

SOME INDIGENOUS PLANTS USED DOMESTICALLY BY EAST AFRICAN COASTAL FISHERMEN

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In a previous paper (Weiss, 1973), I examined several indigenous plants used by local fishermen on the East African coast to obtain a livelihood. Any use mentioned therein has not been repeated here. In this paper I have endeavored to determine some of the plants used in the everyday life of coastal people. The list is not intended to be complete, and it is hoped that the gaps will be filled by more exact surveys. The information was gained during visits to the coast over many years, 1950-66, and involved discussions with a variety of local people, many of whom became old friends. Sadly many of them are now dead, often without passing on their knowledge to the young, mainly because the latter are not interested. It has thus become increasingly difficult to establish the actual usage of a plant, or ingredient of a mixture. It is now, unfortunately, also considered unfashionable, if not actually insulting, to question the semi-literate products of existing educational systems on the subject. They will seldom admit to any knowledge at all of tribal traditions unless these have a useful political connotation.

The system I used was to find a potion, charm or food in use, then try to trace the source of the ingredients. This system is more accurate than asking the use of a particular plant, for many Africans will give any answer they consider acceptable, not with any desire to mislead, but because of lack of knowledge and a disinclination to admit it. Another very important local factor was the natural mobility of coastal people. For centuries they acted as guides and porters for up country safaris, and on these expeditions acquired much knowledge not generally available on the coast. Thus to ask what a specific plant was used for could result in an answer more applicable to Wakikuyu or Wanyumwezi tribal usage. Additionally there is a fair amount of myth, legend, and "old wives tales" associated in particular with herbal remedies, as can be found in any old established rural community. Many plants were said to produce good *dawa* (medicine), and specific uses were quoted, but more detailed questioning often resulted in no one actually having used it for this purpose, or knowing anyone who had. Snakebite cures and poison antidotes were the most common in this category.

One well known use of plants I have basically ignored is that of criminal poisoning, although this use is widespread and well understood in East Africa. Many plants can be so used either singly or in combination, but fatal results are as frequently due to a complete lack of knowledge of the consequences involved in using herbal concoctions as in their deliberate use to kill. Thus a case of poisoning due to a particular mixture may never occur again, yet a question could well elicit the reply that such and such a plant is used by "bad persons" for criminal purposes. If the person questioned had, in fact, the knowledge and the ability to use it, little or no useful information was obtained. I was, however, told by one well known local poisoner that if my wife became a nuisance or a shrew, he could supply a potion that would get rid of her very quickly and in a most natural manner!

One aspect of sorcery which used plants, but not as their "active principles" was that of casting spells. A practitioner often used a special wand pointed in the

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general direction of the recipient, or burnt some mixture, or cast seeds while chanting an incantation. As far as I was able to determine, these items in themselves did not appear to have any basic relevance to the efficacy of the spells, and varied with each practitioner, often with each spell. Similarly the fertility charms placed in the *shambas* (fields) to promote good crops, and the various objects used by rain-makers and diviners, were in themselves of little importance, although the last two may have achieved some value from being handed down within a family.

Also ignored are all the well known foods and spices derived from exotics; maize, millets, rice, beans, coconuts, and usages directly traceable to Arabs or Indians; i.e. khat, jatropha, curry spices, etc. Fungi proved so difficult to preserve and identify that little information on their usage was obtained. They do not form a major item of the local diet, and in fact, there are numerous tribal beliefs against their use as food. In spite of their often noxious appearance, few fungi in the area are poisonous. Another very difficult area for the investigator is that of herbal remedies. The increase in higher standards of medical assistance available to coastal peoples since European settlement, has resulted in a rapid decline in the use of native medicines and the status of those engaged in their preparation. A frequent answer to my questions regarding the medicinal properties of a plant would be, "Ndio bwana, tumetumia zamani, lakini sasa tulienda hospitalini kupata cindano" (Yes we used it previously, but now we go to the hospital for an injection). However it was notable that many households still spent between five and twenty shillings per year on local medicines, potions and charms.

Substitution by modern products is now also widespread and increasing rapidly, causing a decline in the number of local craftsmen and herbalists skilled in the use of local materials. Drinking and water vessels made from gourds give way to empty tins and four gallon kerosene cans; bird lime and woven wicker traps to nylon nets and wire snares; herbal compounds to Beecham's Pills and Sloan's Liniment. Dependence on the local store (*duka*) for imported goods of all kinds including food, has increased the incidence of malnutrition in times of food shortages and, more recently, unemployment. Many young people today have grown up quite ignorant of the variety and value of indigenous food plants, and go hungry in the midst of plenty. In contrast my old cook was usually able to keep our table well supplied with green vegetables from the surrounding bush when on safari.

DESCRIPTION OF PLANTS AND THEIR MAJOR USES

The nomenclature of the East African Herbarium, Nairobi, has been followed. The local tribe and tribal vernacular names are given following the scientific or English vernacular names.

ACANTHACEAE

Thunbergia alata L. Black-eyed Susan.

Swahili: *kijago-gura*, *mkunguzi*.

Perennial, climbing or procumbent herb. Rampant grower widely distributed on the coast and up country. The leaves are triangular, 5-9 cm long; the flowers buffish or orange with a purple center. A poor quality red dye was obtained from the crushed plants and used for personal adornment.

AMARANTHACEAE

Amaranthus spp. (*blitum*, *caudatus*, *spinosus*, *patulus*).

Swahili: *mchicha*. (This literally means spinach and in fact is applied to a variety of well-known plants used to provide leafy vegetables. The Swahili name is also widely accepted by many tribes, and is practically universal these days on the coast.)

Annuals, usually less than 1 m tall, mostly upright in growth but some species sprawling. One of the most important sources of green vegetables where ever it occurs. Utilized by almost all tribes, and frequently eaten by the author when on safari.

Celosia spp. Cockscomb.

Swahili: *mfungu*.

Fairly common species in East Africa, with dense spikes of green, red, or yellow flowers. The stems and leaves are eaten as a vegetable, as are also *cristata* and *argentea*.

