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National Center for Research (NCR)



Medicinal and Aromatic Plants and
Traditional Medicine Research Institute



Medicinal Plants of the Sudan

Part VI

MEDICINAL PLANTS OF THE RED SEA STATE



Khartoum - Sudan
Oct. - 2020



RED SEA STATE

**Medicinal Plants of
Sudan**

Medicinal Plants of the Red Sea State

Part VI

By

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I.S.B.N.;

Foreword to part I

The relationships between Man and plants has always been a very close one throughout the development of human culture, and no doubt, the herbalist is probably one of the first professionals in the evolution of human cultures. Today, the plant kingdom still remains a virtually untapped reservoir of new compounds, some provide novel structures from which synthetic chemists may derive even more interesting compounds.

The information contained in ancient botanical and herbal writings is usually the major source of medicinal folklore. In the Sudan, medicinal folklore passed from one generation to another, but was never documented. There exists however some reports (Welcome Research Laboratory Reports, Sudan Notes and Records and Broun and Massey 1929). More organized institutional research and documentation on medicinal plants were initiated by the department of Pharmacognosy, Faculty of Pharmacy, University of Khartoum. These were further developed by the establishment of the Medicinal and Aromatic Plants Research Institute in 1970, National Council for Research, in collaboration with the department of Botany, Faculty of Science, University of Khartoum.

Sudan folklore medicine represents a unique blend of indigenous cultures with Egyptian, Indian, Arabian, East and West African cultures. The Medicinal and Aromatic Plants Research Institute has drawn an urgent short term objective to issue an atlas of medicinal plants used in Sudanese folk medicine. This in view of a number of factors such as drought, desertification, expansion of agricultural schemes and the introduction of health services to primitive areas which has initiated astonishingly rapid changes leading to the least use of native medicines which would eventually disappear.

This work, is the first comprehensive documentation of medicinal Plants in Erkowit, Red Sea Hills. Great care was taken in illustrating the plants so as to help non taxonomists in the identification of the plants used.

It is hoped that this book will be followed by others on the determination of the important economic and medicinal plants of the Sudan.

Professor Ahmed Khider Bashir
Director, Medicinal and Aromatic Plants Research Institute
National Council for Research,
Khartoum, Sudan
August 1986

Foreword to part IV

The utilization of parts of indigenous plants for making beverages, special foods and as medicines has always been a characteristics of people in various parts of Sudan. For instance, the use of Gngleis, Aradeib, Godaim and Karkadeh; fruits of Tabaldi (*Adansonia digitata*), Tamarind (*Tamarindus indica*), Godaim (*Grewia tenax*) and Roselle (*Hibiscus sabdariffa*) respectively, for making beverages for domestic use and in the service sector was always a characteristic of western Sudan. The use of these beverages has recently spread to virtually all parts of the country. These drinks have also found their way to government offices, official functions and big hotels.

More recently, and due to environmental, demographic and socio economic factors, the use of decoctions from these and other sources as remedial treatment for various ailments particularly malaria has become almost a normal domestic practice all over the country. However, the notion is yielding a mixed impact on the respective plants. The recognition has been beneficial to such plants as Godaim in that it has lead to its conservation and propagation. This is so much so that seedlings thereof are been raised in most forest nurseries and the species is almost the popular ones in popular tree planting campaigns. On the other hand however, the indiscriminate illegal removal of bark from Mahogany (*Khaya senegalensis*) for medicinal use is posing a genuine threat to the tree in its natural habitat, in plantations and to avenue trees.

The "**Medicinal Plants of Northern Kordofan Region**", part IV in the series towards the "**Atlas of Medicinal Plants of Sudan**" is pursuing the same pattern as its predecessors. Emphasis has been given to updating of nomenclature including citation of vernacular and common names together with line illustrations. A Total of 59 plant species reputed to have folkloric medicinal use belonging to 58 genera and 37 families are being portrayed.

It is hoped that Part IV will be a valuable addition to the knowledge of all who are involved in the handling and use of medicinal plants for all purposes. It is also hoped that the series will stimulate the sustainable cultivation of such plants.

**Professor Hassan Osman Abdel Nur
General Manager
Forests National Corporation
Khartoum, Sudan
May 1997**

Foreword to part V

Medicinal plants have been attaining recognition all over the globe. The World Health Organization (WHO) has estimated that 80 % of the population of the developing countries rely on traditional medicine, mainly medicinal plants for their primary health care needs. 25% of the prescription drugs in the united States and up to 60% of those in Eastern Europe proved to consists of unmodified or slightly altered plant products.

In Sudan, people have been tapping their herbal remedies for medication for time immemorial. For this purpose they used a vast variety of plants ranging from the Rain Forest vegetation in the south, to the desert vegetation of the north and from the semi Mediterranean climate of the Red Sea to the rich Savanna of the west.

The Ingassana area represents one of the richest areas in Sudan, both in medicinal plants and in the number of indigenous people relying solely on this type of medication, with an interesting blend of herbal practitioners.

The present part, part V, with more or less the same pattern of the previous ones, constitutes an important addition to the series of Medicinal Plants of Sudan".

Even before the publication of this book, researchers in the Medicinal and Aromatic Plants Research Institute found interesting results from many plants included in this volume. It is hoped that this book will stimulate further research and investigation of medicinal plants in Sudan. In order to make use of this vital natural resource and upgrade the national economy of the country.

Professor Mohammed Galal M. Ahmed
Director, Medicinal and Aromatic Plants Research Institute
National Centre for Research
Khartoum, Sudan
March 2003

Preface

The present book represents another part of the series comprising the "**Atlas of Medicinal Plants of Sudan**", a project fostered by Medicinal and Aromatic Plants Research Institute, Khartoum, Sudan, (Project No. 4/N/1). It is a long-term project proposed in 1972 with the establishment of the Medicinal and Aromatic Herbs Research Unit, Medical Research Council, National Council for Research. The project was designed to document primary information on the medicinal plants and their folkloric uses in the different regions/States of the Sudan. Medicinal plants of each region/ State will be published in a separate part. In the last phase of the project, all published parts will encompass the "Atlas of Medicinal Plants of the Sudan".

Previous parts of the project "Atlas of Medicinal and Aromatic Plants of Sudan" cover the following areas:

Part	Area covered	No. of families	No. of Genera	No. of species
I	Medicinal plants of Erkowit	17	19	20
II	Medicinal plants of the Eastern Nuba Mts.	35	61	76
III	Medicinal plants of the White Nile Prov.	26	43	46
IV	Medicinal plants of Northern Kordofan	37	58	59
V	Medicinal plants of Ingassana Area	32	49	55

The present study (part VI) of the series is devoted to Red Sea State, an area which differs from that elsewhere in the country with respect to its human population composition and vicinity to the Red Sea with its four geomorphological zones: the coastal plain, Tokhar Delta, Red Sea Hills and the western plains.

Obviously, the present study has been aided by a great array of colleagues, herbalists, technicians, workers, car-drivers, etc. It is not possible to acknowledge all such valuable help except by this general statement of hearty thanks and appreciations. However, special thanks are due to Mr. Mohammed Tahair Mohammedain and Hassan Mosa Sabroob.

Professor Gamal E.B. El Ghazali
Project leader
Atlas of Medicinal Plants of Sudan
Medicinal and Aromatic Plants Research Institute

Introduction

The Red Sea State is located in the north-eastern sector of the Sudan (Map 1), approximately between Latitude 15° 52' – 23° 15' N and Longitude 33° 15' – 38° 45' E. The State which is more or less half-moon in outline occupies an area of almost 230,000 square kilometers. The State is bounded from the east by the Red Sea and from the west by the Atmum Desert. The southerly boundaries fringe Kassala State and the international borders with Eritrea, while the northern limits fall along the borders with Egypt. The State may broadly be divided up into four main subsystems:

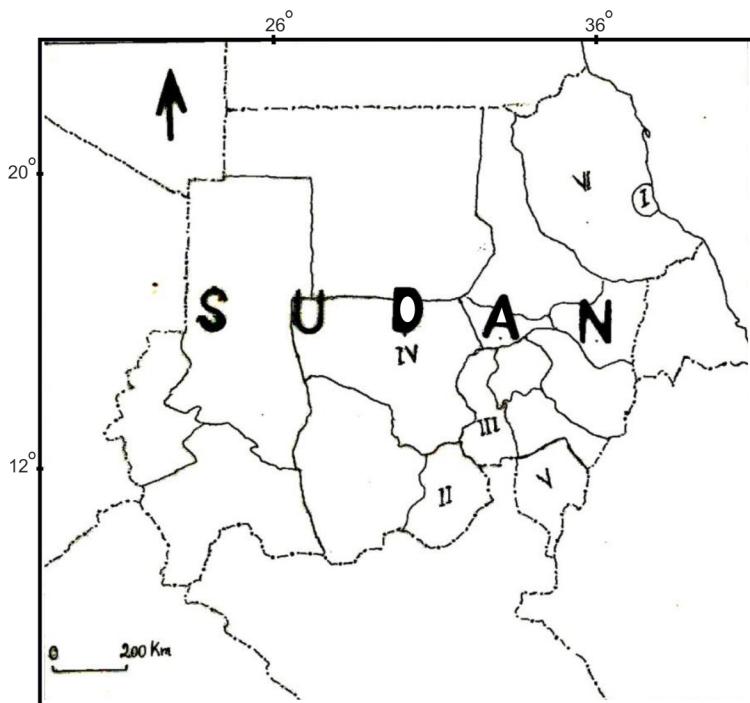
- The coastal plain: a narrow strip between 20-40 Km. wide that includes the salt marsh and a semi-desert plain east of the Red Sea Hills.
- The Red Sea Hills: the undulating highland that lie parallel to the coastal plain and run obliquely in a north-south axis extremely between the Egyptian borders and the Eritrean frontier.
- Semi-desert plain: constitute rain-shadow plains west of the Hills.
- Desert: the barren expanses that occupy the north-western part of the State, adjoining the Atmum Desert.

The present study covers the wild medicinal plants, which had been collected from the area during eight field trips carried out from October 1988 until January 1991.

Generally, the climate of the Red Sea Area is considered to be tropical arid/ semi-arid with low rainfall. The geographical location, the presence of the Red Sea , and the Red Sea hills as an effective physical barrier, have a pronounced effect on the climate of the region. The hills promote orographic rains and reduce temperature. As a result of this, the climate of the Red Sea Region differs from that of elsewhere of the same latitude in the country.

The human population can be categorized in rural and urban population types. The rural population can be settlers or nomads, and is composed of four major ethnic groups: Beja, Beni-Amer, Rashida and other minor groups. The urban population is largely derived from the above mentioned groups mixed with small groups from outside the region.

A total number of (72) species belonging to (60) genera and (41) families were delimited as having medicinal folkloric uses. The plants studied are arranged alphabetically under their subsequent families. Inaddition to the medicinal folkloric uses of each species, the study was supplemented with updated Latin names, synonyms, vernacular names (vern.) names in Hadendawa (H.), Arabic (Ar.), Beja (B.), Beni- Amer (B.A.), Kamelab (K.) and Tigre (T.). Notes on their habit and habitat were also included.



I	Erkowit
II	Eastern Nuba Mountains
III	White Nile Provinces
IV	Northern Kordofan
V	Ingassanana Area
VI	Red Sea State

**Map 1. Present and previous areas covered by
"Atlas of Medicinal Plants of Sudan"**

Aloaceae (Asparagaceae)



***Aloe sinkatana* Reynolds, Journ. S. African Bot. 23 :39 (1959).**

Synonyms	<i>A. abyssinica</i> sensu B. & M., non Lam. ; <i>A. eru</i> sensu Andr. non A. Berger.
Vern. Names	(Ar.) SABAR, (H.) KALANDOY, KALANDDO, (B.A.) and (K.) ABUR, (B.A.) ABIT, (K.) BIRE.
Habit:	Erect succulent acaulous growing singly or in groups, up to 1 m high.
Habitat :	Sandy gravelly khors; 800 - 1000 m.
Folk-uses:	The whole plant is used for diabetes, constipation, rehumatism, as a lotion in ophthalmia, and as a vermifuge.

Amaranthaceae



Achyranthes aspera L., Sp. Pl.:204 (1753).

Synonyms	<i>Achyranthes acuminate</i> E. Mey. Ex Cooke & Wright <i>A. argentea</i> Lam., <i>A. indica</i> (L.) Mill.
Vern. Names	(Ar.) KHASHM EL NASIBA, ABRUKAB, DANAB EL ABILANI, FAKHAH NA'ANA'A, ANAWIDIK, ERG EL ASDA, ERG EL DAM, (H.) DARATNIUWA.
Habit:	Erect or straggling perennial herbs or suffrutescent.
Habitat :	Rocky places; up to 1100 m.
Folk-uses:	Root chewed and used as a styptic on cuts to stop bleeding. Remedy for piles, toothache, dysentery, scorpion and snake-bites. The whole plant is also used as a poultice to cure wounds.



***Aerva javanica* (Burm.f.) Juss. ex Schultes, Syst. Veg., ed. 15, 5:565 (1819).**

Synonyms :	<i>Celosia lanatra</i> L., <i>Iresine persica</i> Burm.f., <i>javanica</i> Burm.f., <i>A. tomentosa</i> Forssk., <i>A. persica</i> (Burm.f.) Merr.
Vern. Names :	(Ar.) RAS AL SHAIB, SHAJARAT AL NAJA, GHAUBEISH, SHEIBA, LERU, EL LARA, ARA, (H.) and (B.) EIGAB.
Habit:	Erect perennial herbs or undershrubs.
Habitat :	Sand or rocky grounds; 100-1000 m
Folk-uses:	Leaves used as a poultice for headache, stems use as a remedy for wounds.

