-7 and Papilionoideae-3) followed by Euphorbiaceae with 8 species. Apocynaceae has 6 species, Meliaceae, Compositae and Poaceae have 5 species each. Combretaceae, Moraceae and Annonaceae also have 4 species each. Only few families such as Amarylidaceae, Araceae, Aristolochiaceae, Bignoniaceae, Boraginaceae, Caricaceae, Guttiferae, Hypericaceae, Umbelliferae and Urticaceae had only one species. The families with single species call for special attention in the area of conservation. Owing to space limitation, only 6 of the 25 recipes obtained during this work are enumerated below (Table 3).

## Discussion and Conclusion

It was noted during the interviews that if internal haemorrhoids is not treated, it can lead to external haemorrhoids. This disease can be treated with both fresh and dry herbs. Special diet that was recommended apart from the herbal recipes is vegetable which should be slightly cooked. They include green spinach, *Amaranthus viridis* Linn (Tete), *Celosia spp*, and water leaf (*Talinum triangulare* (Jacq) Wild: Yoruba- Gbure). The use of *Occimum gratissimum* Linn as species in some soup is also very effective in the treatment of piles. Scientific studies on these plants too would yield interesting results and help us in understanding

the pharmacological actions of the active compounds found in these plants<sup>16</sup>.

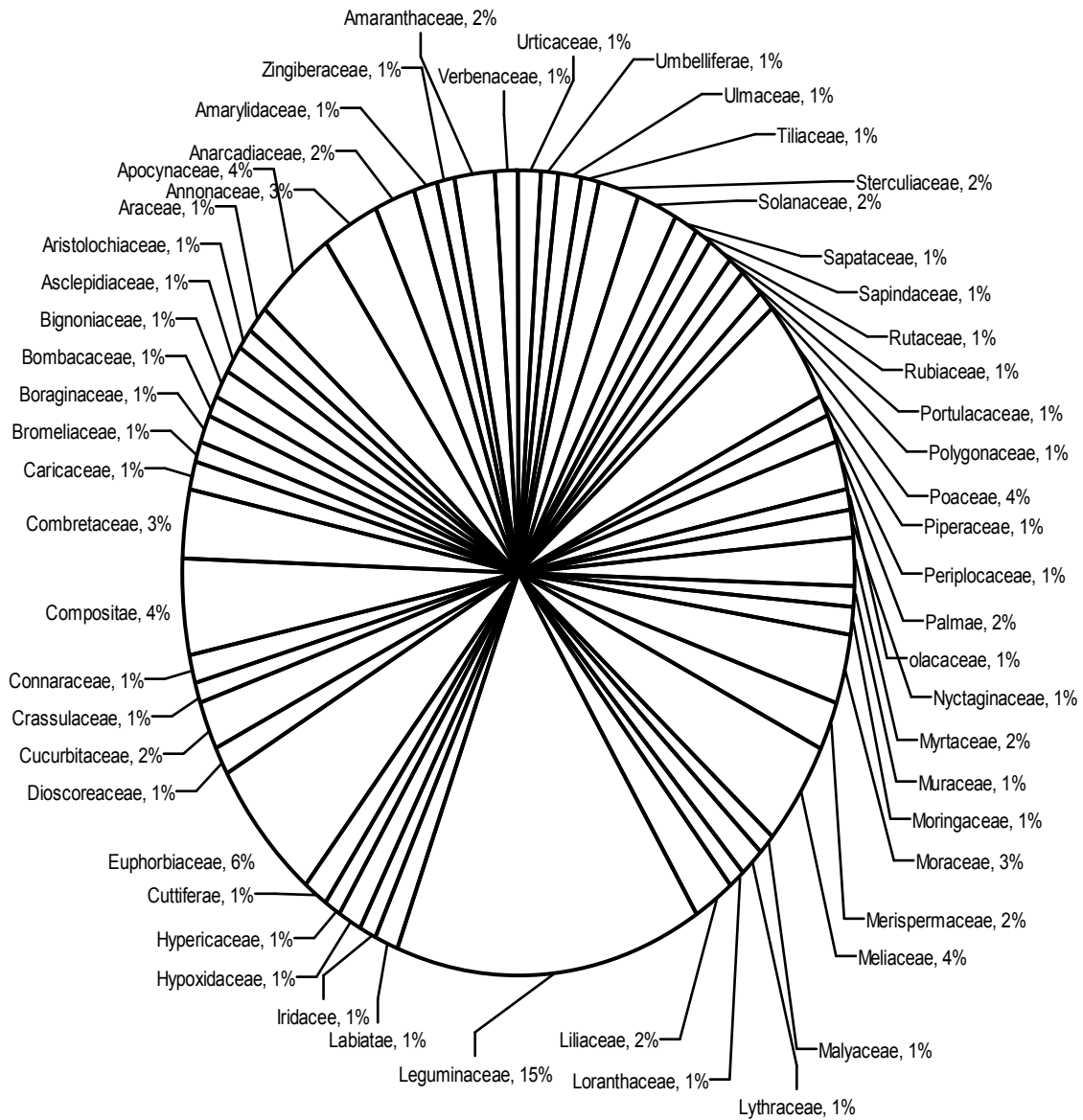
Traditional medical knowledge of medicinal plants and their uses by indigenous cultures are not only useful for conservation of cultural traditions and biodiversity but also for community healthcare and drug development in the present and future<sup>17</sup>. From the opinions of the 25 respondents that were interviewed, 52% suggested that herbal tea is the most effective option in treating haemorrhoids, 16% said herb powder (Yoruba -Agunmu), 8% confirmed rubbing concoction while 12% confirmed that herbal paste/ lotion are more effective. Only 8% suggested herbal juice and the remaining 4% herbal gins. A graphical representation of these opinions is shown in Figure 2. Figure 3 also shows percentage occurrence of the plants in relation to their habits. It indicates that trees made up 58%, herbs- 20%, shrubs - 16% and climbers - 6%.