ANACARDIACEAE

Anacardium occidentale L. Cashew nut.

Swahili: (tree) *mkanju*. (apple) *bibo*. (nut) *korosho*.

Tropical American tree that is widely distributed in the sandier areas of East Africa, and like the mango, is now regarded as indigenous. Spreading tree to 30 m in height, with rough bark. The flower stalk swells into a juicy apple-shaped body, red and yellow when ripe and with a pleasant astringent taste. To the bottom is attached the kidney-shaped fruit consisting of a hard, greenish skin containing a toxic black oil, inside which is the nut. This nut is of considerable economic importance and is considered to rank with the best edible nuts. A very popular intoxicating beer is prepared from the semi-ripe fleshy apples. Since the nut is lost when preparing the drink, excessive brewing severely affects commercial nut production. However, questioning of local growers, who often have other sources of income as fishermen or casual workers, invariably resulted in the answer that they preferred the beer to the additional income. I was told that on the island of Pemba, the corrosive oil extracted from the skin of the fruit was used to produce decorative scars on the arms and hands. The bark contains up to ten percent tannins. The stem yields a transparent, poisonous gum, and a black dye is obtained from the ripening fruits.

Heeria mucronata Bernh.

Swahili: *mbarajao*, *mvunja-hukumu*, *mwabha*; Digo: *msalasanga*; Sanya: *wuruchu*; Giriama: *mukuikwaiyu*.

Small coastal savanna tree with grey bark and dark red wood, common in the Shimba Hills. An infusion of the roots was said to stop diarrhea, but this use was confined, as far as I was able to ascertain, to this area. Similar properties were claimed for an infusion of the bark of *H. reticulata* (Swahili: *msangasanga*).

Lannea stuhlmanni (Eng.) Eng.

Swahili: *muyumbu*, *m. maji*, *mvure*, *mongo*; Boni: *wahari*; Giriama: *mukivure*; Boran: *tile*.

Medium-sized tree to 15 m tall with grey flaky bark and small creamy, strongly scented flowers. The oval fruits are sometimes eaten. The timber from this tree is light and only moderately hard. It is often used for the round billets (pestles) used by women when pounding maize and rice (*kutwanga*). An infusion of the bark, obtained by steeping, then warming pieces in water, produces a dark red-dish-brown dye.

ANNONACEAE

Annona chrysophylla Boj. Wild custard apple.

Swahili: *mkonokono mwitu*; Digo: *mbokwe*; Boni: *malamute*.

Much-branched savanna tree to 8 m in height. Flowers small, green and bark grey. A ginger colored dye is obtained from the bark, which on Zanzibar was used as a woman's hair rinse. The bark also produces an inferior fiber. The roots are cut into pieces and boiled to produce an extract used in the treatment of stomach-ache. The hot pulp is used for poultices. In certain areas, the roots are said to be poisonous if eaten.

Monodora grandidiera Baill.

Swahili: *mganda simba*, *mkilua mwitu*; Giriama: *mserere*; Digo: *mkere*.

Shrub to 3 m in height with silver-colored young twigs and leaves. Flowers large, showy, red and yellow, 8–12 cm in diameter. An extract from the roots was reputedly anthelmintic, but I was not able to obtain details on the method of preparation.

APOCYNACEAE

Adenium obesum (Forsk.) Roem. & Schult.

Swahili: *mdagu*, *wanja*; Duruma: *mwadiga*; Boran: *sarba arba*.

Succulent shrub to 2 m tall, occasionally taller, with grey branches and large, tubular, reddish flowers. The pods are some 20 cm in length, borne in pairs. The seeds have a long, silky pappus. The tap-root is large and fleshy, and a poison used on arrows and in fishing can be obtained from its pulp. A more efficient (cardiac) poison is obtained from the seeds.

Conopharyngia holstii (K. Schum.).

Swahili: *mapumbu ya kuma*; Digo: *kibombo*; Ndorobo: *derendet*.

Heavily-foliaged tree usually less than 15 m tall. When cut it exudes a white latex used for bird lime.

Landolphia kirkii Dyer. Coast rubber vine.

Swahili: *Mbungo* or *mbungu*, sometimes *kilungwana*.

Common evergreen climbing shrub or liana of the coast and islands, with small, white flowers and round green fruits, some 5 cm in diameter. This species was formerly the most important rubber-producing vine of the littoral, and large quantities of the gum were collected and exported. The gum was also used to repair leaking water or milk gourds, and produced a lime for bird catching, but these uses have now almost ceased.

Rauwolfia mombasiana Stapf.

Swahili: *mboza mkali*; Boni: *kihère*; Giriama: *mumasia*.

Glabrous shrub, sometimes small tree, with large leaves and small white flowers. This is another of the reputedly very useful *dawa* (medicine) trees that everyone knew about but no one actually used! Preparations made from the roots were said to cure V.D., stomach pains, and skin conditions, and were also used as a poison. Preparations of the inner bark were used for herbal remedies and the leaves as poultices on swellings.

Schizogygia coffeoides Baill.

Swahili: *mwango*, *mpelepele*; Rufiji: *mkururu*.

Shrub or small tree to 4 m in height with cream flowers and small, red, coffee-like fruits which are said to be very toxic. An extract of the roots, or bark, or both, mixed with an oil is used to alleviate skin conditions.

Strophanthus kombe Oliv.

Swahili: *mchoki*; Zigua: *mlibiti*; Dorobo: *msugu*.

Rambling shrub or climber in the coastal forests, with yellowish-white flowers having long tails. A major source of arrow poison for many tribes. The roots are boiled in water until a gum forms, which is the basis of the poison. Its preparation was frequently the perquisite of certain specific persons in each community, and sometimes a ritual was said to accompany its preparation, especially in times of war.

ARISTOLOCHIACEAE

Aristolochia petersiana Kotch.

Swahili: *mtangwa mwiyi*; Zigua: *lunkulwe*.

Perennial climbing shrub with characteristic flowers. Somewhat uncommon, but well known to be poisonous. Widely believed, not only on the coast, to provide an antidote for snakebite, but I was never able to find anyone who had any personal experience of this use.