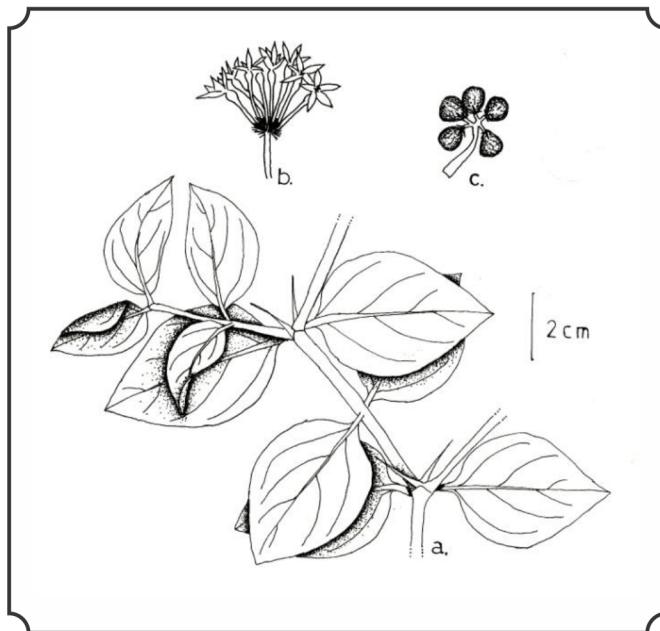
Amaryllidaceae



Scadoxus multiflorus (Martyn) Raf., Fl Tellur. 4:19 (1838).

Synonyms :	<i>Amaryllis multiflora</i> (Martyn) Tratt., <i>Haemanthus multiflorus</i> Martyn, <i>H. rupestris</i> Bak., <i>H. filiflorus</i> Bak., <i>H. micrantherus</i> Pax., <i>H. eurysiphon</i> Harms.
Vern. Names	(Ar.) GASH EL FIL, ZANBAG EL DAM.
Habit:	Erect perennial herbs; bulb globose rhizomatous.
Habitat :	rocky places; 900-1100 m.
Folk-uses:	Plant diuretic, used in dropsies and for asthma. Leaves are antiseptic for foul ulcers, anthrax pustules and to keep wound dressing moist. The bulb is used as a poultice for dog and snake bites

Apocynaceae



***Carissa edulis* (Forssk.) Vahl, Symb. Bot. 1:22 (1790).**

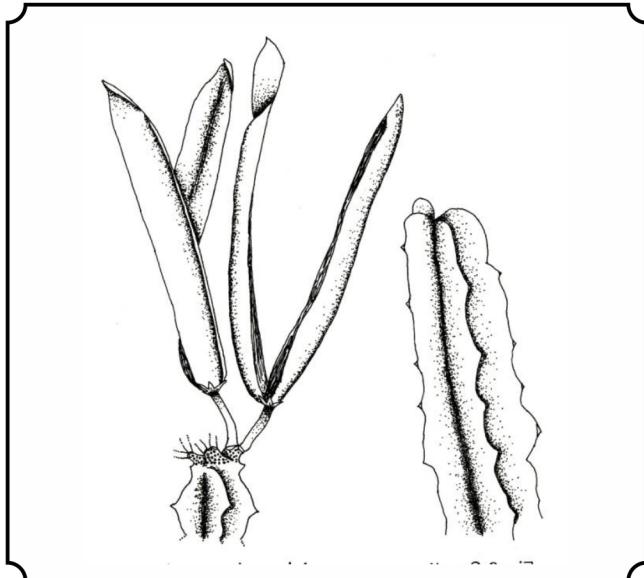
Synonyms :	Anturia edulis Forssk., Carissa tomentosa A. Rich., C. edulis Forssk. var. tomentosa (A. Rich.) Stapf., C. edulis Forssk. var. major Stapf.
Vern. Names	(H.) HARNAB, (R.) AGAM, (T.) AGAAMAT, (B.A.) and (K.) CAGAM, (Ar.) ALLALI, ANSAAR, SA'HAR EL FAI.
Habit:	Erect, much branched thorny shrubs or small trees with zigzagging branches, up to 3 m high.
Habitat :	rock hill slopes and sandy khor edges; 1000.-1951 m.
Folk-uses:	Used as a remedy for chest, gastric ulcers and cough. Reported as anthelmentic, aphrodisiac and abortifacient.

Asclepiadaceae (Apocynaceae)



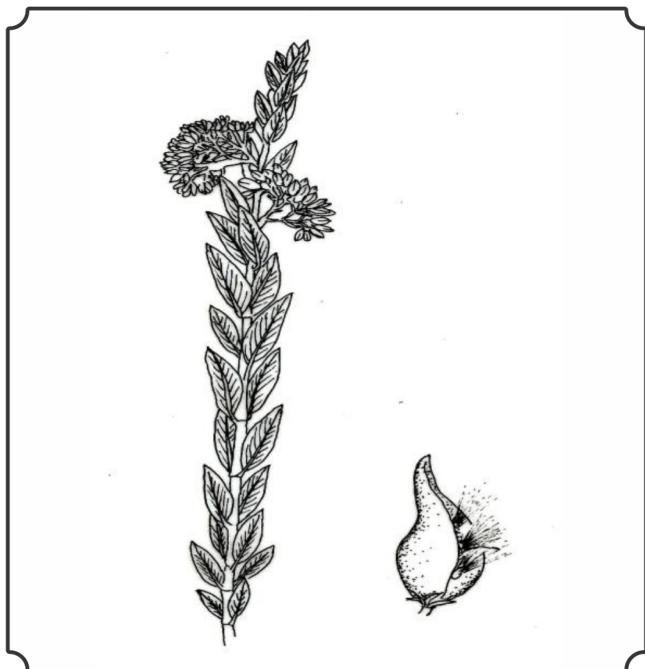
Calotropis procera (Ait.) Ait. f., Hort. Kew 2, 2:78 (1811).

Synonym :	Asclepias procera Ait., Apocynum syriacum Garsault., Asclepias gigantean Willd., A. patula Decne.
Vern. Names:	(Ar.) USHAR, (Engl.) SODOM'S APPLE.
Habit:	Ashy glabrous, ascending to erect, soft woody shrubs or small trees, up to 3 m high.
Habitat :	Lowland plains, water catchment areas, waste grounds.
Folk-uses:	The latex is applied locally against vitiligo, rheumatism, and eczema.



***Caralluma acutangula* (Decne.) N. E. Br., Gard. Chron. Ser. 3, 12 : 369 (1892).**

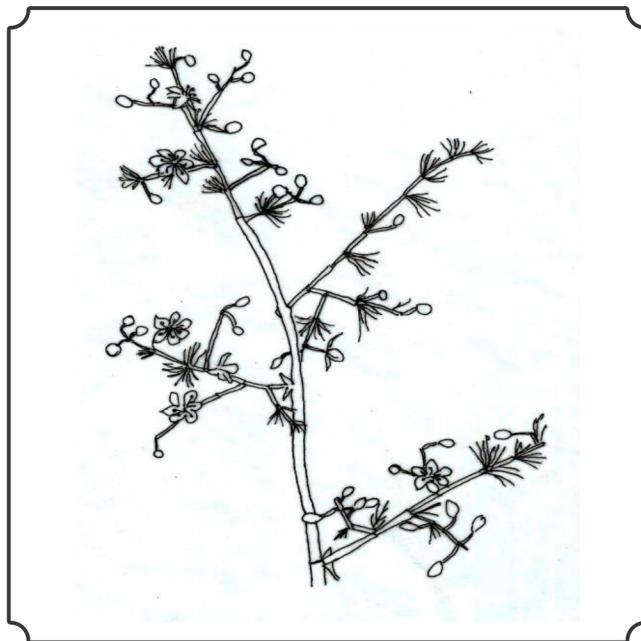
Synonyms :	<i>C. retrospiciens</i> (Ehrenb.) N.E.Br., <i>C. russelliana</i> (Courb ex Brongn) Cufod., <i>Desmidorchis retrospiciens</i> Ehrenb., <i>Boucerosia acutangula</i> Decne, <i>Atapelia desmidorchis</i> Steud.
Vern. Names :	(H.) and (B.) KAREIB, (H.) KARIB KABIR, (B.A.) WALADGINSHI, (B.A.) and (K.) WALADOINSHI, (T.) WAD KENSHI.
Habit:	Erect succulent perennial herbs, with 4-winged branches and nasty smelling flowers, up to 1 m high
Habitat :	sandy gravel soils of dry mountainous slopes; 800-933 m.
Folk-uses:	The latex taken orally for diabetes.



***Solenostemma argel* (Del.) Hayne, Getreue Darstell. Gew.9, t.38 (1825).**

Synonyms :	<i>S. oleifolium</i> (Nect.) Bullock & E.A. Bruce ex Bullock, <i>Cynanchum arghel</i> Del., <i>Cynanchum oleifolium</i> Nect.
Vern. Names :	(Ar.) HARGAL.
Habit:	Glabrous much-branched from the base, erect perennial herbs up to 1 m high.
Habitat :	Stony and sandy wadis, 500-700 m.
Folk-uses:	The infusion of the leaves are used for colic, constipation and malaria.

Asparagaceae



***sparagus racemosus* Willd., Sp. Pl. 2 :152 (1753).**

Synonyms :	<i>Asparagus rigidulus</i> Nakai, <i>Protaspasparagus racemosus</i> (Willd.) Oberm., <i>Asparagus acerosus</i> Roxb., <i>A. dubius</i> Decne, <i>Asparagopsis abyssinica</i> Kunth.
Vern. Names :	(Ar.) DAYOK, BEKHEISET
Habit:	Glabrous rambling and scandent prickly undershrubs with terete and woody branches
Habitat :	sandy soils; about 100 m.
Folk-uses:	Used as demulcent, diuretic, anti-dysenteric, antipyretic.

Asphodeolaceae



***Asphodelus fistulosus* L., var. *tenuifolius* (Cav.) Bak., Journ. Linn. Soc. :272 (1824).**

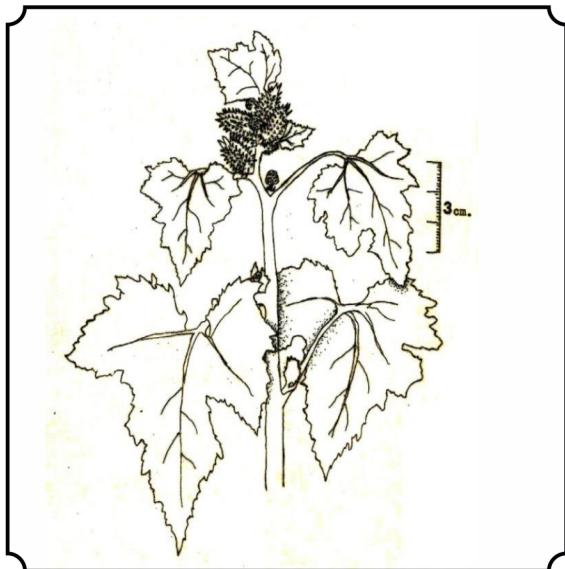
Synonyms :	<i>A. fistulosus</i> Forssk.; <i>A. tenuifolius</i> Cav.
Vern. Names :	(Ar.) BISAYLOON, BARWAG, BAROQ, (H.) O'HANDEBAY (Engl.) WILD ONION, ONION ASPHODEL.
Habit:	Erect annual or biennial herbs with dense basal rosette leaves, fleshy and fusiform roots, up to 1 m high.
Habitat :	sandy and stony grounds, water catchment areas, weed of cultivation; 100-800 m.
Folk-uses:	Seeds diuretic and a lotion in ophthalmia. Fruits for snake and scorpion bites, and emmenagogue.

Asteraceae



***Blumea viscose* (Mill.) V.M. Badillo., Revista Fac. Agron. (Maracay) 7: 9 (1974).**

Synonyms	<i>Blumea aurita</i> (L.f.) DC., <i>Pseudoconyza viscos</i> (Mill.) D'Arch, <i>Conyza viscose</i> Mill., <i>Conyza aurita</i> L.f., <i>Laggera aurita</i> (L.f.) C.B. Clarke,
Vern. Names	(Ar.) UM SHYKONA, (H.) LIEEB (Engl.) STICKY BLUMEA.
Habit:	Glandular Pubescent erect or decumbent annual aromatic herbs up to 1 m high.
Habitat :	Savannal region, wetlands, flood plains, disturbed areas, water catchment areas.
Folk-uses:	Maceration of the powdered whole plant for toothache, rheumatism and spasm.



***Xanthium strumarium* L., Sp. Pl., ed 1, 987 (1753).**

Synonym s :	<i>Xanthium brasiliicum</i> Vell., <i>X. strumarium</i> L. ssp. <i>brasiliicum</i> (Vell.) O.de Botos & J. Vigo., <i>X. abyssinicum</i> Wallr., <i>X. californicum</i> E.L. Greene., <i>X. indicum</i> Konig ex Roxb., <i>X. italicum</i> Moretti.
Vern. Names	(Ar.) RAMTOUK, RANTOUK, LUSSEIG, ABAK.
Habit:	Scabrid tomentose erect branching annual herbs up to 80 cm high with appressed minute white hairs and branched stems.
Habitat :	Coastal dunes, cultivated fields, waste grounds.
Folk-uses:	Powdered leaves taken orally for malaria, thyroiditis and diabetes.