Heavy and stimulating foods, tobacco, alcoholic drinks, tea, coffee and meats of all kind must be completely avoided as suggested by the herbalists. Light and simple diets made from grains and vegetables, and eating of fruits ensure good digestive system<sup>1</sup>.

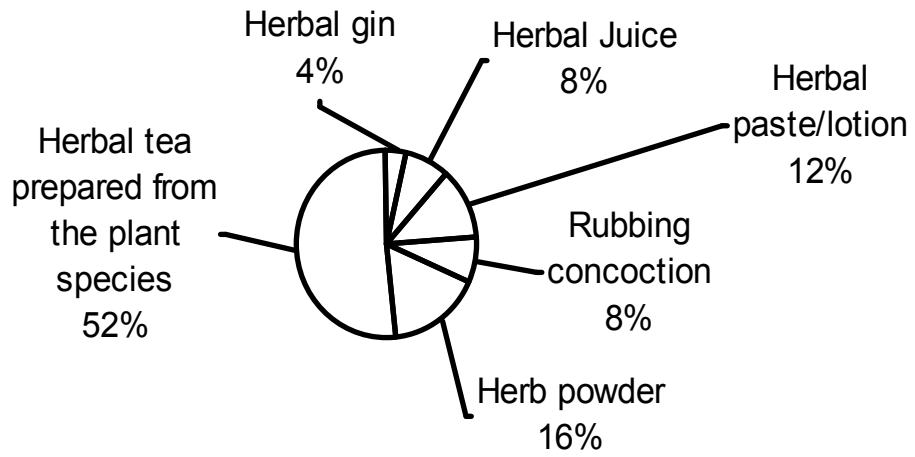
Future surveys should encourage the participation of the son of the soil especially in Oyo State, to allow for easier access to information. A close communication among medicinal plants researchers, traditional medicine practitioners and industrialists should be encouraged. The acceptance of herbal medicines and herbal practitioners by the educated class, the problem of finance and the maintenance of medicinal plants are still of much concern, though some measures of progress have been made in the past. The protection of our rich flora including medicinal plants should be a matter of great concern. Forest reserves should exist to protect forest species, farms/ medicinal gardens should be set up at various local government areas to protect medicinal plants especially those facing extinction. Ethnobotanists may be instrumental in