ASCLEPIADACEAE

Calotropis procera (Ait.) Ait. f.

Swahili: *mpamba mwitu*; Somali: *bohr*.

Succulent, laxly branched shrub to 3 m tall, rarely to 6 m, with a corky, yellowish bark and purple-white flowers. The spongy pods, some to 4 cm long, contain brown seeds tipped with a silky floss. This floss is used to stuff pillows and cushions (recent use). A durable fiber was formerly obtained from the stems. The fiber was twisted to make long lines for fishing, but this use has now practically ceased. The latex is said to be poisonous to humans, but not to goats or camels.

BIGNONIACEAE

Kigelia aethiopum (Fenzl) Dandy. Sausage tree.

Swahili: *mvungavunga*, *mkungati*, *mwegea*; Giriama: *muratini*; Boni: *shelole*.

Unmistakable tree widely distributed in East Africa and usually found in the wetter areas of the coast. Height to 45 m, with grey or pale brown bark. The large reddish flowers have an unpleasant scent. The long (up to 1 m) sausage-shaped, grey-green fruits hanging from the branches are conspicuous but not edible, as they are extremely fibrous and toxic. I was told on several occasions that the fruit was used by "bad people" to cast spells, but was unable to discover by what method. The sliced, roasted fruit was added to native beer to make it more potent, but is now little used.

This tree and also *Ficus* spp. are the favorite resorts of devils (*shetani*), who take up their abode therein and have to be placated by the locals. The *shetani* is usually the spirit of a prominent or infamous, depending on the point of view, local person who, often, had died a violent death. Such trees were never intentionally felled, and on one occasion, this caused me considerable trouble and expense. This occurred while clearing land for agricultural experiments. At the center of the plot there was a large *Kigelia*, inhabited by a particularly malignant spirit, which had to be felled. In order to do this it was necessary to induce the spirit to move to an adjacent tree, and then the *Kigelia* felled to prevent it from returning. The same procedure was adopted at each tree until the edge of the clearing was reached. As each move involved a ceremony by the local witch-doctor and gifts to the landowners and the spirit (who appeared to have a substantial appetite and thirst for local beer), I was very pleased when the final ceremony was completed.

BOMBACACEAE

Adansonia digitata L. Baobab.

Swahili: *mbyuu*; Boni: *jak*; Bajun: *murū*.

Distinctive tree common in the drier areas of East Africa. Its immense girth, light grey color, and appearance when leafless or having been planted upside-down make it unmistakable. There is in fact a legend told in Mombasa that "long ago" the trees, in some way, offended a very powerful and evil spirit, who caused all their seeds to grow the wrong way from that time onwards. The largest trees are not always the oldest, as girth is not primarily related to age. The tree is leafless for most of the year, and a tree in full leaf is an unusual sight. The large pendulous white flowers open in the evening, last only one night, and have an unpleasant scent. The fruits are large, up to 25 cm in length, oblong in shape, woody, and contain a number of seeds each of which is surrounded by an acid pith. Where ever it occurs, it is utilized by the local people. The young germinating shoots (rather like asparagus in appearance), new shoots and leaves are eaten as vegetables. The seeds are also eaten when food is short, their pulp, which contains tartaric acid, is chewed to quench the thirst. An infusion of the seeds is used as a hair wash by women. The acid pulp was also used for curdling milk, and as a rubber coagulant when the latter one was commercially collected on the coast. The dry pulp burns with an offensive and irritating smoke, and was used as a fly repellent near stock bomas and as a hut fumigant. The empty fruits are universally used as water containers, drinking cups and bailers. A strong durable fiber is obtained from the inner bark, and was formerly used to make a high quality bark cloth. Bark ash was used in soap making. There is a common belief that an antidote to the arrow poison produced from *Strophanthus* spp. can be obtained from the bark, but I was never able to find anyone who knew how to produce it. Many tribes believed that individual trees or groups of trees, were inhabited by spirits and would place pieces of cloth tied to sticks and offerings of food at their base. The trees played an important part in witchdoctor's ceremonies, especially when casting out spirits from an afflicted person (the *ngoma ya shetani*). In the late fifties the combination of witchdoctor and baobab was still not easily ignored by local people. I knew of one tree in Rufiji District of Tanzania, which was used as a "bank" by the celebrated Ngufumali, and the money and ritual objects he openly stored within its trunk were sacrosanct.

Bombax rhodognaphalon K. Schum. ex. Engl.

Swahili: *msufi mwitu*.

Tall forest tree with a smooth yellowish-green bark. The fruit is a cigar-shaped woody capsule containing numerous round black seeds surrounded by a crumbly, coarse, reddish-brown kapok. This is widely used for stuffing pillows and cushions. A reddish-brown dye can be obtained from the bark.

BORAGINACEAE

Cordia ovalis R. Br. ex. DC.

Swahili: *msasa*.

Small tree to 7 m tall, with a bluish bark that scales off in long strips. The leaves are oval, 10 × 8 cm, and their rough upper surface is used as sandpaper.

CAESALPINIACEAE

Tamarindus indicus L. Tamarind tree.

Swahili: *mkwaja* (Lamu *msisi*); Bajun: *ukwaju*; Sanya: *raka*; Somali: *hamar*.

Savanna tree to 15 m tall often found growing on or beside termite hills. The brown pods resemble a thin sausage and contain up to ten seeds in an acid pulp.

This pulp has a variety of culinary uses and produces an inferior vinegar substitute. It is also made into a drink for alleviating fevers, and a laxative for children. The grayish bark produces an inferior fiber occasionally used for rope, and the young straight branches are favored for walking sticks.

Cassia occidentalis L. Stinking weed.

Swahili: *mnuka uvundo*, *mrambazi* (Zanzibar: *kunde nyika*); Duruma: *msalafu*.