Balanitaceae (Zygophyllaceae)



***Balanites aegyptiaca* (L.) Del., Descr. Egypte, Hist. Nat. 221 (1813).**

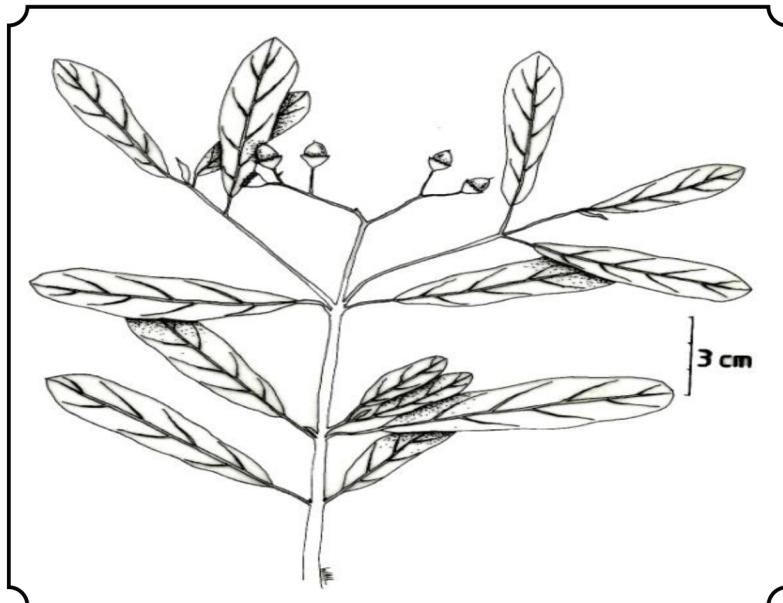
Synonyms :	Ximenia aegyptiaca L., Agialida aegyptiaca Kuntze, <i>Balanites racemosa</i> Chiov.
Vern. Names:	(Ar.) HEGLIG, fruit LALOB, (H.) SASSUD, SHASHOT, (B.) SHAASHOAT, SHASHAB; (B.A.) and (K.) OG-OGAT, (B.A.) QOG, QOGAT.
Habit:	Spinescent savannah, erect shrubs or trees up to 5 m high.
Habitat :	clay and silty khor edges; 100-1143 m.
Folk-uses:	Different parts of the plant possess laxative effect. Fruits powder is taken orally on empty stomach for constipation and jaundice.

Boraginaceae



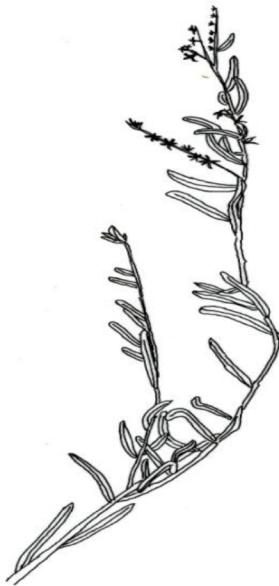
***Arnebia hispidissma* (Sieber ex Lehm.) DC., Prodr. 10 :94 (1846).**

Synonyms :	<i>Anchusa asperrima</i> Del. , <i>Lithospermum hispidissma</i> Sieber ex Lehm., <i>Arnebia asperrima</i> (Del.) Hutch. & Dalz.
Vern. Names :	(Ar.) GHAREIR, (B.) ATANAAB, AWAI, AWAT.
Habit:	Erect annual bushy herbs.
Habitat :	sand between rocks; 500-1000 m.
Folk-uses:	Used against snake-bites. The powdered whole plant with sesame oil is applied on chests for cough and chest pains.



***Cordiasinensis* Lam., Tabl. Encycl. Meth. Bot. 1:423 (1792)**

Synonyms :	<i>Cornus gharaf</i> Forssk., <i>Cordia rothii</i> Roem. & Schult., <i>C. gharaf</i> (Forssk.) Ehrenb. ex Aschers., <i>Cordia reticulate</i> Roth in Roem. & Schult., <i>Cordia subopposita</i> A. DC.
Vern.Names:	(Ar.) HUNDERAB, INDERAB, INDRAB GIMBIL, GIMBIL, MUNDERAB, (H.) DERAB.
Habit:	Scabrid much-branched erect shrubs or small trees up to 3 m high
Habitat :	Edges of sandy rocky khors, water catchment areas, lowland plains; about 200 m.
Folk-uses:	Root used as abortifacient and stems to treat wounds.



***Heliotropium strigosum* Willd., Sp. Pl. 1 :743 (1798).**

Synonyms :	<i>H. cordofanum</i> DC. & A.DC., <i>H. brevifolium</i> Wall., <i>Euploca strigosa</i> (Willd.) Diane & Hilger.
Vern. Names:	(Ar.) IRG EL DABEIB, (H.) KOKAR HANDEEB.
Habit:	Hirsute erect or spreading annual or perennial herbs up to 50 cm high with solid, angled stems and rough longitudinally fissured bark.
Habitat :	Lowland plains, open desert scrub, moist grounds, sandy gravel soils at foot of rocky hills or wadies; 100-1951 m.
Folk-uses:	Laxative and diuretic; used for snake-bite, healing of wounds and ulcers.

Brassicaceae



***Anastatica hierochuntica* L., Sp. Pl. 641 (1753).**

Synonym :	<i>Anastatica littoralis</i> Salish, <i>Myagrum hierochunticum</i> (L.) Crante.
Vern. Names:	(Ar.) KAFF MARIAM, SHAJARAT MARYAM, SHAJARAT AL-KHALAS, (Engl.) MARIYAM'S FLOWERS, TRUE ROSE OF JERICHO.
Habit:	Stellate_ hairy erect annual woody herbs with dichotomous branches and the whole plant dying away with the branches curled inwards enclosing the persistent racemes of siliculas and open hygroscopically during rains.
Habitat :	Sandy and silty soils; 50-500 m.
Folk-uses:	Dried plant used to reduce pains and facilitate child birth, as an emmenagogue; for epilepsy and cold



***Farsetia longistyla* Baker, Bull. Misc. Inform. Kew.: 211 (1895)**

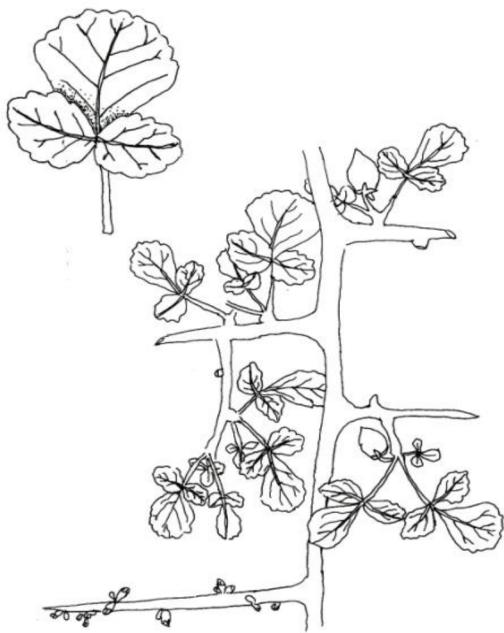
Synonyms :	<i>F. stylosa</i> R.Br., <i>F. longisiliqua</i> Decne.
Vern. Names:	(H.) HOOK, ABAHA GAWI.
Habit:	Annual or perennial much branched erect herbs with woody bases and slender, rather rigid divaricate branched with yellow barks, up to 1 m high.
Habitat:	Sandy-gravelly plains, among rocks, coastlands, among rocks and roadsides; 200 1000 m.
Folk-uses:	Dried or fresh stems for wound healing.



***Zilla spinosa* (L.) Prantl in Engl.& Prantl., Nat. Pflanzenfam. 3, 2 :175 (1891).**

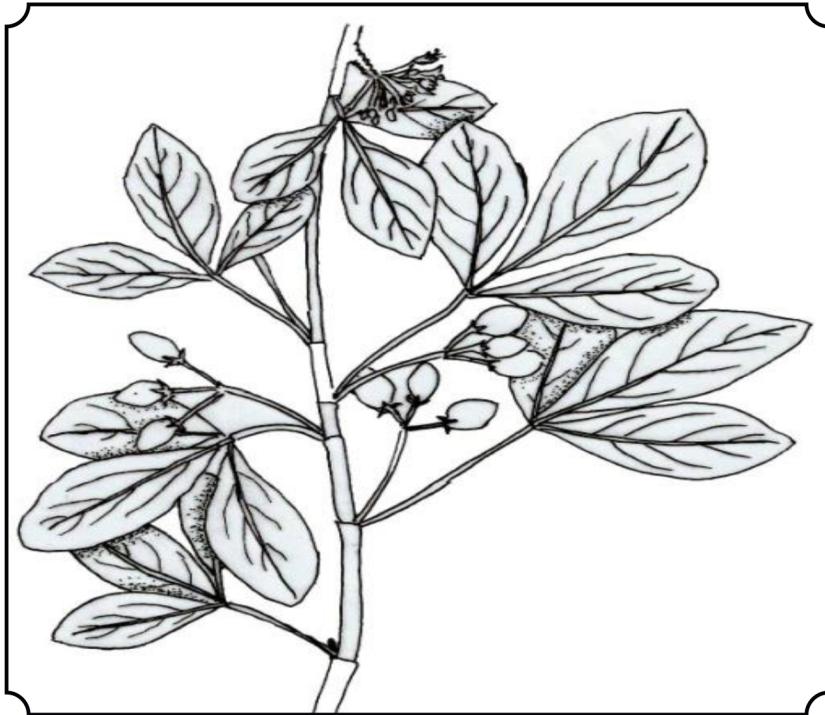
Synonyms :	Z. <i>myagroides</i> Forssk., Z. <i>microcarpa</i> Vis., <i>myagroides</i> Forssk. var. <i>microcarpa</i> Oliv., <i>Bunias spinosa</i> L.
Vern. Names :	(Ar.) SILLA, SHABRAM, (H.) ANOW ETAYI
Habit:	Glaucous erect perennial herbs or shrubs with densely dichotomously branched spine-tipped stems.
Habitat :	Sandy soils, sandy plains, stony wadis; 100-500 m.
Folk-uses:	A remedy for kidney stones. The fumes of the powdered whole plant is used for cough.

Burseraceae



Commiphora africana Engler in DC., Monogr. Phan. 4:149 (1883).

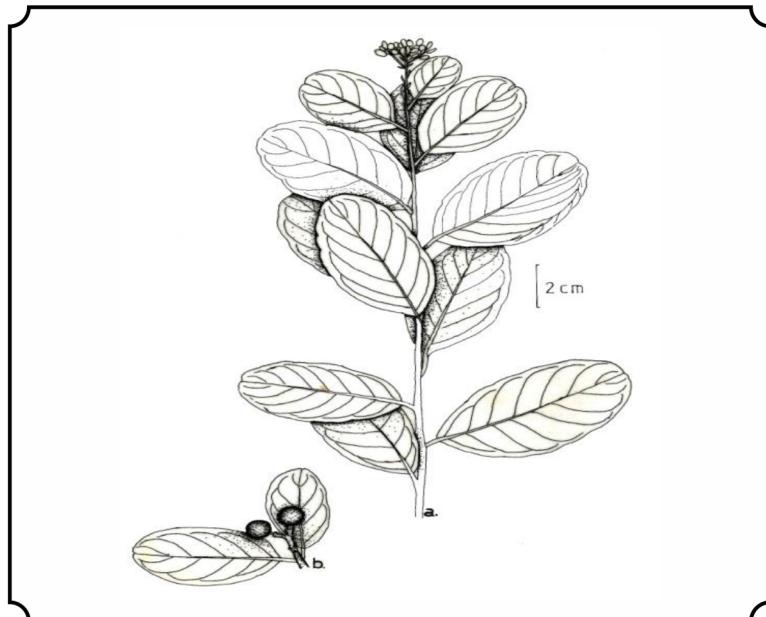
Synonyms :	<i>Heudelotia africana</i> A. Rich. in Guill. & Perr. <i>Balsamodendron africanum</i> (A. Rich.) Arn.
Vern. Names :	(Ar.) GAFAL, (B.A.)and(K.) ANGAI,(H.) HAMAT,(B.) MAYAKW.
Habit:	Erect shrubs or small trees with green and shinning, resin-scented, flaking in papery scales barks.
Habitat :	rocky grounds; 1100-2800 m
Folk-uses:	Bark for sterility and scorpion stings.The stems are used for the ailment of dermatitis, cough, flu and measles.



***Commiphora erythraea* (Ehrenb.) Engler. in DC., Monog. Burs. 55:10
(1883)**

Synonyms :	<i>Balsamea erythraea</i> Engl., <i>Hemprichia erythraea</i> Ehrenb.
Vern. Names:	(Ar.) ANDRAB EL JABAL, (H.) RABAI DERAB.
Habit:	Small trees with short without spines branches, bark flaking off in irregular large pieces and spotted, up to 8 m high.
Habitat :	hill rocky slopes; 700-1100 m.
Folk-uses:	Gum for snake bites. The stems are used as a powder to treat wounds.

Capparidaceae



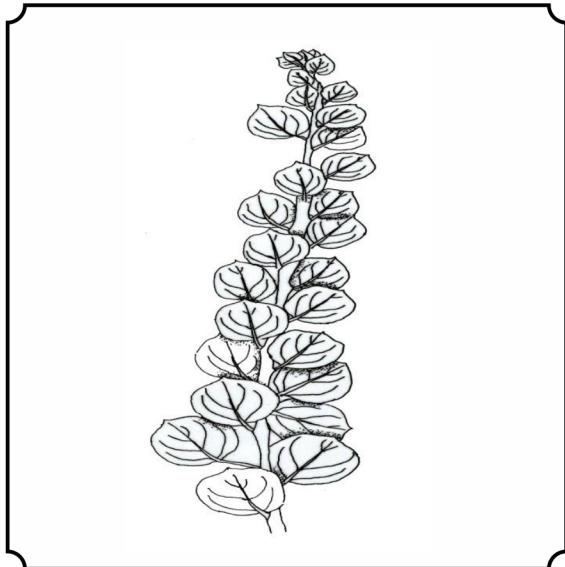
Boscia senegalensis (Pers.) Lam. ex Poir. in DC., Prodr. 1:244 (1824).

Synonyms :	<i>Boscia firma</i> Radlk., <i>B. hypoglauca</i> Gilg., <i>Podoria senegalensis</i> Pers., <i>Boscia octandra</i> Hochst. ex. Radlk.,
Vern.Names:	(Ar.) MOKHEIT, UMKHEIT, UNDURAB, KURSAN, TOHAM , (H.) HAM, HAMT, (B.) HAMT.
Habit:	Pubescent erect shrubs or small trees coriaceous leaves up to 3 m high..
Habitat :	Sandy gravelly soils, lowland plains; 100-700 m.
Folk-uses:	Root used against bilharzias; leaves as a poultice for muscular pain, measles, and as an eye-wash; fruit against tuberculosis.