**Table 2.** Species distribution according to families

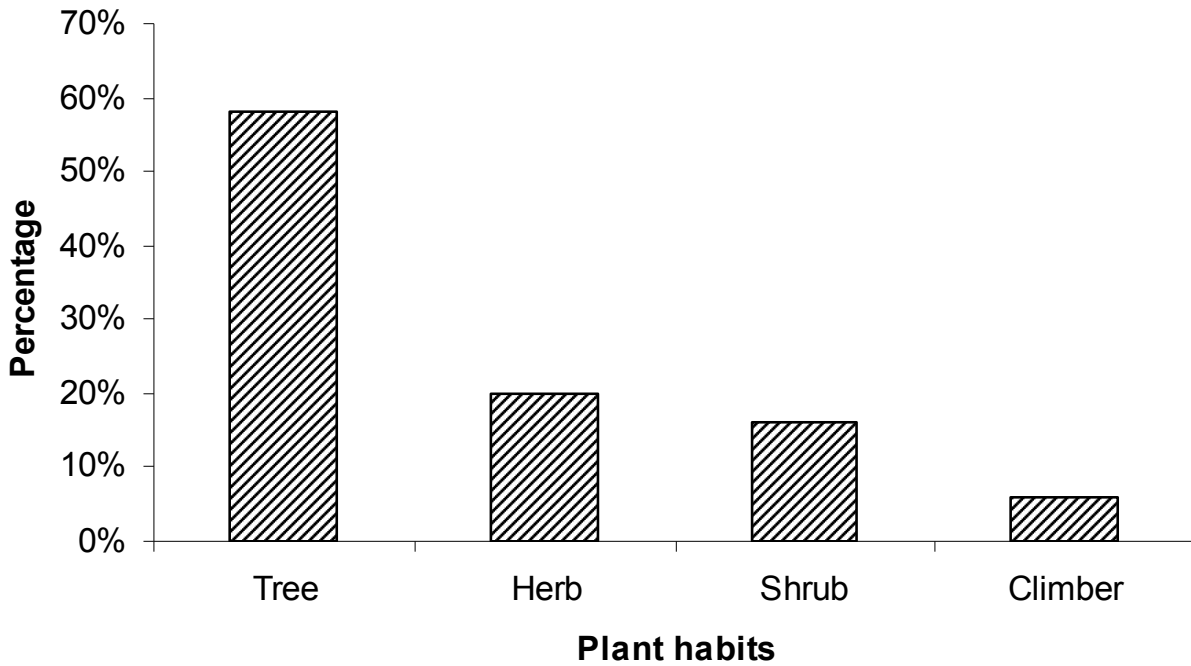
| S. No. | Family                        | Number of species |
|--------|-------------------------------|-------------------|
| 1      | Amaranthaceae                 | 3                 |
| 2      | Amaryllidaceae                | 1                 |
| 3      | Anarcadiaceae                 | 3                 |
| 4      | Annonaceae                    | 4                 |
| 5      | Apocynaceae                   | 6                 |
| 6      | Araceae                       | 1                 |
| 7      | Aristolochiaceae              | 1                 |
| 8      | Asclepiadaceae                | 2                 |
| 9      | Bignoniaceae                  | 1                 |
| 10     | Bombacaceae                   | 2                 |
| 11     | Boraginaceae                  | 1                 |
| 12     | Bromeliaceae                  | 1                 |
| 13     | Caricaceae                    | 1                 |
| 14     | Combretaceae                  | 4                 |
| 15     | Compositae                    | 5                 |
| 16     | Connaraceae                   | 2                 |
| 17     | Crassulaceae                  | 1                 |
| 18     | Cucurbitaceae                 | 3                 |
| 19     | Discoreaceae                  | 1                 |
| 20     | Euphorbiaceae                 | 8                 |
| 21     | Guttiferae                    | 1                 |
| 22     | Hypericaceae                  | 1                 |
| 23     | Hypoxidaceae                  | 1                 |
| 24     | Iridaceae                     | 1                 |
| 25     | Labiatae (Lamiaceae)          | 2                 |
| 26     | Leguminosae - Caesalpinoideae | 12                |
| 27     | Leguminosae - Mimosoideae     | 7                 |
| 28     | Leguminosae - Papilionoideae  | 3                 |
| 29     | Liliaceae                     | 3                 |
| 30     | Loranthaceae                  | 2                 |
| 31     | Lythraceae                    | 1                 |
| 32     | Malvaceae                     | 1                 |
| 33     | Meliaceae                     | 5                 |
| 34     | Menispermaceae                | 3                 |
| 35     | Moraceae                      | 4                 |
| 36     | Moringaceae                   | 1                 |
| 37     | Musaceae                      | 1                 |
| 38     | Myrtaceae                     | 3                 |
| 39     | Nyctaginaceae                 | 1                 |
| 40     | Olacaceae                     | 1                 |
| 41     | Palmae (Araceae)              | 3                 |
| 42     | Periplocaceae                 | 2                 |
| 43     | Piperaceae                    | 2                 |
| 44     | Poaceae                       | 5                 |
| 45     | Polygalaceae                  | 2                 |
| 46     | Portulacaceae                 | 1                 |
| 47     | Rubiaceae                     | 2                 |
| 48     | Rutaceae                      | 2                 |
| 49     | Sapindaceae                   | 2                 |
| 50     | Sapotaceae                    | 2                 |
| 51     | Solanaceae                    | 3                 |
| 52     | Sterculiaceae                 | 3                 |
| 53     | Tiliaceae                     | 1                 |
| 54     | Ulmaceae                      | 1                 |
| 55     | Umbelliferae                  | 1                 |
| 56     | Urticaceae                    | 1                 |
| 57     | Verbenaceae                   | 2                 |
| 58     | Zingiberaceae                 | 2                 |