Small, branched shrub to 3 m tall, with yellow flowers. Pods long 10–15 cm with a brown stripe when dry. A purge is made from an extract of the young leaves, bark, fruits or a mixture of these depending on local preference. Such usage is widespread on the coast, but may have been introduced by the Arabs. A poultice is made from a heated wad of leaves. *C. didymobotrya* Fres. is said, by some locals around Mombasa and Dar-es-Salaam, to be very poisonous, but no details could be obtained.

CANELLACEAE

Warburgia stuhlmannii Engl.

Swahili: *mkaa*.

Tree to 25 m tall with grayish-yellow, flaky bark. Flowers greenish-white with an unpleasant scent. The inner bark is stripped, powdered and used as a plaster to ease aches and joint pains.

CAPPARIDACEAE

Cadaba farinosa Forsk.

Swahili: *kibaazi mwitu*, *mvunja fumo*; Boni: *keunya*; Boran: *khaddi*.

Shrub or small much-branched tree to 8 m tall, with pale green-yellow flowers and small, sausage-shaped fruits containing red seeds. The twigs are used as tooth brushes (*mswaki*). An infusion of the leaves is heated and inhaled to clear the head of colds. It is also used as part of the treatment for persons said to be possessed of evil spirits.

Cleome strigosa Oliv.

Swahili: *mwaangu*, *mkabila mshenzi*.

Stiffly erect, somewhat hairy shrub to 1 m tall, with mauve flowers. Common on the coast and found growing on the shore above high-water mark. The leaves are used as a vegetable. A leaf decoction was formerly used to ease earache pain.

Maerua angolensis DC.

Swahili: *mtunguru*; Boran: *galagacha*; Somali: *hamaloshi*.

Shrub or small tree of the coastal savanna, seldom above 5 m tall, with a smooth, greyish bark. Pods to 25 cm in length resembling a string of beads. The wood is hard and heavy and poles are much used in building huts. A root infusion was taken to ease toothache and for the relief of colds. The fruit is considered poisonous.

Thylachium africanum Lour.

Swahili: *mdudu*; Boni: *mtongi*.

Shrub or small tree to 6 m in height, with dark grey bark, often found growing on termite hills. The tuberous roots are an important source of food in times of famine, but contain a toxic principle and must be well boiled before eating. Improper or hurried cooking proves fatal, as is well known to the locals.

COMBRETACEAE

Terminalia prunioides Laws.

Terminalia spinosa Engl.

Swahili: *mwalambe*; Giriama: *mwanga*.

The two species are generally treated by the local people as being the same and have similar uses. Tall, to 15 m in height, with rough, fissured gray bark. Timber brown, heavy and very durable in the ground. Frequently used as the main supports posts (*nguzo*) in hut building, and sought after for this purpose.

COMMELINACEAE

Aneilema aequinoctiale Kunth.

Swahili: *jaja*, sometimes *kongwa* or *kongwa mwitu*.

Perennial herb of shady places up to 2.5 m tall, and with orange flowers. The leaves are hairy and feel sticky when touched. An infusion of the non-flowering plant was said to relieve colds, but an old man said he remembered "long ago" it was powdered and taken like snuff for the same purpose.

Commelina spp.

Swahili: *kongwa* or *mpovupovu*.

Were widely believed to produce "good medicine," but only on Zanzibar was *C. benghalensis* L. used specifically for the relief of eye injuries.

CUCURBITACEAE

Lagenaria vulgaris Serv. Bottle gourd.

Swahili: *mmumunya*, *mumunie*.

Annual climbing or sprawling herb with large heart-shaped hairy leaves some 20 cm in diameter. Growing wild or cultivated, the large bottle-shaped gourds are eaten when young as a vegetable, or allowed to ripen and dry. Cleaned internally, they then have a wide variety of uses as liquid containers, drinking cups, bailers and for seed storage.

Luffa cylindrica Roem. Loofa.

Swahili: *madodoki*, sometimes *mtango kima* or *uziuzi*.

Common annual climber with yellow flowers, those of the male being some 15 cm in diameter. The cucumber-like fruits are edible when young but when mature the interior is a mass of fiber. It is then used like a sponge.

Momordica spp. (probably *charantia* L.).

Swahili: *boga la kibariani*.

Annual, occasionally a perennial, climbing herb. The mature cucumber-like fruits are eaten as a vegetable.

CYCADACEAE

Cycas thuarsii Guad.

Swahili: *mtapo*, *mpapindi*.

Encephalartos hildebrandtii A. Br. & Bouche.

Swahili: *mkwanga*, *mkamwa*; Sanya: *balacha*; Boni: *icheli*.

Both these cycads are utilized in times of famine. The spongy pith of the stem is chopped into small pieces and allowed to remain in heaps for about a week to ferment. The pieces are then well washed in hot water, allowed to dry in the sun, then pounded into flour. The most popular dish made from this flour was a thick paste which resulted from continuous boiling and stirring. Since it was somewhat

insipid it was usually flavored with peppers or coconut oil. Although this usage was well known on Zanzibar and the adjacent Tanzanian coast, I did not meet it elsewhere. The practice was probably introduced from India or Ceylon, whose merchants have long traded with East Africa.

DIOSCOREACEAE

Dioscorea spp. (probably *dumetorum* or *sansibarensis*).

Swahili: *ndiga*, *kinana*; Zaramo: *dendego*.

Climbing yam with large, round, acuminate leaves. The tubers, which become very large, are widely used in times of famine, but are extremely poisonous. On the coast they are sliced, boiled several times in salt water (the water being discarded each time) then washed in fresh water. On Pemba Island I was told that the slices are buried in the foreshore, left for several days, dug up, well washed, then spread in the sun to dry. Since the porridge produced from the pounded slices was often bitter, peppers or coconut were added.

EBENACEAE

Euclea frutuosa Hiern.

Swahili: *mdaa*, *mdaa mwitu*; Giriama: *mukipa*; Digo: *mlala*; Pokomo: *lukisa*.

Common, much-branched tree of the coast, to 25 m tall. Twigs, widely used as toothbrushes, make the lips and mouth red. A black dye was extracted from the roots to color grass mats, "amerikani" cloth and sometimes fishing lines.

Royena macrocalyx Grke.