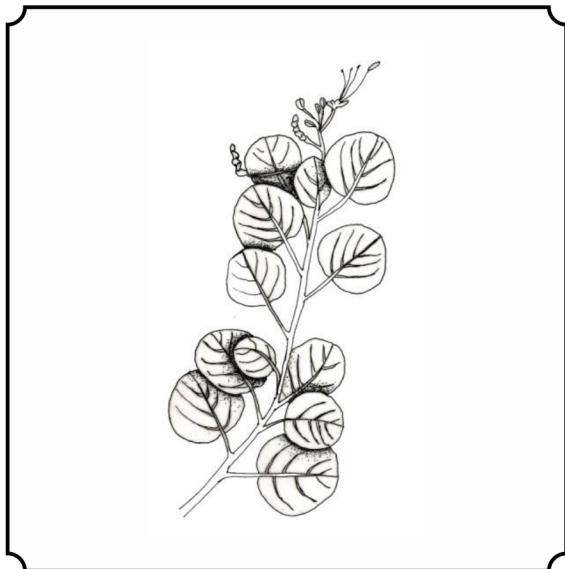
***Cadaba farinosa* Forssk., ssp.*farinosa* Elffers, Graham & De Wolf, F.T.E.A., Capparid. :75 (1964).**

Synonyms :	<i>C. mombassana</i> Gilg. & Bened, <i>C. dubia</i> DC., <i>C. miqueliania</i> Turcz., <i>Stroemia farinose</i> R. Brown.
Vern. Names:	(Ar.) SURREH, EL SARHA, (B.) QALEE, (B.A.) ASTAN.
Habit:	Tomentose erect shrubs or small trees, branching from the base.
Habitat :	Hill sides on sandy rocky soils, khor banks and lowland plains; 60-1020 m.
Folk-uses:	as purgative, anthelmintic, taenifuge, gargle for tonsilitis and as a poultice (with oil) for backache and sciatica.



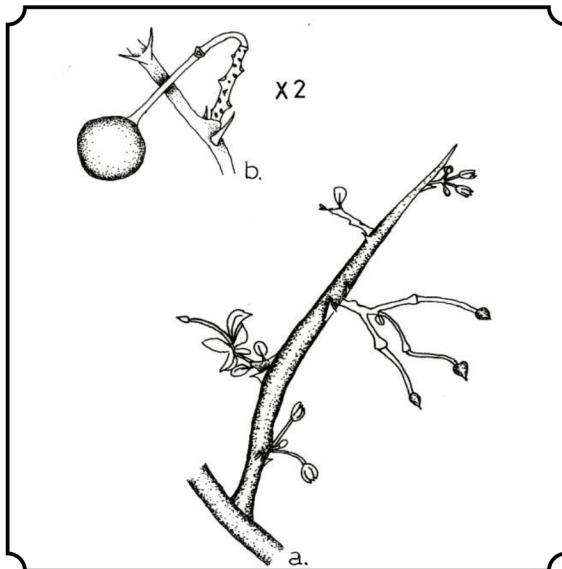
***Cadaba glandulosa* Forssk., Fl. Aegypt.-Arab.:68 (1775).**

Synonym :	<i>Stroemia glandulosa</i> (Forssk.) Vahl, <i>Cadaba monopetala</i> Edgew., <i>C. mollis</i> Steud.
Vern.Names:	(Ar.) IRKIS, KURMUT SOGHEIR, (B.) KORMOT, QORMOT, (B.A.) KILMIT.
Habit:	Glandular-hairy much- branched erect shrubs or undershrubs.
Habitat :	Hill slopes and sandy rocky khor beds; 100-1100 m.
Folk-uses:	used as a poultice for swellings. The maceration of the leaves is taken for glandular indurations, antispasmodic, and vermifuge. The smokes of the leaves are used for rheumatism.



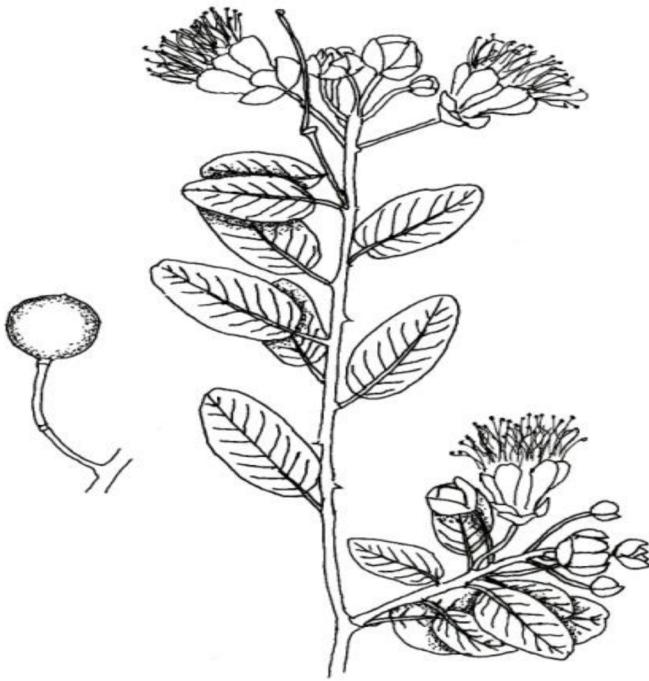
***Cadaba rotundifolia* Forssk., Fl. Aegypt.-Arab. :68 (1775).**

Synonym :	<i>Stroemia rotundifolia</i> Vahl, <i>Capparis rotundifolia</i> Rotter.
Vern.Names:	(Ar.) KURMUT, SARIH, ADDIMIR, KURMUT AL ALALI, SERHE, (H.) YAM, (B.) KORMOT, QORMOT, (B.A.) KILMIT.
Habit:	Glabrous much branched erect shrubs with drooping stems, and young twigs densely covered with short glandular hairs, up to 3 m high
Habitat :	sandy silty grounds, rocky slopes, coastal plains; 50-900 m.
Folk-uses:	Reported as powerful purgative. The poultice of the leaves (with lemon and vinegar) is applied for vitiligo.



***Capparis decidua* (Forssk.) Edgew., Proc. Linn. Soc. Bot. 6:184 (1862).**

Synonyms :	<i>Sodada decidua</i> Forssk., <i>Capparis aphylla</i> Hayne ex Roth., <i>C. sodada</i> R. Br.
Vern. Names:	(Ar.) TUNDUB, (H.) SARRUB.
Habit:	Glabrous leafless spinescent much branched erect shrubs or small trees with short recurved stipular spines up to 4 m high.
Habitat :	Sandy wadis and khor beds; 100-1000 m.
Folk-uses:	Maceration of stems for jaundice. Powdered branches are taken orally for colic and flatulence.



***Capparis tomentosa* Lam., Encycl. 1:606 (1785).**

Synonyms :	<i>C. puberula</i> DC., <i>C. polymorpha</i> A. Rich., <i>C. persicifolia</i> A. Rich., <i>C. tomentosa</i> var. <i>B.</i> Oliv., <i>biloba</i> Hutch & Dalz., <i>C. alexandrae</i> Chiov.
Vern. Names:	(Ar.) HEKKABIT, MURDU, SHAROBA, GULUM, EL SON, GURTUM,(B.A.) ANDEL.
Habit:	Erect or scrambling shrubs or small trees.
Habitat :	rocky hill sides and termite mounds; up to 1143 m.
Folk-uses:	The fruits are used to treat anaemia, whereas the branches for malaria.



***Maerua crassifolia* Forssk., Fl. Aegypt.- Arab. :104 (1775).**

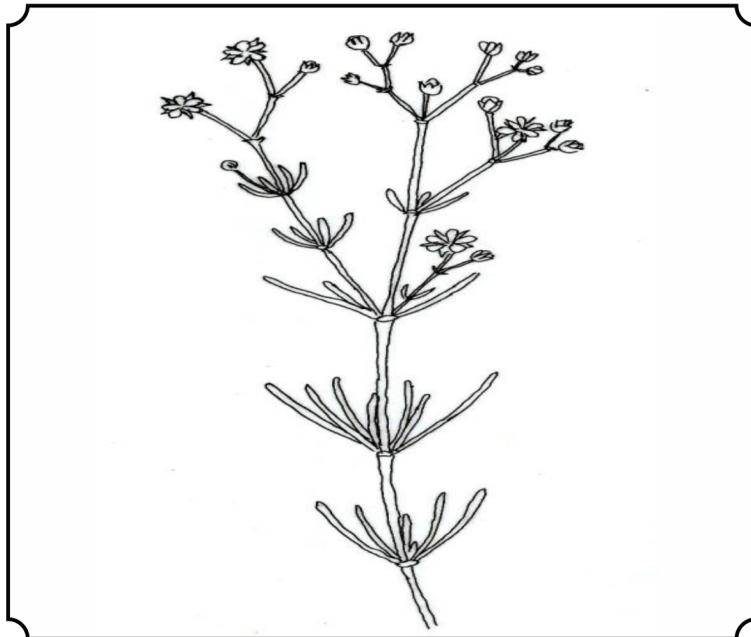
Synonyms :	<i>M. uniflora</i> Vahl, <i>M. rigida</i> R.Br. ex G. Don, <i>M. hirtella</i> Chiov., <i>M. meyeri-johannis</i> Gilg, <i>M. uguenensis</i> Gilg.
Vern. Names:	(Ar.) SAREH, SARHA, SURRAKA, KOWOGE, (H.) KAMOP, (B) KAMOAB, MARGAM.
Habit:	Pubescent evergreen trees up to 10 m high with twisted, drooping branches and smooth, dark-grey, scaly bark.
Habitat :	Lowland plains, low rocky hills, gravelly soils; 200-1100 m.
Folk-uses:	Leaves used for stomach troubles.

Caryophyllaceae



***Silene burchelli* Otth in DC., Prodr. 1:374 (1824).**

Synonyms :	<i>S. pilosellaefolia</i> Cham. & Schl., <i>S. chirensis</i> A. Rich., <i>S. sericea</i> A. Rich., <i>S. meruensis</i> Engl.
Vern. Names:	(H.) HALAISHAAIGOM, KAIOUT.
Habit:	Erect perennial herbs with woody rootstock and stems branching from the base.
Habitat :	hilly ground; 1000-1244 m.
Folk-uses:	For the treatment of scrofula, dermatitis and as a tonic bath.



***Spergula fallax* (Lowe) E.H. L. Krause in Sturm, Fl. Deutschland,
3, 5: 19 (1901).**

Synonyms :	<i>Spergularia fallax</i> Lowe, <i>Spergula flaccid</i> (Roxb.) Asch., <i>S. pentandra</i> L. var. <i>intermedia</i> Boiss., <i>Arenaria flaccid</i> Roxb., <i>Lepigonum fallax</i> (Lowe) Lowe.
Vern. Names:	(H.) RABAY ABDAR.
Habit:	Glabrous annual erect or ascending herbs with stems many from the base and linear sessile whorled leaves, up to 30 cm high.
Habitat :	Desert wadis, sandy sand alluvial soils.
Folk-uses:	Maceration of the whole plant taking in the morning with sugar to treat dizziness (vertigo).

Chenopodiaceae (Amaranthaceae)



***Suaeda fruticosa* (L.) Forssk.ex J.F. Gmel. in L., Syst. Nat. ed. 13, 2: 503 (1791).**

Synonyms :	<i>S. vermiculata</i> Auct non Forssk., <i>S. schimperi</i> (Moq.) Ulbr., <i>S. volkensii</i> C.B. Clarke ex Bak. & Clarke.
Vern. Names	(H.) ADLIB, (B.A., T., and K.) HECHIM.
Habit:	Erect succulent much branched from base undershrubs with narrowly terete or sometimes subterete leaves up to 50 cm high.
Habitat :	saline soils on sea coast; 0-100 m.
Folk-uses:	Leaves used for sores, rheumatism and arthritis.

Commelinaceae



***Commelina benghalensis* L., Sp. Pl. :41 (1753).**

Synonyms :	<i>C. obscura</i> K. Schum, <i>C. pyrrhoblepharis</i> Hassk., <i>C. rufociliata</i> C.B. Clarke, <i>C. uncata</i> C.B. Clarke.
Vern. Names:	(Ar.) BAYAD, SANFAL, EL BEYYEID, JADAB, IBREEG AL FAKI, (B.) HADAIB, HULAIB, HULEEB, HALEEED.
Habit:	Erect or ascending annual or perennial herbs.
Habitat :	sandy gravel moist soils; 600-1568 m.
Folk-uses:	Root decoction employed for stomach troubles. Stem used for probing wounds.



***Commelina forskalaei* Vahl, Enum. 2:172 (1805)**

Synonyms :	<i>C. falcata</i> Hassk in Peters, <i>C. latifolia</i> Hochst. ex A. Rich.
Vern. Names:	(Ar.) DUEID, EL BEYYEID, UM DAMAS, (H.) KOHENDEEB.
Habit:	Erect perennial, trailing or ascending herbs, often with subterranean, cleistogamous flowers, and stems rooting at lower nodes.
Habitat :	Sandy and gravelly soils; 600-1568 m.
Folk-uses:	Leaves and flowers for hemorrhoids.

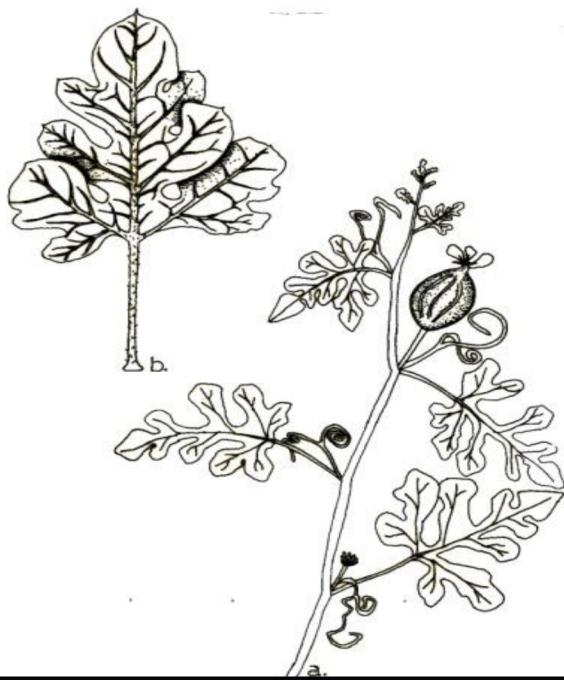
Convolvulaceae



***Convolvulus arvensis* L., Sp. Pl. 153 (1753).**

Synonyms:	<i>Convolvulus ambigens</i> House, <i>C. incanus</i> auct. Non Vahl, <i>Strophocaulos arvensis</i> (L.) Small., <i>C. chinensis</i> Ker Gawl., <i>C. sagittifolius</i> Liou & Ling.
Vern. Names:	(Ar.) MUDDEYD, MUDDID, AL-ULLIG, KHARMAN, (H.) SARHOOB.
Habit:	Glabrous climbing, trailing or prostrate perennial herbs branched mostly at the base, with hastate, sagittate or auriculate leaf bases.
Habitat :	rocky sandy soils, 1000-1100 m.
Folk-uses:	Purgative and used as a dressing for wounds and as a poultice for eyes and lips.

