SOME INDIGENOUS COAST PLANTS FOR COAST GARDENS

By R. MORAY GRAHAM

I trust that I shall sometime see
A forester who loves a tree;
Whose soul is not immersed in slumber,
Dreaming of potential lumber.

At best gardening on the Coast can be disheartening. Too often, if the house is not perched on a bed of old coral the soil consists of pure sand. A few plants do not seem to mind this unduly, but one always feels that the next long dry spell will see them off, and that is disturbing.

Up-country people who own houses on the Coast normally inhabit them for just one or two months in the year, avoiding the rainy season, and so their efforts can only be spasmodic. Those Europeans who are more or less permanently resident are mainly businessmen living on or near Mombasa Island. Their houses, as often as not, are leased, and it is very well known that a gardener's best work is done on his own land.

It may be noted that relatively few Coast species are really worth cultivating, that fewer still are at all well known, and that almost the only way in which seeds, roots or cuttings can be obtained is to go out into the bush and collect them. And this, unless one happens to be able to get out on safari for weeks at a time, at different seasons of the year in order to spot potential winners in flower and in fruit, is nearly impossible.

Not many people have tried seriously to cultivate indigenous species in a garden on the Coast. One might ask why the Forest Department does not run an official nursery to try out far more Coast plants of promise, selling interesting types to the public. There are two possible explanations. Firstly, some probing auditor, green though his pencil may be, would want proof that *Heinsia*, for example, really does produce saleable timber, and that could lead to endless altercation. And secondly, of course, there is the odd fact that so few foresters are interested in flowers.

In practice some of the better Coast plants are already commonly used. *Adenium obesum*, with its bright pink Azalea-like flowers will do even at 6,000 feet. The local white *Plumbago zeylanica* is grown, but is not seen nearly so often as the sky-blue South African form. *Hibiscus schizopetalus* is also commonly used, and some bulbous species like *Gloriosa*, *Haemanthus* and *Crinum* have a very wide natural distribution and are found up-country. *Clitoria ternatea* is freely used on the Coast. The palm-like *Encephalartos hildebrandtii*, though sometimes seen in Nairobi, could with advantage be planted much more on the Coast. It is common in the Arabuko-Sokoke forest near Kilifi.

Palms, other than coconuts, are always worthy of a place. *Borassus flabellifer*, with that curious bulge two-thirds of the way up the stem, prefers deep soil, but grows quite well on parts of Mombasa Island. *Phoenix reclinata*, the common *mukindu*, is less exacting. *Raphia ruffia*, normally riparian, will do well enough in damp hollows. Its leaves may grow to a length of 50 feet and its fruits are those blatantly artificial-looking, highly polished 'pine-cones' sometimes found in local curio shops. The well-known gardeners' fibre is harvested from it. The Oil-palm, *Elais guineensis*, occurs, usually as a riparian plant, but is not difficult to grow if it can be watered occasionally.

On a Coast plot one does not usually ask more of a tree than that it should provide shade, yet there are some locals which are also decorative when in flower. Many

of them are deciduous during the dry weather, but are correspondingly hardy. Those which do not shed their leaves so freely demand better soil conditions as a rule.

Erythrina abyssinica, common from sea-level to 7,000 feet, is often rather scraggy looking. A far finer species, *E. sacleuxii*, is found in savanna, or as a forest tree in the Arabuko Sokoke area. When in full bloom a well-grown specimen is spectacular with its masses of brilliant scarlet flowers. *Fernandoa magnifica* from the Shimba Hills bears very large orange-coloured flowers resembling those of its relation, the Nandi Flame; but these are neither such a good colour, nor are they so freely borne as on *Spathodea*. *Markhamia zanzibarica*, again, is very similar to the Nairobi representative of the group, *M. hildebrandtii*. The flowers are yellow with purple spots.

Several of the smaller trees, growing to a height of from ten to 25 feet, are worth considering. *Mundulea sericea* has reddish-purple flowers, while those of *Millettia usaramensis* are mauve or mauve-blue. These very attractive little trees may resemble an arborescent Wistaria when in full bloom. A fish-poison is made from the bark of *Mundulea*, and also from that of *Barringtonia racemosa*. The large, cream-coloured flowers of this plant are borne on long pendulous racemes like those of the Sausage Tree (*Kigelia*); but as it only thrives in deep shade on a river bank it is seldom seen. Incidentally, *Kigelia aethiopica* itself is quite worth growing if one has land to spare.

Leptactinia platyphylla from the Shimba Hills has sweet-scented, white, star-shaped flowers an inch across which are freely borne in a good year. Those of *Holarrhena febrifuga* are very similar, though the tree belongs to quite a different family. *Ixora odorata*, a rather scandent little tree also from the Shimba Hills, bears heads of trumpet-shaped flowers up to two and a half inches long, pink outside and white inside, followed by small red cherry-like fruits. This is an attractive plant. From the same area comes *Turraea kaessneri*. Each of its rather striking and sweet-scented white flowers, borne in clusters, consists of a narrow central trumpet two and a half to three inches long; but in addition five greenish-white strap-shaped petals up to five inches long hang from the calyx. *T. mombassana*, a many-stemmed shrub growing to about nine feet, bears, singly, quantities of small white flowers about one and a half inches long, against a dense background of small, dark-green leaves.