Swahili: *mdaa*; Giriama: *mkuruponya*.

Large shrub of the coastal savanna. The young leaves are reddish-brown and pubescent, the older ones glossy and green. A black dye was formerly extracted from the roots and used to color grass mats and baskets. An unspecified part of the plant was said to be used in snakebite remedies in the Kwale area of Kenya.

EUPHORBIACEAE

Croton spp. (probably *sylvaticus* Hochst.).

Swahili: *msinduzi*; Boni: *kimili*; Sanya: *keirtata*; Duruma: *msandusi*.

Large shrub or small tree to 10 m in height, with rough bark and large leaves. The roots are aromatic. A root infusion is taken internally for stomach disorders and respiratory infections.

Excoecaria madagascariensis (Baill.) Mull. Arg.

Giriama: *mgulare* or *mugulari*.

Much-branched shrub or small tree to 10 m in height, usually found in drier areas of the Kenyan coast. A preparation of the bark and latex is used together with *Acokanthera* poison on hunting arrows, but is said to be of little use alone.

Phyllanthus spp. (probably *stolzianus*).

Swahili: *mkamba mwitu*.

Coastal forest shrub to 4 m tall, with small off-white flowers and yellowish fruits. The roots are said to be used in fertility potions and as an aphrodisiac, but this knowledge was not general, and only a few old persons around Kilifi, Kenya, were aware of it. However, these potions were once much more readily available, and the inclusion of this root was considered most probable.

Ricinus communis L. Castor oil plant.

Swahili: (plant) *mbarika*, (seeds) *mbono*, and so known almost universally on the coast.

Well known shrub or small tree. Oil obtained from the seeds is used for a multitude of purposes: to mix with dye for personal adornment, to oil the skin to promote softness, as a hairdressing, a laxative, and as a constituent of many herbal remedies when an oily paste is required. The seeds, highly ornamental, are used to decorate gourds, the person, and in such games as "bao." Collected they form an important local export, and cultivation is officially encouraged.

Securinega virosa (Roxb. ex. Willd.) Baill.

Swahili: *mkwamba* or *mtoja*; Giriama: *mkwambo*.

Shrub or small tree to 7 m tall common on the coast and savanna, with greenish-yellow flowers. Fruits are small white berries, eaten in times of famine. The timber is close-grained, reddish-yellow, and is used for firewood and to make charcoal. The young, straight stems or branches are split and woven into strong baskets.

Synadenium (probably *glauscens* Pax.).

Swahili: *kinyunyu* (also for *S. carinatum*); Digo: *tupa*; Giriama: *tiha*.

Shrub to 4 m tall with green flowers and large fleshy green leaves, 15 × 5 cm. The latex was used as a fish poison on the North Kenya coast in particular, and elsewhere as a poultice to reduce boils and swellings.

FLAGELLARIACEAE

Flagellaria guineensis Schum.

Swahili: *mpepe*, *mteba*.

Common climber of coastal districts which attains considerable heights on trees by means of its leaves, which are long, slender and end in a strong tendril. Flowers small, white; berries a brilliant red. The straight stems, up to 7 m in length, have a variety of uses. The berries were included in remedies for the relief of V.D. This last was somewhat vague, for although it was widely believed, the actual method of preparation and use was not established. It was definitely an ingredient of potions supplied by the local witchdoctor and herbalist.

GRAMINEAE

Hyparrhenia rufa Staph. Thatching grass.

Swahili: *fefe*.

Perennial grass to 2.5 m tall often found on black-cotton soil. Widely used for thatching and screens around households.

Panicum maximum Jacq. Guinea grass.

Swahili: *inde*.

Perennial tussock grass to 2 m tall. Used for thatching only as a last resort, as it is not durable.

Phragmites mauritianus Kunth. Reed grass.

Swahili: *mtete*.

Perennial grass, usually in moist situations, growing to 4 m tall. The mature stems, which can be several centimeters in diameter, are used as filling in fences and screens around homesteads, and for interior partitions.

HYPERICACEAE

Harungana madagascariensis Lam. ex Poir.

Swahili: *funa maji*, *mgondogondo*, *mbura*; Digo: *marindazia*.

Shrub or tree of the forest edge to 15 m tall. The bark is scaly, red brown and

shows pink when slashed. The wood is soft and not durable. The sap is blood red and is used to produce an orange dye. The small, orange berries are edible.

LABIATAE

Ocimum americanum Mill. Mosquito bush.

Swahili: *kinuka* or *kivumbasi*.

Common, erect, branched annual herb with dense spikes of small flowers, and opposite lanceolate leaves. The leaves and seeds are used in cooking. A leaf infusion is used for stomach complaints, and the whole dried plant is burnt in huts at night as a mosquito repellent. The smell is quite characteristic, as anyone who has walked through a Zanzibar village at night can well recall. The leaves also yield an essential oil by distillation.

LILIACEAE

Aloe spp.

Swahili: *msubili*, *kisimamleo*, *msubiri mwitu*.

Succulent perennials, usually with a rosette of narrow, spiny leaves and a long raceme of reddish or yellow flowers. Classification of this species was always difficult, and I was unable to identify those shown to me by coastal people with one exception, *A. rabaiensis* Engl. Generally the roots are believed to promote regular movement of the bowels, but this statement was often modified by adding that only certain women collected them for this purpose. More common was to use the leaves or their mucilage as a hot poultice to relieve swellings. An unspecified concoction was also used to treat gonorrhoea.

Gloriosa simplex L. Gloriosa lily.

Swahili: *msufari*, *mkalamu*; Boran: *homa*.

Climbing, tuberous-rooted lily, widely spread in East Africa, with large yellow-orange to scarlet flowers. The poisonous properties of this plant are well known, and the powdered rhizome is used for criminal poisoning.

LOBELIACEAE

Lobelia fervens Thunb.

Swahili: *kinwale*, *kisambali*.

Annual, sometimes perennial herb, 25–35 cm in height, with small, blue flowers and glabrous leaves. Very common in ricelands on the coast. The whole plant is used as a vegetable. It is also crushed and mixed with coconut oil to form a poultice to reduce swellings.