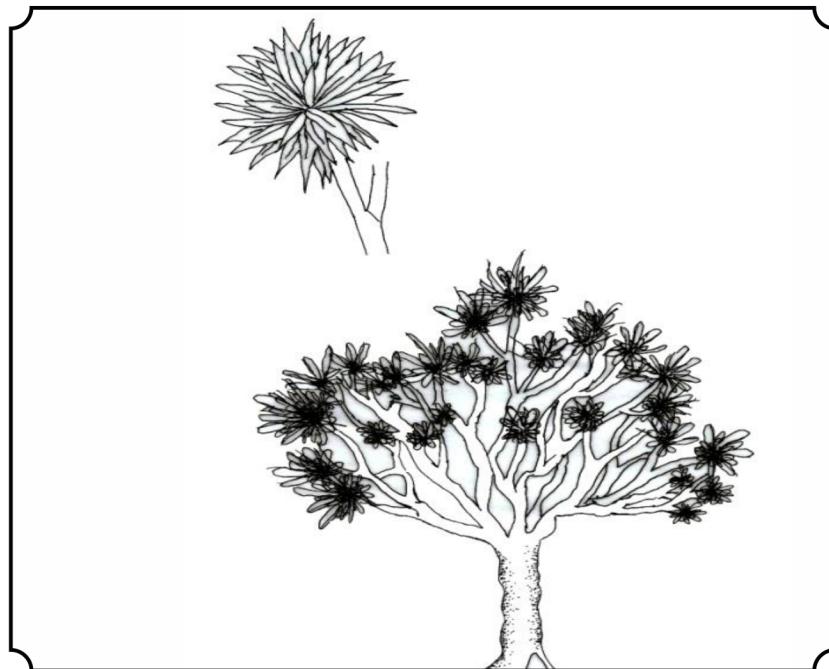
Cucurbitaceae



Citrullus colocynthis (L.) Schrad., Linnaea 12:414 (1838).

Synonyms :	<i>Cucumis colocynthis</i> L., <i>Colocynthis vulgaris</i> Schrad. <i>Citrullus colocynthoides</i> Pangalo, <i>C officinalis</i> Schard.
Vern. Names:	(Ar.) HANDAL, IRK EL BATTIKH, (H.) SEENAB.
Habit:	Climbing or prostrate perennial herbs.
Habitat :	Sandy soils; 60-770 m.
Folk-uses:	Powerful cathartic properties. The decoction of the fruits are used for diabetes, constipation and as a vermifuge.

Dracaenaceae (Asparagaceae)



***Dracaena ombet* Kotschy & Peyr., Pl. Tinn. :47 (1867).**

Synonym s :	<i>Sansevieria ehrenbergii</i> Schweinf. Ex Bak., <i>forskaoliana</i> (Shultesf.) Hepper & Wood.
Vern. Names	(Ar.) SHAGARAT EL TINEIN, (H.) BATT, TOOMBA, TOMBET, UMBET, (B.) OMBET, OMBET, UM BEIT, (B.A.) and (K.) SHIMBERKIT.
Habit:	Small trees with forked stems and branches.
Habitat :	rocky hill slopes; 1000-1200 m.
Folk-uses:	The leaves are used for scorpion bites and diabetes whereas the stems are burned for rheumatism.

Eupobiaceae



***Acalypha fruticosa* Forssk., Fl.Aegypt.-Arab.:161(1775).**

Synonyms :	<i>Acalypha betulina</i> Retz., <i>A. amentacea</i> Roxb., <i>A. stipulacea</i> Klotzsch., <i>Ricinocarpus fruticosus</i> (Forssk.) Kuntze.
Vern. Names:	(H.) MUT, (R.) RIKTUDA.
Habit:	Erect shrubs or small trees.
Habitat :	Sand rocky places; 500-1951 m.
Folk-uses:	Leaves used as a stomachic in dyspepsia and cholera, constipation, eczema and emmenagogue; root used for gonorrhoea and snake-bite remedy.



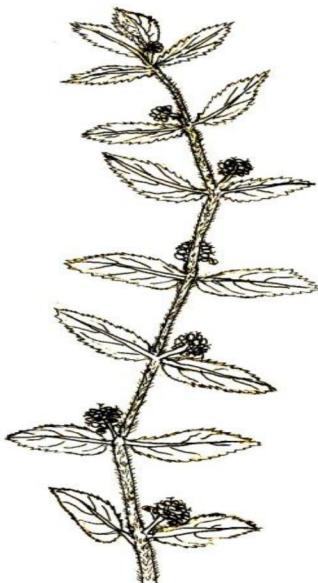
***Chrohrozophora plicata* (Vahl) Spreng., Syst. Veg. 3 :850 (1826)**

Synonyms :	<i>Croton tinctorius</i> sensu Burm, <i>C. plicatus</i> Vahl <i>Chrozophora burmanni</i> Spreng., <i>C. obliquifolia</i> (Vis.) Baill., <i>Croton asper</i> J. Koenig. ex Roxb.
Vern. Names:	(Ar.) TERBA, AKASA, AL GHO'BERA, AL ARGASSI.
Habit:	Tomentose prostrate or ascending bushy annual herbs.
Habitat :	Weed of cultivation, water catchment areas, sand soils; 400-550 m.
Folk-uses:	For the treatment of mastitis, orchitis and rheumatism.



***Euphorbia heterophylla* L., Sp. Pl.: 453 (1753).**

Synonyms :	<i>Poinsettia heterophylla</i> (L.) Kl. & Garcke, <i>E. geniculata</i> Ortega.
Vern. Names:	(H.) ATEEB
Habit:	Glabrous erect annual herbaceous shrubs, leaf stipules reduced to purplish glands with simple or rarely branched stems, up to 1 m high
Habitat :	Weed of cultivation
Folk-uses:	Maceration of the whole plant for constipation, skin allergy, echsima, wounds and scorpion bites.



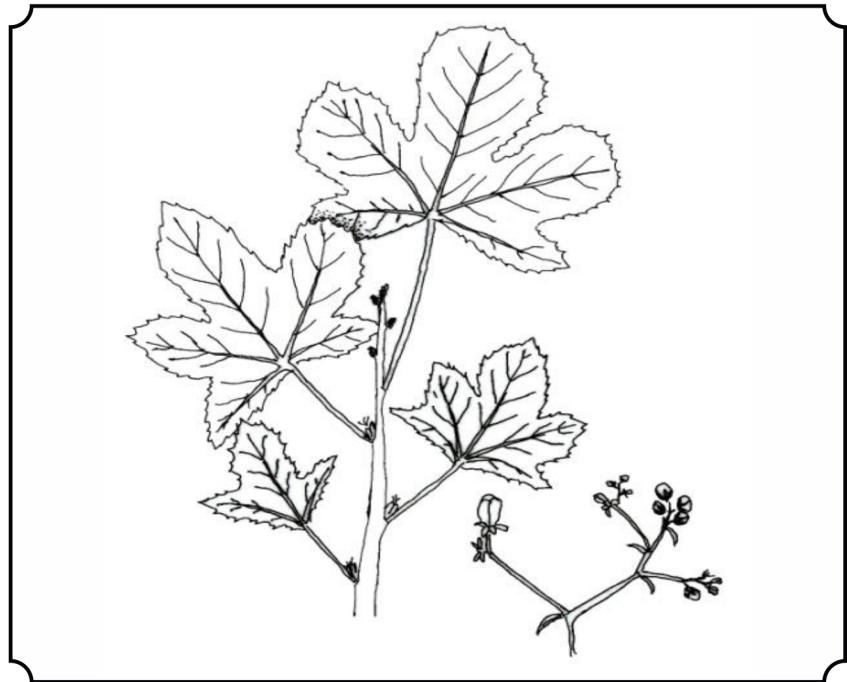
***Euphorbia hirta* L., Sp. Pl. ed. 1:454 (1753).**

Synonyms :	<i>E. pilulifera sensu</i> Boiss. in DC., <i>non</i> L., <i>E. hirta</i> var. <i>procumbens</i> (Boiss.) Brown., <i>E. gemella</i> (Lag.) Small., <i>E. capitata</i> Lam., <i>E. bancana</i> Miq.
Vern. Names:	(Ar.) ABU LEBBEN, (H.) OTETA.
Habit:	Erect prostrate or ascending annual herbs.
Habitat :	Sand soils as a weed of cultivation; 100-950 m.
Folk-uses:	Root said to be given to allay vomiting for snake bites. Plant is used as a remedy for gonorrhoea, dysentery. Latex used for cough and as an ophthalmic remedy.



***Jatropha aceroides* (Pax & K. Hoffm.) Hutch., F.T.A. VI (1):789 (1912).**

Synonyms :	<i>J. lobata</i> Muell.-Arg. ssp. <i>aceroides</i> Pax & Hoffm. in Engl.
Vern. Names:	(Ar.) ABU QUAEIHAT, (H.) LMBERIT.
Habit:	Glabrous glaucous erect small shrubs branching from the base with digitately 3-5-lobed, suborbicular or reniform leaves.
Habitat :	Sandy wadis or rocky hill slopes; 500-1000 m.
Folk-uses:	The leaves are taken for constipation. The fruits are applied locally for rheumatism and as a remedy for skin ailments.



***Jatropha glauca* Vahl, Symb. Bot. 1:78 (1790).**

Synonyms :	<i>J. lobata</i> Muell.-Arg. in DC., <i>J. ricinifolia</i> Fenzl. Ex Baill., <i>J. lobatus</i> Forssk., <i>J. glandulifera</i> Roxb.
Vern. Names:	(Ar.) ABU QUAEIHAT, (H.) NAKWA-TAKET, (B.) MAKWA-TAKET.
Habit:	Succulent glabrous erect undershrubs up to 1 m high, with hollow, striate stems and papery white barks and branching from the base.
Habitat :	Lowland plains, damp sandy soils; 500-1000 m.
Folk-uses:	The latex is used for hemorrhoids and mouth ulcers.



***Ricinus communis* L., Sp. Pl. ed. 1 :1007 (1753).**

Synonyms :	<i>R. communis</i> var. <i>beneguelensis</i> Muell. Arg., <i>R. communis</i> var. <i>megatospermus</i> (Del.) Muell. Arg., <i>R. angulatus</i> Thunb., <i>R. armatus</i> Andr.
Vern. Names :	(Ar.) KHIRWI, KHIRWAA, (H.) BLLAS, (T.) GALA, (B.A.) and (K.) SITEFAF.
Habit:	Erect annual or perennial herbs.
Habitat :	Sandy or rocky grounds; 500-1000 m.
Folk-uses:	Seeds purgative. Leaves applied externally (green or pounded) for headache. The leaves are used as a poultice for swellings.

Lamiaceae (Labiatae)



Micromeria abyssinica Benth. in DC., Prodr. 12:224 (1848).

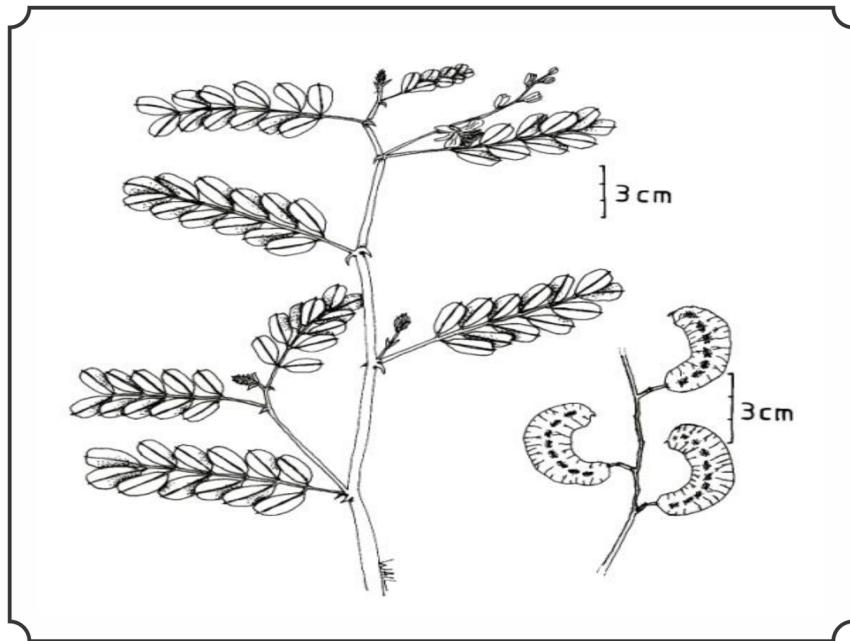
Synonyms :	<i>Satureja abyssinica</i> (Benth.) Brig. in Engl. & Prantl., <i>Calamintha abyssinica</i> (Hochst. ex Benth.) A. Rich., <i>Clinopodium abyssinicum</i> (Hochst. ex Benth.) Kuntze.
Vern. Names	(H.) WAAWAYGADAM, IBAINAH, (H.) BATAB.
Habit:	Aromatic ascending perennial herbs, up to 80 cm high.
Habitat :	Rocky grounds; 1000-2667 m.
Folk-uses:	Leaves used as bronchitis, constipation, febrifuge and cough remedy.