**Fig.1.** Pie-chart showing the percentage number of species in each of the families



**Fig. 2.** Percentage of respondents' responses to most effective treatment option



**Fig. 3.** Graphical representation of the percentage occurrence of the plant habits used in treating haemorrhoids

**Table 3.** Enumeration of recipes

| Botanical name                               | Vernacular name | Plant part used |
|--|-----------------|-----------------|
| <i>Anthocleista djalonensis</i> A. Chev.     | Sapo            | Bark            |
| <i>Aframomum melegueta</i> K. Schum.         | Atare           | Fruit           |
| <i>Rauvolfia vomitoria</i> Afzel Stirp. Med. | Orira           | Stem bark       |
| <i>ALLIUM SATIVUM</i> Linn.                  | Ayuu            | Bulb            |
| <i>Allium ascolanicum</i> Linn.              | Alubosa elewe   | Whole plant     |
| <i>Eugenia aromatic</i> Linn.                | Kanafuru        | Flower          |
| <i>Acacia nilotica</i> (Linn.) Wild ex. Del. | Booni           | Fruit           |
| <i>Dalbergieuna welwitshii</i> (Bak.) Bal.   | Paran           | Root            |
| <i>Mondora myristica</i> (Geatn) Dunal       | Sasangbaku      | Fruit           |

**Preparation-** Carefully washed *Anthocleista djalonensis* (Sapo) is cut into pieces and placed in a four liter keg with the other plant materials and soaked with clean water and alcoholic beverages. It is left for three to four days because of the hardness of the bark.

**Application-** One tea cup of the extract is taken thrice daily until the hemorrhoid disappears.

|  |             |        |
|--|-------------|--------|
| <i>Khaya grandifoliola</i> C. D. C.      | Oganwo      | Bark   |
| <i>Allium sativum</i> Linn.              | Ayuu        | Bulb   |
| <i>Eugenia aromatic</i> Linn.            | Kanafuru    | Flower |
| <i>Alstonia boonei</i> De Wild           | Awun        | Bark   |
| <i>Cajanus cajan</i> (Linn.) Millsp.     | Otili       | Leaves |
| <i>Terminalia catappa</i> Linn.          | Furutu      | Bark   |
| <i>Manihot esculenta</i> Crantz.         | Ege/Gbaguda | Leaves |
| <i>Carpolobia lutea</i> G. Don.          | Osusun      | Leaves |
| <i>Aframomum melegueta</i> K. Schum.     | Atare       | Seed   |
| <i>Cymbopogon citrates</i> (D.C.) Stapf. | Kooko-oba   | Leaves |

**Preparation-** The above plant materials are cut into smaller sizes and put into an adequate container with the required amount of water. The container with the content is heated and allowed to cool and then it is filtered with a clean cloth. The filtrate should be stored in a refrigerator.

**Application-** Two wine glassful of the filtrate is taken daily till ailment disappears.

|  |          |        |
|--|----------|--------|
| <i>Khaya grandifoliola</i> C. D. C.        | Oganwo   | Bark   |
| <i>Allium sativum</i> Linn.                | Ayuu     | Bulb   |
| <i>Eugenia aromatic</i> Linn.              | Kanafuru | Flower |
| <i>Aristolochia ringens</i> Vahl.          | Akogun   | Root   |
| <i>Detarium microcarpum</i> Guill. & Perr. | Ogbogbo  | Bark   |
| <i>Aframomum melegueta</i> K. Schum.       | Atare    | Seed   |