MALVACEAE

Sida spp. (probably *acuta*). Broom plant.

Swahili: *kifagio*.

Common weed of cultivated lands and gardens, with wiry, fibrous stems and yellow flowers. The whole plant is uprooted, tied with fiber and used as a broom. Another species, probably *S. cordifolia*, has large leaves which are used as a substitute for toilet paper (Swahili: *mchokochole*).

Thespesia danis Oliv.

Swahili: *mhowe* (Lamu-Muhanda); Sanya: *danisa*; Boni: *mlambale*.

Small tree to 5 m tall, common where it occurs on the coast. It has yellow flowers up to 4 cm in diameter, and small, edible fruits. The wood is red, hard and durable, and around Malindi and Lamu, Kenya, it was used to make strong hunting bows.

Thespesia populnea (L.) Sol. ex Corr.

Swahili: *mtakawa*.

Medium-sized tree to 10 m tall, common on the shore north of Dar-es-Salaam, and on Zanzibar, and widely spread on the coast generally. The timber is reddish-brown, hard and durable in salt water. At Bagamoyo, Tanzania, it was being used for minor planking and repairs to small boats.

MELASTOMATACEAE

Dissotis rotundifolia T.

Swahili: *kichinja uthia*.

Perennial creeping herb with red or mauve flowers, common on uncultivated land in moist areas at the coast. The leaves are chewed to relieve coughing.

MELIACEAE

Trichilia emetica Vahl.

Swahili: *mnwamaji, mitimaji*; Digo: *mudimadi, nyamadze*; Boran: *anona*.

Much-branched evergreen tree to 15 m tall, occasionally much taller. Flowers greenish-white, fruits round, reddish, containing black seeds with red arils. As the name of the tree implies, it is the source of an emetic, which is prepared from the ground bark. On the coast, preparation of this powder was considered to be a specialist occupation, as too strong a mixture was known to be poisonous.

MIMOSACEAE

Albizia anthelmintica Brongn.

Swahili: *mpojoro, mtikiti*; Boni: *hobocho*; Zigua: *mfuleta*; Boran: *hawacho*.

Large bush or small tree to 10 m tall, occasionally taller. It has a smooth grey bark, small, pale green flowers and brown, oblong pods 6–12 cm in length. The tree is widespread in East Africa and where ever it occurs a bark infusion is used as an anthelmintic by the locals. It is probably the most important indigenous source of such medication.

Dichrostachys cinerea (L.) Wight & Arn.

Swahili: *mfunga nyumba, mkingiri, mkulajembe*; Sanya: *mukingili*; Boni: *msativu*; Boran: *jireme*.

Small thorny savanna tree to 5 m in height, sometimes much taller. Bears small, yellow and mauve flowers in pendulous clusters. Pods form twisted bundles which remain on the tree for some time after ripening. The heartwood is dark and very tough. A pod infusion is drunk to ease the pain from scorpion stings. I was also told that a poultice of the boiled pods was applied to scorpion stings and snake-bites, but no one had actually used them in this manner. The straight branches are favored for spear and hoe handles.

Parkia filicoidea Welw. ex Oliv.

Swahili: *mnienzi*.

Tall, to 20 m, often flat-topped tree of coastal forests. The brown pods, 15–30 cm in length, contain black seeds in a dry, sweetish, yellow pulp. It is a hunters' tree, for the ripe seeds are much sought after by birds and monkeys. Guinea fowl and francolin were ambushed or caught on birdlime; now they are often netted.

MORACEAE

Antiaria toxicaria (Rumph. ex Pers.) Lesch. False Iroko.

Swahili: *mkunde*; Digo: *mnguongo*.

Very tall tree of coastal and inland forests, with a smooth pale gray bark.

Formerly it was a major source of strong, white bark cloth. Another hunters's tree, since the ripe fruits are much appreciated by birds and small game.

MORINGACEAE

Moringa oleifera Lam. Horse-radish tree.

Swahili: *mlonge*, *mzunze*.

Small, much-branched tree to 7 m tall. Originally from Asia, it is now completely naturalized on the coast, and most natives are unaware that it is an exotic. The flowers can be large, cream-colored and fragrant. The long (25 cm) and thin capsules contain winged seeds. The tree is often planted near homesteads. The powdered root is pungent and used as a flavoring, the young seeds and leaves as vegetables.

NYMPHAEACEAE

Nymphaea capensis Thunb. Blue water lily.

Swahili: *makula*, *myungiyungi*.

Aquatic perennial with large, up to 20 cm in diameter, floating leaves. Flowers, varying from blue to pinkish-mauve, have prominent golden stamens. Plants are widely regarded as having medicinal properties but there is some disagreement as to which parts cure what. Underwater stems are used for stomach ailments, and the juice of raw leaves to ease chest conditions. It is an ingredient in many of the herbal medicines (*dawa*) of the coast, but it is most likely that a number of such uses may have been introduced by Arabs and Indians, for it is most commonly so used on Zanzibar and Pemba. The roots are collected and eaten in times of famine.

PALMAE

Borassus aethiopicum Mart. Borassus palm.

Swahili: (tree) *mvumo*, (leaves) *majore*; Duruma: *mugumo*; Sanya: *mtame*; Boni: *ong*.

Tall palm to 25 m in height. The mature trees have a curious bulge some two thirds up the stem. It is common in the coastal belt but somewhat uneven in its distribution, possibly due to excessive local tapping for palm wine. The palm has a multitude of uses. The fresh sap is a pleasant drink, and when fermented produces a high quality toddy. The leaves are used for making mats, baskets, screens, thatching, etc., and the newly germinated seedlings and young fruits are eaten.

PAPILIONACEAE

Abrus praecatorius L. Crabs-eyes. Lucky bean.

Swahili: (plant) *mkandume*, *mkangauchawi*, *mlazalaza*, (seeds) *macho ya tipitipi*; Giriama: *mturituri*.