Leguminosae (Caesalpinioidae)



***Senna alexandrina* Mill. in Lock, var. *alexandrina* Polhill & Thullin,
F. Ethio. 3: 63 (1989).**

Synonyms :	<i>Cassia angustifolia</i> Vahl, <i>C. acutifolia</i> Del., <i>Senna acutifolia</i> (Del.) Balka, <i>Cassia senna</i> var. <i>senna</i> Brenan., <i>Cassia alexandrina</i> (Garsault.) Thell.
Vern. Names :	(Ar.) SENNA, SENNA EL RIF, SENNA MEKKA SENNA SANA, (H.) AMBARKI.
Habit:	Glabrous erect perennial herbs or undershrubs up to 2 m high.
Habitat :	Sand silty khor beds, water catchment areas; 100 800 m
Folk-uses:	The leaves and fruits are taken for constipation. The leaves are used as a powder for wounds.



***Senna italica* Mill., Gard. Dict. ed. 8, No.2 (1768).**

Synonyms :	<i>Cassia aschrek</i> Forssk., <i>C. obovata</i> Collad., <i>Cassia italica</i> (Mill.) Spreng.
Vern. Names:	(Ar.) SANNA, SENNA EL KELB, ISHRIG, (H.) AMBARKI.
Habit:	Erect perennial herbs or small shrubs up to 1.5 m high.
Habitat :	Sand or clay soils; 500-1000 m.
Folk-uses:	The fruits are taken for constipation.

Leguminosae (Mimosoideae)

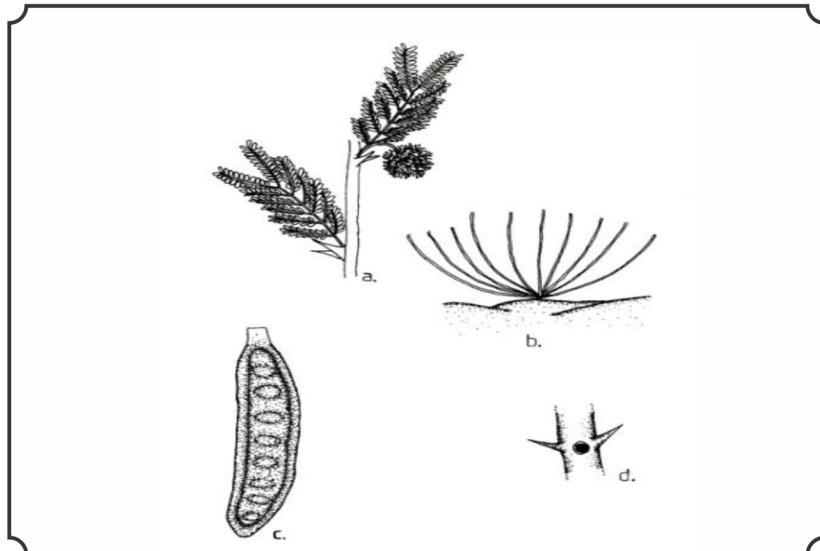


Fig. 47- *Acacia oerfota* (Forssk.) Schweinf. (a. flowering branch, b. habit, c. fruit, d. spines)

***Acacia oerfota* (Forssk.) Schweinf., Bull. Herb. Boiss 4, App. II: 213 (1896).**

Synonyms :	<i>A. nubica</i> Benth. in Hook., <i>A. gorinii</i> Chiov., <i>Mimosa oerfola</i> Forssk.
Vern. Names:	(Ar.) AUD, LAOT, EL UT, (R.) GAMEROT.
Habit:	Erect shrubs.
Habitat :	Dry rocky or sandy soils; 500-1000 m.
Folk-uses:	The bark extract used to treat rheumatism, fresh leaves for swellings, powdered leaves to regulate menstruation and cough.

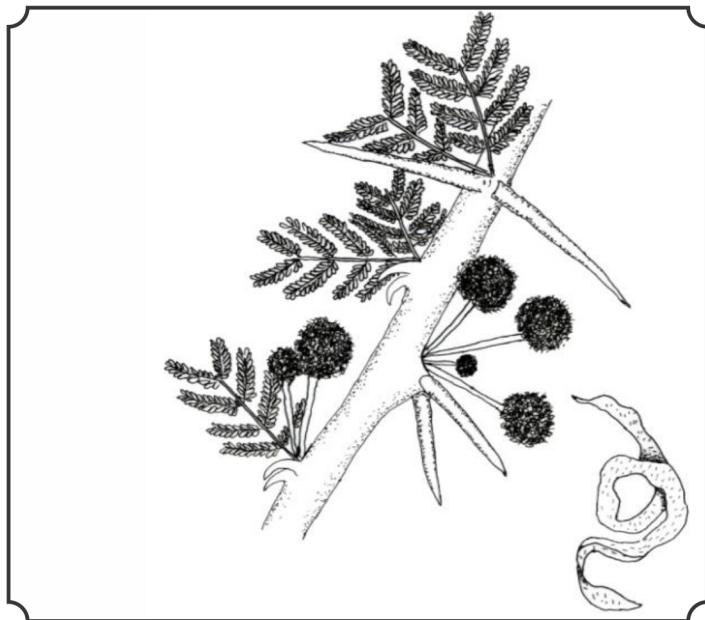
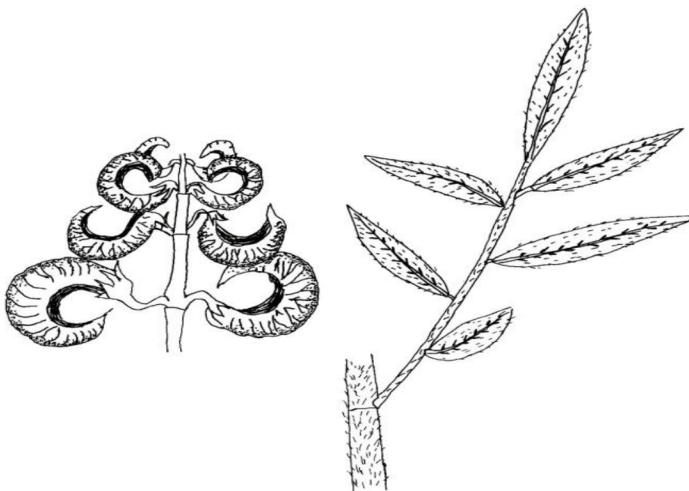


Fig. 48- *Acacia tortilis* (Forssk.) Hayne (flowering branch, fruit)

***Acacia tortilis* (Forssk.) Hayne ssp. *raddiana* (Savi) Brenan, Kew Bull. 1957:87(1957).**

Synonyms :	A. <i>raddiana</i> Savi., A. <i>tortilis</i> Hayne var. <i>pubescens</i> A. Chev. , A. <i>tortilis</i> sensu Crowfoot, non (Forssk.) Hayne; A. <i>spiropcarpa</i> sensu B. & M.
Vern. Names :	(Ar.) SAYYAL, (H.), TAWAR, TOWAI, (B.) TAWAAY, TOWAI.
Habit:	Large trees.
Habitat :	Banks of wadis and sites receiving considerable amounts of water, on sandy soils; 700-1670 m.
Folk-uses:	Applied as vermifuge, against dermatological disorders, and skin infections, rheumatism and flatulence.

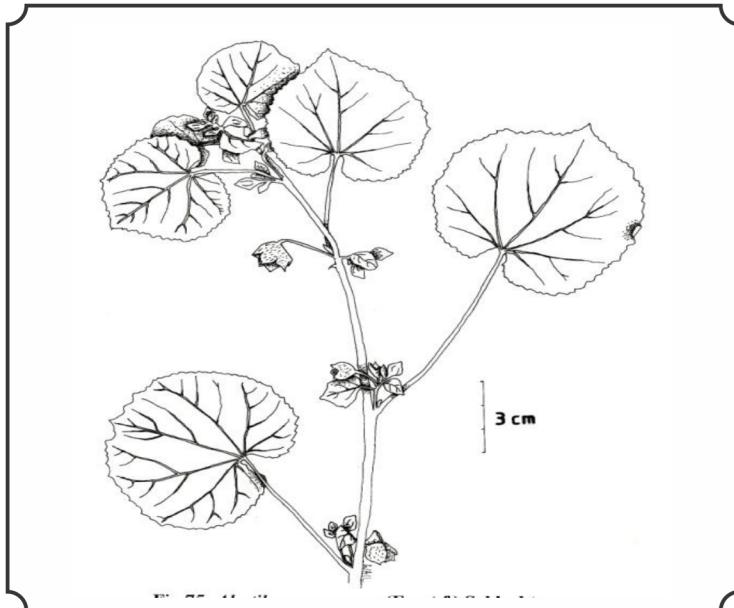
Leguminosae (Papilionoidae)



***Vermifrax abyssinica* (A. Rich.) Gillett., Kew Bull. 20:245 (1966).**

Synonyms :	<i>Doryenopsis abyssinica</i> (A.Rich.) V.N. Tikhom. & D.D. Sokoloff., <i>Helminthocarpon abyssinicum</i> A. Rich.
Vern. Names:	(Ar.) GATTAFA, (H.) RABA HANOON.
Habit:	Perennial, procumbent, slender herbs with small orange to reddish flowers borne in short peduncled, few-flowered, capitate inflorescence with coiled circled pods and corregated valves.
Habitat :	Sandy rocky khor beds; up to 1000 m.
Folk-uses:	Roots used to treat gripe. The powdered whole plant is taken for colic.

Malvaceae



***Abutilon pannosum* (G. Forst.) Schlecht., Bot. Zeit. 9:829 (1851).**

Synonyms :	<i>Abuliton lanatum</i> Husaine & Baguar, <i>A. glaucum</i> (Cav.) Sweet., <i>Sida glauca</i> Cav., <i>S. pannosa</i> G. Forst., <i>S. tomentosa</i> Roxb.
Vern. Names:	(Ar.) HANBUK, UMBAROW, GARGADAN, MAKHSHASH EL RIGAL.
Habit:	Perennial sub-shrub with woody bases.
Habitat :	Silty and often saline flood plains, river banks, clayey-sandy soils.
Folk-uses:	Powdered leaves for spasm and as poultice for fever.

Meliaceae



Fig. 51- *Azadirachta indica* J. Juss. (Inflorescent, leaflet, leaf)

***Azadirachta indica* J. Juss., Mem. Mus. Hist. Nat. Paris, 19:221, t. 13, 5 (1830).**

Synonyms :	<i>Melia azadirachta</i> L., <i>Antelaea canescens</i> Cels. Ex Heynh.
Vern. Names:	(Ar.) NEEM, (H.) O'NEEM, (Engl.) INDIAN LILAC.
Habit:	Glabrous brown large, deep-rooted, evergreen trees, 15-30 m high.
Habitat :	Savannah, dry and arid forests.
Folk-uses:	Powdered leaves for toothache and antipyretic as a poultice.

Nyctaginaceae



Commicarpus africanus (Lour.) Dandy in Andr., F. P. S. I:153, fig. 91 (1950)

Synonyms :	<i>Boerhavia scandens</i> Forssk., <i>B. africana</i> Lour., <i>B. pentandra</i> (Burch.) Heim., <i>Gisekia africana</i> Kuntze.
Vern. Names:	(Ar.) ABU LEBBEN, ABU EL LESIG, IRG EL TUEIRAT, ABU LABAN, (H.) SABEEB ATRAM.
Habit:	Glabrous climbing or procumbent perennial herbs with glandular fruits.
Habitat :	Sand rocky places, moist sites; up to 1000 m .
Folk-uses:	Root decoction used for jaundice, leaves for gardiasis, and the whole plant for glandular indurations.

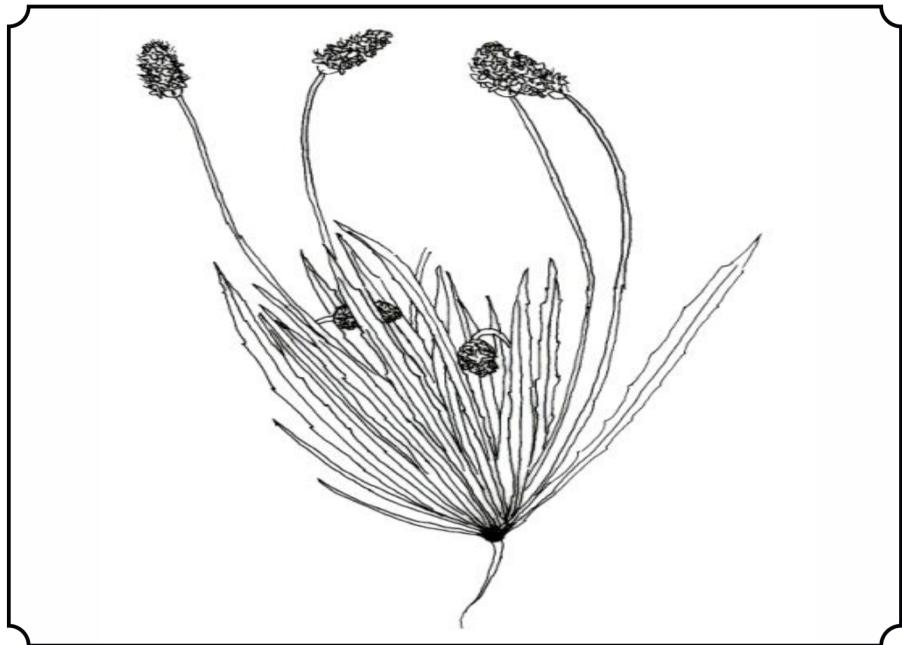
Papaveraceae



Argemone mexicana L., Sp. Pl.: 508 (1753).