|   |               |           |
|---|---------------|-----------|
| <i>Axonopus compressus</i> Guill. & Perr.           | Idi           | Stem bark |
| <i>Anogeissus leiocarpus</i> (D. C.) Guill. & Perr. | Ayin          | Stem bark |
| <i>Pteleopsis suberosa</i> Engl. & Diels.           | Okuku         | Bark      |
| <i>Musa paradisiaca</i> Linn.                       | Ogede agbagba | Leaves    |
| <i>Grewia pubescens</i> P. Beauv.                   | Afoforo       | Leaves    |
| <i>Gladiolus daleni</i> van Geel.                   | Baka          | Rhizome   |
| <i>Bridelia Ferruginea</i> Benth                    | Ira           | Bark      |
| <i>Cocos nucifera</i> Linn.                         | Agbon         | Leaves    |

**Preparation-** The plant materials are cut into pieces and put in a container. They are properly rinsed with clean water and boiled for about 20 minutes. It is later allowed to cool and then filtered.

**Application-** One tea cup of the filtrate is taken thrice daily for about two weeks.

|   |               |             |
|---|---------------|-------------|
| <i>Khaya grandifoliola</i> C. D. C.           | Oganwo        | Bark        |
| <i>Allium sativum</i> Linn.                   | Ayuu          | Bulb        |
| <i>Eugenia aromatic</i> Linn.                 | Kanafuru      | Flower      |
| <i>Pteleopsis suberosa</i> Engl. & Diels.     | Okuku         | Bark        |
| <i>Allium ascolanicum</i> Linn.               | Alubosa elewe | Whole plant |
| <i>Acacia nilotica</i> (Linn.) Wild. Ex. Del. | Bonni         | Seed        |
| <i>Gongronema latifolium</i> Berth.           | Madunmaro     | Bark        |
| <i>Aframomum melegueta</i> K. Schum           | Atare         | Fruit       |

**Preparation-** Tincture of the above plant recipes is a recommended remedy.

**Application-** One glassful is taken three to four times daily until full cure is achieved.

|  |               |             |
|--|---------------|-------------|
| <i>Khaya grandifoliola</i> C. D. C.        | Oganwo        | Bark        |
| <i>Allium sativum</i> Linn.                | Ayuu          | Whole plant |
| <i>Eugenia aromatic</i> Linn.              | Kanafuru      | Flower      |
| <i>Pteleopsis suberosa</i> Engl. & Diels.  | Okuku         | Bark        |
| <i>Allium ascolanicum</i> Linn.            | Alubosa elewe | Whole plant |
| <i>Picalima nitida</i> (Stapf.)            | Abere         | Fruit       |
| <i>Calotropis procera</i> R. B.            | Bomubomu      | Leaves      |
| <i>Gladiolus daleni</i> van Geel.          | Baka          | Rhizomes    |
| <i>Detarium microcarpum</i> Guill. & Perr. | Ogbogbo       | Bark        |
| <i>Aristolochia ringens</i> Vahl.          | Akogun        | Root        |
| <i>Aframomum melegueta</i> K. Schum.       | Atare         | Fruit       |

*Tetrapleura tetraptera* (Schun & Thonn) T. Aidan Pod

**Preparation-** All the above plant material are cut into pieces (note that only the soft part of *Tetrapleura tetraptera* (Aidan) is cut into pieces), a decoction is prepared with adequate quantity of water and boiled. It is filtered and mixed with honey.

**Application-** Two table spoonfuls is taken thrice daily for about two weeks.

|   |             |        |
|---|-------------|--------|
| <i>Aframomum melegueta</i> K. Schum.        | Atare       | Fruit  |
| <i>Viscum album</i> Linn.                   | Afomo       | Leaves |
| <i>Synsepalum dulcificum</i> (Radlk) Engl.  | Agbayun     | Leaves |
| <i>Khaya senegalensis</i> (Descr.) A. Juss. | Oganwo      | Bark   |
| <i>Dialum guineense</i> Wild.               | Awini       | Leaves |
| <i>Canthium subcordatum</i> D. C.           | Igi Elere   | Bark   |
| <i>Senna fistula</i> Linn.                  | Aidan tooro | Bark   |
| <i>Clerodendron splendens</i> G. Don.       | Dagba       | Leaves |
| <i>Stephania dinklagei</i> Lour.            | Gbejedi     | Bark   |
| <i>Carica papaya</i> Linn.                  | Ibepe       | Leaves |
| <i>Moringa oleifera</i> Lam.                | Ewe igbale  | Leaves |
| <i>Allium sativum</i> Linn.                 | Ayuu        | Bulb   |

**Preparation-** All the barks are pulverized (ground into fine powder) and separated from the leaves. The clean dried leaves and bulbs are also tinctured, after which they are mixed together and poured into a container with clean water for boiling and covered with a lid. It is warmed for further use.