Common climber with small pinkish flowers. The fruit contains four or five scarlet seeds with a black spot. The seeds ground in water are extremely poisonous, but said to be harmless when boiled. Their main use is for ornament, but they are also used in witchcraft. The only definite use I could establish in this field was in divination (*ugazi*) when the pattern of a number of thrown seeds indicated favorable or unfavorable circumstances for a project or journey.

Dalbergia melanoxylon G. & P. African blackwood. African ebony.

Swahili: *mpingo*; Boni: *samachi*; Digo: *mboranguluwe*.

Much-branched, usually multi-stemmed thorny tree to 12 m in height, with

small, white sweetly scented flowers. A root decoction was taken as a "tonic" when sick.

Eriosema spp.

Swahili: *mbaazi mwitu* (in general).

Roots sometimes eaten, especially by children.

RHIZOPHORACEAE

Bruguiera gymnorrhiza (L.) Lam.

Swahili: *mkifu, muia, msindi*; Digo: *mchofi*.

Tree to 25 m in height, occasionally more and often the tallest species in a mangrove swamp. Bark reddish-brown, very rough, with a high tannin content. Its main use on the coast where ever it is found, is as a source of building poles (*nguzo & boriti*) for it becomes very hard and durable when seasoned. There was formerly an extensive export trade in these poles to the Persian Gulf.

ROSACEAE

Parinari curatellifolia Plan. & Benth.

Swahili: *mbira*.

Much-branched tree to 15 m in height, with rough, corky gray bark, and small yellow flowers. The plum-sized, reddish fruits are commonly eaten, and have an astringent taste. Children also extract the kernels from the hard seeds which have a slight almond flavor. An inferior tooth brush is made from the branchlets.

RUBIACEAE

Canthium pallidum (K. Schum) Bull.

Swahili: *kifuwake*; Giriama: *mfudzo*.

Medium-sized, many-stemmed tree to 7 m in height, common on the Kenyan coast. Produces good poles for building huts.

Tarenna graveolens (S. Moore) Brem.

Swahili: *mliwa*; Digo: *mfuidzo-fuidzo*.

Evergreen shrub or small tree, 3–5 m in height, with pale bark and highly scented white flowers, often found growing in pure stands on the coast. The ground wood was made into poultices to treat ulcers, sores and smallpox lesions. It was regularly sold in local markets on the Kenyan coast, but was less popular in Tanzania. The reddish-black fruits were occasionally eaten, most often by children.

Xeromphis spp. (probably *obovata*).

Swahili: *mtengeji*; Sanya: *mgojama*; Zigua: *mdasha*.

Small bushy tree, 3–8 m in height with brown bark and small yellowish flowers, common in the dry coastal hinterland. Well known among many tribes for the treatment of gonorrhoea. A bark extract is used for poisoning.

RUTACEAE

Fagara chalybea (Eng.) Eng.

Swahili: (tree) *mkununungu*, (leaves) *pombo*; Giriama: *mdungu*.

Savanna tree to 12 m in height. The trunk has large thorns, the branches smaller ones. The leaves have a pronounced lemon scent and are used to flavor food, and eaten as a vegetable. Branchlets are used as tooth brushes, and are believed to keep the gums hard and healthy.

Toddalia asiatica (Lam.) Lam. Wait-a-bit thorn.

Swahili: *kikucha*; Sanya: *kikucha*; Dogo: *kikomse-cha-chui*.

Scandent evergreen shrub which is one of the most unpleasant of the East African thorns. The small greenish flowers have an unpleasant scent and produce small, lobed, yellow fruits. These are hot to the taste, are eaten by children, and are used to flavor food in times of famine. The leaves and young shoots are sometimes pounded and used for stomach disorders (vague).

SALVADORACEAE

Dobera glabara (Forsk.) R. Br.

Swahili: *mkupa*; Giriama: *mkulakula*; Boni: *hurub*; Sanya: *garse*.

Evergreen tree of the dry savanna. It has a smooth yellow bark and reaches heights of 12 m. The young twigs are used for tooth brushes, and together with *Salvadora persica* are the most popular ones for this purpose.

Salvadora persica L.

Swahili: *mswaki*; Giriama: *mweza moyo*; Sanya: *ade*.

Medium-sized tree of the drier parts of the coast. It has a pale bark and light green, smooth leaves. Favored for tooth brushes.

SAPOTACEAE

Manilkara sulcata (Eng.) Dub.

Swahili: *mchambiji*, *mchedi*, *meteweji*; Sanya: *kuraga*; Bajun: *mkuraki*; Giriama: *muchedizi*; Boni: *kurag*.

Evergreen forest tree to 10 m in height. The fruits are edible. It was said that a fruit extract could counteract the effects of snakebite, and although I questioned a number of people in the Malindi area of Kenya about this, none of them had so used it. However, several had bought medicine locally, said to contain it, to reduce the pain and swelling resulting from stings and snakebite.

SOLANACEAE

Datura metel L. Thorn apple.

Swahili: (plant) *mnanaha*, (fruits) *kidyungu*.

Annual, much-branched herb 1–2 m tall, with somewhat hairy stems and branches. Flowers long, white, funnel-shaped. Fruit 3–5 cm in diameter covered with spines; seeds brown, oval, 50 cm in length. The toxic nature of this plant is widely known, and it has been used for criminal poisoning in many parts of East Africa. An infusion of the leaves and stem, sometimes the flowers, is used. The leaves and flowers are dried and used to relieve respiratory congestion, being either rolled in rough cigarettes or placed on embers and the smoke inhaled. One local herbalist at Bagamoyo, Tanzania, used a small brazier and placed a cloth over it and the head of the person being treated. The leaves of *Cissus* spp. were used in a similar manner. Adding the seeds to local beer was said to make it more potent, but overuse caused severe head and stomach pains.

THYMELAEACEAE

Lasiosiphon latifolius (Oliv.) Bren.

Swahili: *kinyunywa*, *mwata*; Duruma: *mpawe*; Boni: *madiddi*.

Large, multi-stemmed shrub to 15 m in height, with orange flowers. The calyx tube and sepals are covered with silky white hairs. The bark contains a strong fiber, and the young leaves are said to be used by witchdoctors to produce poison.