Synonym :	<i>Argemone leiocarpa</i> Greene, <i>A. alba</i> Raf., <i>A. mucronata</i> Cours. Ex Steud., <i>Papacer mexicanum</i> (L.) E.H.L. Krause.
Vern. Names	(Ar.) KHASH KHASH MEXICKI, (H.) GHUNAB, WAHALAIL, WANAH, (Engl.) MEXICAN POPPY.
Habit:	Prickly glaucous erect annual rather stiff woody herbs with yellow juice.
Habitat :	Overgrazed and waste abandoned cultivated lands on sandy and hilly grounds, 100-1100 m.
Folk-uses:	Seeds emetic and cathartic and for dysentery. Whole plant for swellings.

Plantaginaceae



Plantago ovata Forssk., Fl. Aegypt.-Arab. :31 (1775).

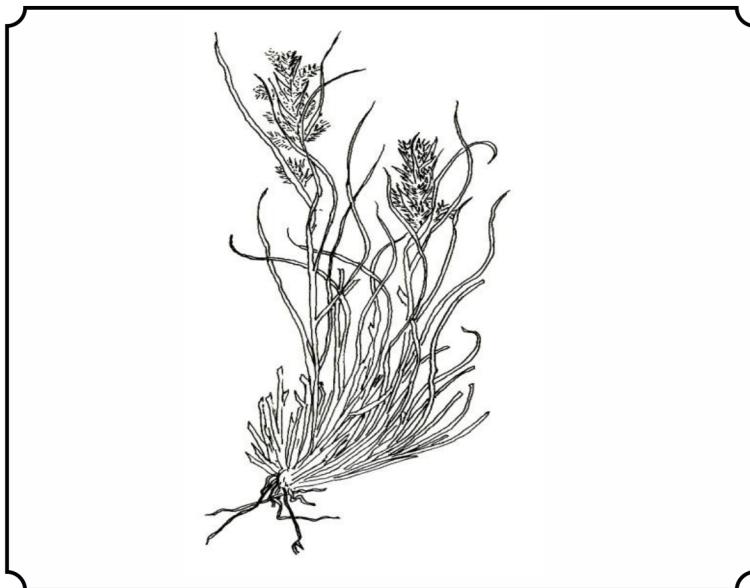
Synonyms :	<i>P. brunnea</i> Morris, <i>P. fastigiata</i> Morris, <i>P. insularis</i> Eastw., <i>P. trichophylla</i> Nab.
Vern. Names :	(Ar.) RIBLA, QATTUNA, LESAN AL HAMAL AL BAIDAWI, (H.) O'HAMEEM.
Habit:	Densely villous erect annual herbs with rosetted, radial or some cauline and alternate leaves.
Habitat :	Sandy soils; 1000-1100 m .
Folk-uses:	Used for diarrhoea, dysentery, emmenagogue and intestinal irritations.

Poaceae (Graminae)



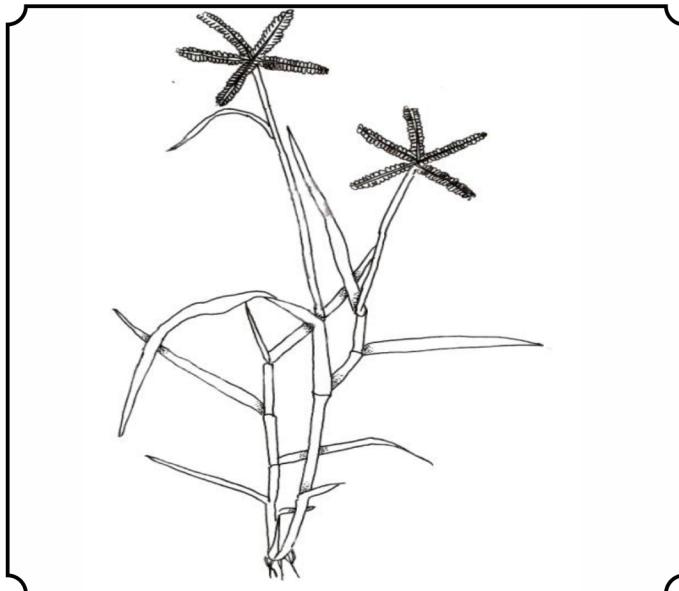
***Chloris virgata* Swartz, Fl. Ind. Occ. 1:203 (1797).**

Synonyms :	<i>Rhabdochloa virgata</i> (Sw.) P. Beauv <i>Chloris compressa</i> DC., <i>C. elegans</i> H.B.K., <i>C. meccana</i> Hochst. & Steud. ex Steud <i>C. alba</i> J. Presl
Vern. Names:	(Ar.) ABI MALHI, UMM FARU, (H.) TUMMAL, TIMALA .
Habit:	Annual herbs; culm erect or ascending, or prostrate below.
Habitat :	Sandy rocky grounds;-100/00 m.
Folk-uses:	Root decoction used for colds and rheumatism. Roots are used to treat cancerous ulcers.



***Cymbopogon schoenanthus* (L.) Spreng., ssp. *proximus* (Hochst. ex A. Rich.) Maire & Weiller, Fl. Afr. Nord. :287 (1952).**

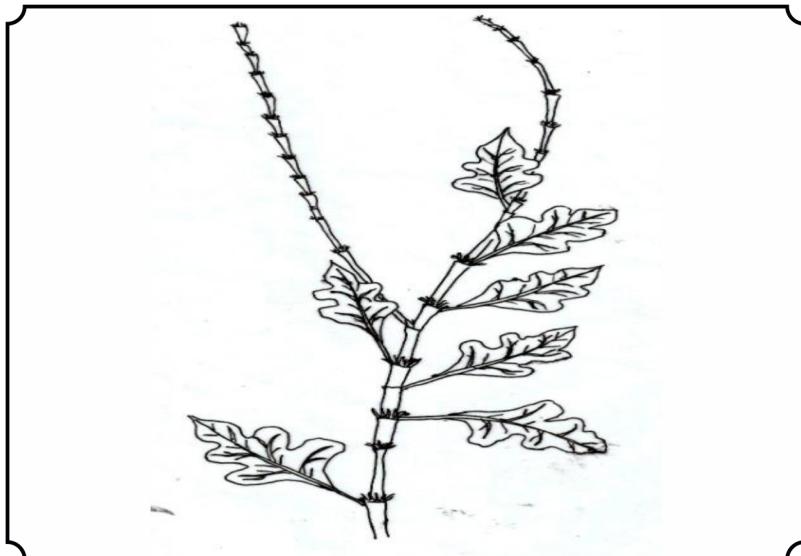
Synonyms :	<i>Andropogon proximus</i> A. Rich., <i>Cymbopogon proximus</i> (A. Rich.) Stapf, <i>Andropogon schoenanthus</i> L.
Vern. Names :	(Ar.) MAHAREIB, HALFAT EL BARR, HOMARIT, (B.) HOMAREI.
Habit:	Glabrous perennial herbs with tufted branched erect culms.
Habitat :	Sandy dry khors and wadis or rocky places; 400-134 m.
Folk-uses:	The plant is used in the preparation of a drink which is reputed as diuretic, astringent and of carminative properties.



***Dactyloctenium aegyptium* (L.) Willd., Enum. Hort. Berol. 1029 (1809).**

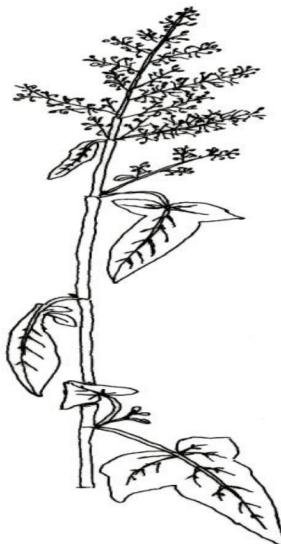
Synonyms :	<i>Cynosurus aegyptius</i> , <i>Eleusine aegyptia</i> (L.)Desf., <i>Dactyloctenium figare</i> De Not., <i>Eleusine cruciata</i> Elliott., <i>E. prostrate</i> Spreng
Vern. Names :	(Ar.) ABU or UMM ASABIAA, KIRIAB, KOREIB, (H.) TIRAB, (B.) EDABAAB.
Habit:	Annual herbs; culms prostrate & geniculate.
Habitat :	Sandy or rocky places; 100-1000 m
Folk-uses:	Plant used for nervous diseases and root for amenorrhoea; reported as dysentery and haemoptysis remediesThe whole plant is also used as a poultice to treat swellings and as vulnerary.

Polygonaceae



Oxygonum sinatum (Hochst. & Steudel.) Dammer in Engl., Pflanzenw. Ost.-Afr. C.:170 (1895).

Synonyms :	<i>Ceratogonium sinatum</i> Hochst. & Steudel. in DC., <i>Oxygonum atriplicifolium</i> Hochst. & Steudel. var. <i>sinuatum</i> (Hochst. & Steudel.) Bak. & Wright., <i>Oxygonum elongatum</i> Dammer.
Vern. Names:	(H.) TUKWATAKU, (B.) ADAR-INGOWIL.
Habit:	Erect annual herbs.
Habitat :	Sandy or rocky moist grounds ; 1000-1568 m
Folk-uses:	Cough remedy. The powdered whole plant is taken for colic, dysentery and giardiasis.



***Rumex abyssinicus* Jacq., Hort. Bot. Vindob. 3:48, tab. 93 (1776).**

Synonyms :	<i>R. schimperi</i> Meisn. in DC., <i>Acetosa abyssinica</i> Jacq.
Vern. Names:	(Ar.) HIMEID, HARA, HAR, REKHA, H.) MALGHAT, (Engl.) SORREL, SPANISH RHUBARB.
Habit:	Erect herbs with perennial rootstock with hollow reddish stems with red persistent, membranous, reticulate sepals and enlarged in fruits.
Habitat :	Sandy rocky moist places; up to 1050 m.
Folk-uses:	Cough remedy. Rhizome is a taenicide and purgative. The powdered fruits are aphrodisiac and used in ophthalmia.



***Rumex vesicarius* L., Sp. Pl. ed. 1:336 (1753).**

Synonyms :	<i>Acetosa vesicaria</i> (L.) A. Love, <i>Lapathum vesicarium</i> Moench.
Vern. Names:	(Ar.) HAMAZ, (H.) WAHUMRAAKU, KWAT HUM'ROUK.
Habit:	Glabrous erect or ascending fleshy perennial herbs, branching from the base with suborbicular winged fruits, up to 50 cm high.
Habitat :	Sandy and rocky grounds, soft gravelly soils of moist lowland plains; 800-1633 m.
Folk-uses:	The leaves are used for dysentery, cough, tonic and to stop diarrhoea.

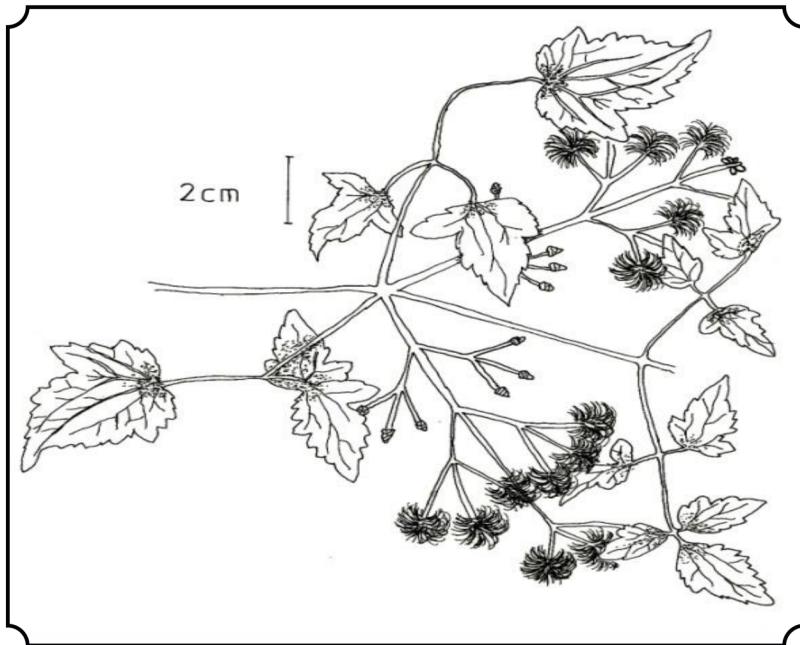
Primulaceae



***Anagallis arvensis* L. ssp *arvensis* Taylor, F. T. E. A., Primul. : 11 (1958).**

Synonyms :	A. <i>phoneicea</i> Scop., A. <i>Arabica</i> Duby., A. <i>indica</i> Sweet., A. <i>carnea</i> Schrauk., <i>Lysimachia arvensis</i> (L.) Manns. & Anderb.
Vern. Names:	(Ar.) SABUNGHEYT, AIN EL JENEL, LUBBUN, HANTUT, SALLALA, TAPPAR, (H.) INAYTASYAM.
Habit:	Procumbent or diffused annual herbs.
Habitat :	Gravely sand soils; 1000-2667 m.
Folk-uses:	For cerebral affections, leprosy, hydrophobia and dropsy. The leaves are used as a dusting powder to cure wounds.

Ranunculaceae



Clematis hirsuta Perr. & Guill., FL. Seneg. Tent. 1:1 (1831).

Synonyms :	<i>C. glaucesens</i> Fresen., <i>C. iniso-dentata</i> A. Rich., <i>C. thunbergii</i> Steud., <i>C. grata</i> sensu Oliv., <i>C. brachiata</i> sensu Wickens., <i>C. wightiana</i> Wall.
Vern. Names:	(Ar.) YASMIN ALBAR, SHAALUK, (H.) SHADDEIP SHAL'LOUB.
Habit:	Woody lianes.
Habitat :	Rocky grounds; 1000-1274m.
Folk-uses:	The stems are used for colitis, whereas the roots for scorpion and snake bites.