**Application-** One tea cup is administered thrice daily until the ailment is cured in about two weeks.

this context through developing guidelines for the setting-up of community-based nurseries and gardens, with proper identification of the tree varieties for developing these tree varieties *ex situ*. Our diets are about 90% carbohydrates or sugar, the fact is possibly responsible for the increasing incidence of sugar related to Haemorrhoids<sup>18</sup>.

Conclusively, conservation of plants is necessary as it ensures the availability of plants for traditional herbalists, traditional healers and herb sellers. One major advantage of traditional medicine is that, it is cheaper than orthodox medicine and readily available.

## References

1. Neame PB and Pillay VKG. 1964. Spontaneous hypoglycaemia, hepatic and renal necrosis following the intake of herbal medicines. *South African Medical Journal*, 38:729-732.
2. World Health Organisation (WHO) 1977. Resolution-promotion development of training and research in traditional medicine. WHO Document No. 30:49.
3. World Health Organisation (WHO) 1976. African traditional medicine. *Afro Tech. Rep. Series 1*. WHO Brazaville, pp 3-4.
4. Gbile ZO and Adesina SK. 1987. Nigerian Flora and its Pharmaceutical Potential. *Journal of Ethnopharmacology*, 19:1-16.
5. Gbile ZO, Soladoye MO and Adesina SK. 1988. *Plants in traditional medicine in West Africa*. In: Modern Studies in African Botany, (Goldblast P and Lowry PP, Eds.) pp 343 – 349. Published by Missouri Botanic Gardens, Missouri, USA.
6. Soladoye MO, Yakubu FA, Kola-Oladiji K, Alabi DA and Agbomeji YO. 2006. *The collection, conservation and cultivation of local medicinal plants for natural medicine production*. Paper presented at the Seminar/Workshop and Exhibition of Natural Medicine Products.

- Organized by Nigeria Traditional Medical Association, Ijebu-North in Collaboration with Faculty of Science, Olabisi Onabanjo University Agp-Iwoye, held 19-23 September, 2006.
7. Thomson WHF. 1975. The nature of haemorrhoids. *British Journal of Surgery*, 62:542-552.
  8. Hedberg JM. 1993. The role of exercise twining in the treatment of haemorrhoids. *Mcd*. 30:193-206.
  9. Elewude JA. 1986. *Jatropha curcas*- 'Lapalapa funfun'. In: The State of Medicinal Plant Research in Nigeria, (Sofowora A, ed.) Univ. of Ibadan Press, Nigeria. pp153-157.
  10. Hass PA, Fox TA and Hass GP. 1984. The pathogenesis of Heamoroids. *Diseases of the Colon & Rectum*, 27:442-450
  11. Slezak FA and Hutch L. 1987. Combined ligation injection treatment of Haemorrhoids. *Diseases of the Colon & Rectum*, 30:147-148.
  12. Duke J. 1989. *Foods as pharmaceuticals*. In: Simon, J. E; Kestner, A and Buchrie, M. A (eds) Herbs 89. Proceedings of the fourth herbs growing amd marketing conference, San Jose, CA. July 22-25 pp 166-167.
  13. Gary J and Martins. 1995. *Ethnobotany. A people and Plants Conservation Manual*. Chapman and Hall. U.K. 268pp.
  14. Treben M. 1986. *Health through God's Pharmacy. Advice and experience with Medicinal Herbs. Ennsthaler*. Austria. 88pp.
  15. Holmgren PK and Keuken W. 1974. *Index herbariorum*. Part I, ed. 6. *Regnum Veg*. 92: 1-397.
  16. Ramana MV. 2008. Ethnomedicinal and ethnoveterinary plants from Boath, Adilabad district, Andhra Pradesh, India. *Ethnobotanical Leaflets* 12: 391-400. 2008.
  17. Pei SJ. 2001. Ethnobotanical approaches of traditional medicine srudies: Some experiences from Asia. *Pharmaceutical Biology*, 39:74-79.
  18. Olapade EO. 1995. The Herbs for Good Health Series. 3:113-114