TILIACEAE

Grewia villosa Willd.

Swahili: *mukorobasho*; Bajun: *mkuroboshu*; Somali: *gomesha*.

Shrub to 3 m in height with round leaves to 10 cm in diameter, the undersurface covered with white hairs. Fruits edible, reddish-brown, the size of a cherry. A compress of leaves was used to reduce facial swellings, and was said to be especially good for sore or swollen eyes.

Triumfetta rhomboidea Jacq.

Swahili: *mchokochole*; Boni: *tumone*.

The large leaves are used as a substitute for toilet paper.

VERBENACEAE

Clerodendrum hilderbrandtii Vatke.

Swahili: *mkormudo*, *mkua usiku* (spp. generally *mtozatoza*); Giriama: *mkula usiku*.

Large shrub or small tree with white, tubular flowers. The smooth, green branches, with the pith removed, were formerly used for pipe stems. The most common local use was to make a pulp of the leaves to bait the smaller fish traps (*dema*, *mingona*) and, although it appeared to be effective, there was no obvious reason for choosing these particular leaves. The roots, either pounded or boiled, were used in herbal remedies but with no specific curative powers.

Premna chrysoclada (Boj.) Gurke.

Swahili: *muvumo*, *mvuma nyuki*; Giriama: *muruma*.

Shrub to 3 m in height, the branchlets covered with short, stiff brown hairs. The blackish fruits are edible. A root infusion was used as a purgative, and to treat fevers.

VIOLACEAE

Rinorea elliptica (Oliv.) O. Kuntz.

Swahili: *mshunduzi*; Boran: *kara*.

Glabrous evergreen shrub to 8 m in height, with a smooth, very dark brown or black bark. Flowers small, pinkish-white and berries red. The Giriama say that a preparation from the roots is effective as an antidote to snakebite, but that the method of preparation and use is a secret.

The following plants were said to be used in herbal compounds (†) or in sorcery (*), but I was unable to ascertain the specific purpose:

† <i>Abutilon mauritianum</i> H.	Roots	Swahili: <i>Mchekachaka</i>
† <i>Afzelia cuanzensis</i> Welw.	Roots?	<i>Mbambakofi</i>
* <i>Dalbergia melanoxydon</i> G. & P.	Leaves	<i>Kikwaju</i>
† <i>Dichopetalum stuhlmanni</i> Eng.	Leaves	<i>Njenjere</i>
* <i>Fernandoa magnifica</i> Seem.	Roots	<i>Mitisumu</i>
* <i>Grumilea lauracea</i> K. S.	Roots	<i>Msigande</i>
* <i>Hydnora abyssinica</i> A. Bm.	Rhizome	<i>Nyambo</i>
* <i>Oldfieldia somalensis</i> (Chiov.) M-R.	Bark	<i>Mbombaro</i>
* <i>Pedaliium murex</i> L.	All	<i>Mbigili</i>
* <i>Securidaca longipedunculata</i> F.	Leaves	<i>Nzigi</i>
† <i>Tribulus cistoides</i> L.	Roots	<i>Mbiliwili</i>
* <i>Vitex strickeri</i> V. & H.	Roots	<i>Mvumba</i>
* <i>Xylothea tettensis</i> Gilg.	Roots	<i>Mchekachaka</i>

The following plants were used for fiber:

<i>Barringtonia racemosa</i> (L.) Blume.	<i>Mtomondo</i>
<i>Sansevieria</i> spp.	<i>Mkonge</i>
<i>Urena lobata</i> L.	<i>Mpuruza</i>

The following fruits or seeds are occasionally eaten, most frequently by children looking after stock or guarding *shambas*:

	Swahili:
<i>Afromomum angustifolium</i> K. Schum.	<i>Matunguu</i>
<i>Antidesma venosum</i> Mey. ex Tul.	<i>Karacha</i>
<i>Carpolobia goetzei</i> Gurke.	<i>Mzukizuki</i>
<i>Deinbollia borbonica</i> Scheff.	<i>Mbwakabwaka</i>
<i>Enterospermum littorale</i> Miern.	<i>Mfunzofunzo</i>
<i>Flacourtia indica</i> (Burm. f.) Merr.	<i>Ngovigovi</i>
<i>Garcinia livingstonei</i> T. And.	<i>Mpekechu</i>
<i>Hirtella zanzibarica</i> Oliv.	<i>Mkonechacha</i>
<i>Ochna mossambicensis</i> Klotch.	<i>Mkilimo, mlanyuki</i>
<i>Piliostigma thonningii</i> (Sch.) M-R.	<i>Mchikichiki</i>
<i>Premna holstii</i> Gurke.	<i>Mvumba ngombe</i>
<i>Salacia floribunda</i> Tul.	<i>Nguku</i>
<i>Sclerocarya caffra</i> Sond.	<i>Mngongo</i>
<i>Vitex mombassae</i> Vatke.	<i>Mfudumaji</i>
<i>Ximenia americana</i> L.	<i>Mpingi</i>
<i>Ziziphus mauritiana</i> Lam.	<i>Mkunazi</i>

Leaves of the following plants are used as vegetables:

<i>Asytasia gangetica</i> (L.) T. And.	<i>Mchicha</i>
<i>Cleome strigosa</i> Oliv.	<i>Mwaangu</i>
<i>Corchorus</i> spp.	<i>Msafa, mulenda</i>
<i>Ethulia konzoides</i> L.	<i>Kimangari</i>
<i>Ipomoea pes-caprae</i> L.	<i>Majani ya mwaka</i>
<i>Jacquemontia capitata</i> Don	<i>Kikopwe</i>
<i>Sesuvium portulacastrum</i> L.	<i>Mboga wa pwani</i>
<i>Sonchus oleraceus</i> L.	<i>Sunga pwapwa</i>
<i>Talinum cunifolium</i> Willd.	<i>Kitambi cha maskini</i>
<i>Triumfetta annua</i> L.	<i>Mlenda</i>
<i>Vernonia cinerea</i> Less.	<i>Kifuka</i>

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