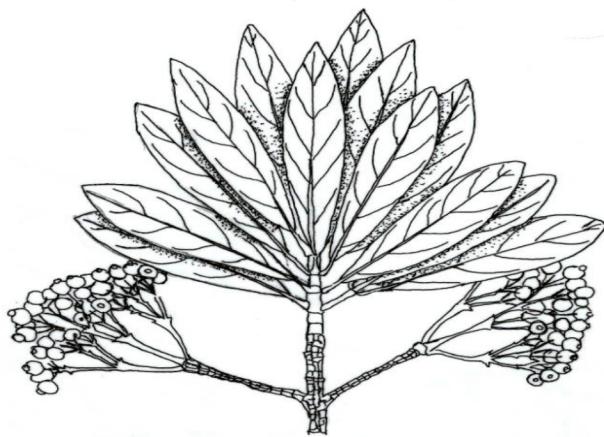
Rhamnaceae



Zizyphus spina-christi (L.) Desf., Fl. Atlantica: 201 (1798)

Synonyms :	<i>Rhamnus spina-christi</i> L., <i>R. nabeca</i> Forssk., <i>Ziziphus africana</i> Mill.
Vern. Names:	(Ar.) SIDDIR, NABAK, (H.) GABAT and TAGAB, (B.) QABAT, (B.A.) QESELE.
Habit:	Spinescent erect shrubs and trees up to 10 m high.
Habitat :	light silty soils in plains, wadis and water depression; 200-1100 m.
Folk-uses:	Fruits used in treatment of dysentery.

Rubiaceae



Pavetta crassipes K. Schum in Engl., Pflanzenw. Ost- Afr.C:389 (1895).

Synonyms :	<i>Pavetta barteri</i> Dawe, <i>P. utilis</i> Hua, <i>P. crassiper</i> var. <i>major</i> De Wild.
Vern. Names	(H.) KANTEEB
Habit:	Glabrous savannah erect shrubs or small trees with frequently corky branches and cracking and peeling barks.
Habitat :	Rocky places; up to 1050 m.
Folk-uses:	Used for treatment of gonorrhoea and cough. The smokes of the stems are used to treat arthritis and rheumatism.

Salvadoraceae



***Salvadora persica* L., Sp. Pl. :122 (1753).**

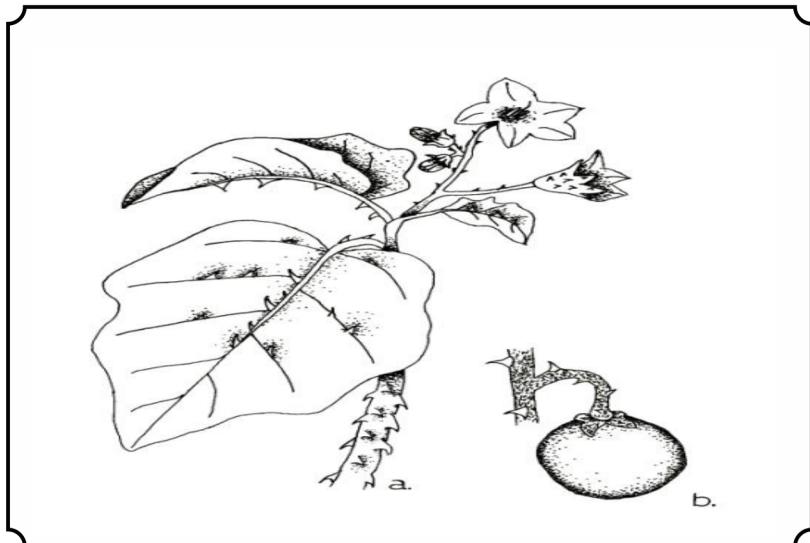
Synonyms :	<i>Rivinia paniculata</i> L., <i>Cissus arborea</i> Forssk. <i>Embelia grossularia</i> Retz., <i>Pella ribesioides</i> Gaertn.
Vern. Names	(Ar.) ELRAK, ARAKA, SHAUI (branches and roots), (H.) MUSWAK, HEIB, CHIB, (B.A., K., T., B.A., K.) ADAI, ADAIET, (B.) HIB.
Habit:	Shrubs or small trees forming tangled thicket or clumps.
Habitat :	Sand silty soils or on rocky slopes; 100-1000 m.
Folk-uses:	Applied for ancylostomiasis. The fruits are used as appetizers whereas the young branches as a tooth brush.

Solanaceae



***Solanum coagulans* Forssk., Fl. Aegypt. Arab. :107 (1775).**

Synonyms :	<i>S. dubium</i> Fresen., <i>S. thruppii</i> C.H. Wright., <i>S. campylacanthum</i> Hochst. Ex A. Rich., <i>S. marginatum</i> L.f., <i>S. deppressum</i> Bitter.
Vern. Names:	(Ar.) JUBBIN, GUBBEIN, NUDA, TELLET, (H.) TALAL
Habit:	Prickly grey-stellate tomentose erect perennial bushy herbs or undershrubs with sinuately lobed leaves up to 1 m high
Habitat :	Sandy soils; 100-808 m.
Folk-uses:	The fruits are used for cancerous ulcers and to relief backache. Seeds used as milk coagulent.



***Solanum incanum* Jaeger, Systematic Studies in the Genus Solanum in Africa (1985).**

Synonyms :	<i>S. incanum</i> L., <i>S. unguiculatum</i> A. Rich., <i>S. sanctum</i> L., <i>S. hierochunticum</i> Dunal, <i>S. floccosistellatum</i> Bitter in Fedde.
Vern. Names:	(Ar.) BEJEM BEJEM, JUBBIN, GIBEIN, (H.) MANYUB, MANIOP, ULLIL, (B.) HLIL, OLALT, (B.A.) FINDYE.
Habit:	Spinescent tomentose erect perennial herbs or shrubs, up to 1 m high.
Habitat :	Sandy soils, water catchment areas of gravelly soils 500-2141 m.
Folk-uses:	Used for chest troubles, toothache, splenosis, ring worms and snake-bites. The fruits are used as a poultice to treat swellings.



***Solanumnigrum* L., Sp. Pl.:186 (1753).**

Synonyms :	<i>S. nodiflorum</i> Jacq., <i>S. judaicum</i> Bess., <i>S. americanum</i> Mill.
Vern. Names:	(Ar.) ENAB EL DIB, HARSH, TAMR EL ABEID, DANAB EL DEEB, (H.) HALAK ALEEM.
Habit:	Erect annual or perennial herbs or undershrubs.
Habitat :	Sand rocky places; 100-1143 m.
Folk-uses:	Fruits purgative. Plant used for dropsy and for chronic inflammation of liver. The leaves are used for skin ailments, flatulence and delirium.

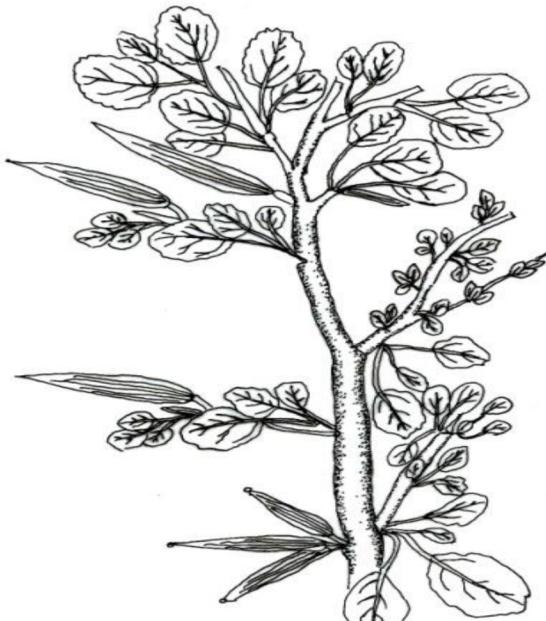
Tamaricaceae



***Tamarix aphylla* (L.) Karst., Pharmaceutish Medicinische Botanik 7:641 (1882).**

Synonyms :	<i>Thuja aphylla</i> L., <i>Tamarix orientalis</i> Forssk., <i>T. articulate</i> Vahl, <i>Tetraclinis aphylla</i> (L.) Rothm.
Vern. Names:	(Ar.) TARFA, (H.) AMAB, (Engl.) TAMARIX, SALT CEDAR, ATHEL TAMARIX.
Habit:	Small or medium sized spreading trees, up to 10-12 m high.
Habitat :	Semi- arid, arid, subtropical and warmer Temperate regions.
Folk-uses:	Dried powdered aerial parts used as a poultice for elephantiasis, and as fumigant for rheumatism.

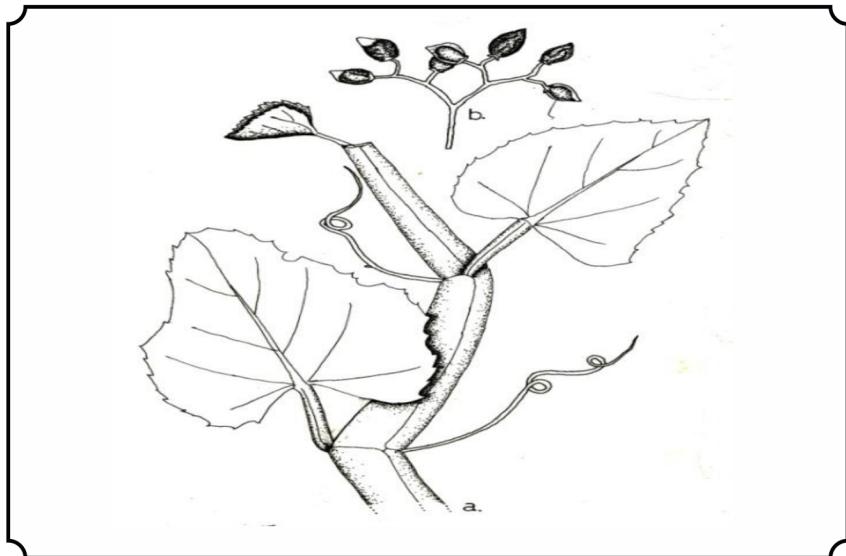
Tiliaceae (Malvaceae)



***Corchorus depressus* (L.) Christens, Dansk. Bot. Arkiv. 4, 3:34 (1922).**

Synonyms :	<i>C. antichorus</i> Raeusch., <i>Antichorus depressus</i> L., <i>Jussiaea edulis</i> Forsk.
Vern. Names:	(Ar.) SUTEIH, UM SHITEIH, (B.) SETII, (H.) OKA TALOOB.
Habit:	Prostrate or decumbent perennial herbs from stout rootstock with tortuous branches.
Habitat :	Khor beds up the mounts, on sandy and rocky grounds; 0-1000 m.
Folk-uses:	Plant used as a demulcent and for hoarseness.

Vitaceae



Cissus quadrangularis L., Syst. Nat. ed.12, 2:124 (1767).

Synonyms :	<i>Vitis quadrangularis</i> (L.) Wall. ex Wight & Arn. <i>Cissus edulis</i> Dalzell., <i>C. tetragona</i> Harv., <i>succulent</i> Galpin, <i>Saelanthus quadrangonus</i> Forssk.
Vern. Names:	(Ar.) SALA'ALA'A, SALALA, (H.) KAT-UT, (R.) METOWI, (B.A.) and (K.) SANSAILE, (B.A.) and (T.) SANSALE.
Habit:	Glabrous climbing or prostrate shrubs with succulent, quadrangular stems
Habitat :	Sandy rocky slopes and outcrops; 100-1000 m.
Folk-uses:	Leaves are used for wounds, jaundice, scorpion bites, and rheumatism.

Zygophyllaceae



Fagonia cretica L., Sp. Pl. :386 (1753).

Synonyms :	<i>F. arabica</i> L., <i>F. deflexa</i> Moench., <i>F. erecta</i> Mill., <i>hispanica</i> L.
Vern. Names:	(Ar.) UBU SHOKA, ABU SHWEIKA and SHOLIB, (H.) OSAR.
Habit:	Prostrate annual herbs.
Habitat :	Sandy places, 200-1000 m.
Folk-uses:	Used for tumours, anaemia and ulcers. The maceration of the whole plant is taken on empty stomach for diabetes.

Discussion and Conclusions

A total number of 72 plant species belonging to 60 genera and 41 families were compiled during field trips to various localities in Red Sea State as possessing medicinal folkloric uses. The most represented families are Capparaceae and Euphorbiaceae with (7) species each, followed by Ascelipiaceae, Boraginaceae, Brassicaceae, Poaceae, Polygonaceae and Solanaceae each with (3) species. According to habit, herbs recorded the highest proportion with (54 %), followed by shrubs (26.5), trees (12.5 %) and undershrubs (5.5 %).

The present study represents part VI of the series comprising the "Atlas of Medicinal Plants of the Sudan". Previous parts cover Erkowit (20 species) (El Ghazali 1986), Eastern Nuba Mountains (76 species) (El Ghazali *et al.* 1987), while Nile Provinces (46 species) (El Ghazali *et al.* 1994), Northern Kordofan (59 species) (El Ghazali *et al.* 1997), and Ingessana Area- Blue Nile (55 species) (El Ghazali *et al.* 2003). Although the number of species recorded from the various parts exceed (300 species), it was noticed that the same species occur in different regions with different folkloric uses. In case of *Balanites aegyptiaca*, although there is a consensus on the use of the fruits as a laxative, it was used as an anthelmentinc in the Nuba Mountains (part II), against bilharizia in the White Nile Provinces, antidiabetic in Northern Kordofan, and for jaundice in the Red Sea State.

In spite of the medicinal folkloric uses documented by the six parts of the "Atlas of Medicinal Plants of the Sudan", fostered by the National Centre for Research (Khartoum, Sudan), a considerable number of research were encountered to document the medicinal plants of different regions in Sudan. these regions include: West Kordofan (Doka & Yagi 2009), North Kordofan (El Kamali 2009, Suleiman 2015), South Kordofan (Issa *et al.* 2018), Blue Nile State (Musa *et al.* 2011, Gibreel *et al.* 2013), Khartoum State (Mariod *et al.* 2014), Erkowit and Sinkat (Adam *et al.* 2020), Central Sudan (El Kamali 1996), and Darfur (Hegzy *et al.* 2020).

We hope that the present study will contribute positively to the documentation of the indigenous traditional knowledge on the medicinal usage of wild plants of the Red Sea State, and to provide through further toxicological, pharmacological and phytochemical studies, potential bioactive compounds which could promote pharmaceutical and herbal industries in Sudan.

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