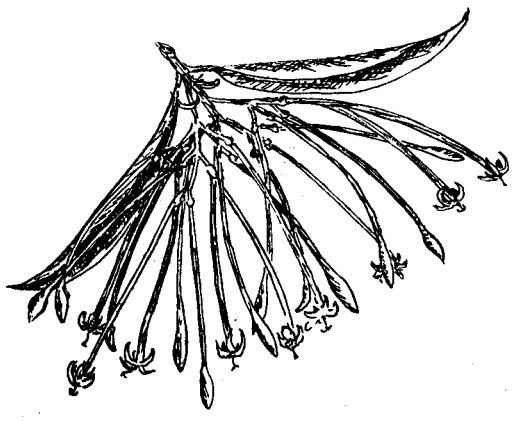

Fig. 1. *Ixora odorata*

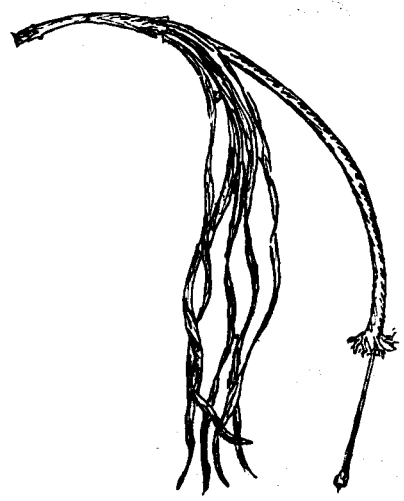

Fig. 2. *Turraea kaessneri*
Single flower

In the dry bush country north of Malindi several species of *Cassia* are common. They are small, deciduous trees with bright golden-yellow flowers, sometimes scented, borne in profusion. It is difficult to be sure of today's names for these, but *C. abbreviata*, *C. afrofistula* and *C. singueana* would all seem to be worth growing. In any event as seeds or plants cannot be bought, the names do not matter. It is enough to know that there are useful, hardy species available to those who care to look for them. And of course, with regard to names the botanists are quite unpredictable.

Lawsonia inermis is another small tree from the bush country near Malindi. It is not in itself very striking, but the numerous small, white flowers are very sweetly scented. The scent is extracted by Swahilis and Arabs and used in perfumery. In addition henna dye, taken from the leaves, is used locally for dyeing finger-nails red. Scent used to be extracted also from the flowers of a local *Uvaria*, not yet finally identified. These are two inches in diameter, greenish-white in colour with a maroon mark at the base of each petal. Another small tree of the same family, *Asteranthe asterias*, has scented, greenish-white, quite large flowers with a purplish mark at the base of each petal.

In the family of *Rubiaceae* we find *Rothmannia fischeri*, a small forest tree with large bell-shaped flowers, white with purple spots. *Gardenia lutea* and *G. volkensii* are savanna species with tubular white flowers turning yellow as they age. All of these have the typical scent of Gardenia. They are slow growing but interesting and hardy plants. *Heinsia crinita*, a shrub to about 12 feet, is common in the bush near Kilifi. When in flower it is perhaps the most showy and attractive of the whole group. The extremely numerous white, star-shaped flowers cover the whole plant and are jasmine-scented. Unfortunately the show lasts for three or four days only, after which all the petals are shed.

Fig. 3. *Heinsia crinita*

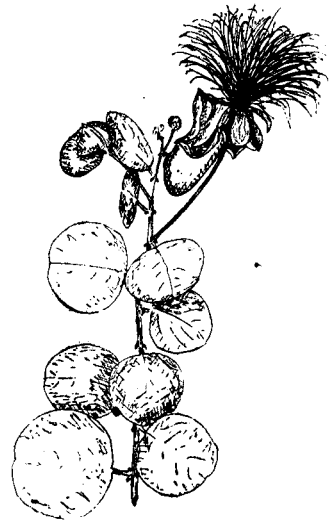

Fig. 4. *Capparis galeata*

Brackenridgia zanguebarica, a small tree of the Coast and of the Shimba Hills, is another potentially excellent garden species which, like its relation *Ochna*, loses much of its value because its flowering period is so restricted. The small white flowers seem to envelop the tree completely once or twice a year, but fall almost at once. The rather dull purple flowers of *Securidaca longipedunculata* on the other

Fig. 5. *Strophanthus verrucosus*

hand, though very numerous, last well on the tree. They are scented and are followed by fruits which look very like locusts. The Swahili name for the plant is *mzigi.*

Apart from those already mentioned, there are some reasonably attractive shrubs available. *Acridocarpus zanzibaricus* may be found in blossom for most of the year and the flowers last well. The plant is almost too common to receive the attention it merits. Various forms of the bright red *Pentas* are already common in cultivation. The Coast one is good. It appears to be *P. bussei.* Some of the smaller white *Clerodendrums* are quite handsome, but most of them have an evil smell, which is presumably why they are used as bait in woven fish-traps.

Among the *Acanthaceae* there are several useful plants. The Coast form of *Thunbergia affinis* bears large Gloxinia-like flowers, blue when newly opened, but

turning to a good purple with a yellow throat. *Ecbolium amplexicaule* is a somewhat straggling undershrub. The delicate flowers are about an inch across and are usually greenish in colour. They may, however, be bright emerald green turning to blue-green in the throat, and are then very attractive. Several species of *Barleria* have very delicate textured flowers from one to two inches in diameter, white, sky-blue or carmine in colour. The botanists, apparently, have not yet sorted out this group.

Tetracera boiviniana, a somewhat untidy shrub from the Shimba Hills, bears white flowers an inch and a half across, and scented strongly of ripe peaches. On the forest edge near Kilifi there is a scrambling or climbing form. *Strophanthus mirabilis*, a many-stemmed shrub from the Coast bush, has bell-shaped flowers more than an inch in diameter. The corolla is white and the sepals pinkish. The petals are elongated into tails over an inch and a half long—an interesting-looking flower.

A small shrub which will grow in pure sand almost at high water mark, and which is not undecorative, is *Sophora tomentosa*. The flowers are yellow and not very conspicuous; but the whole plant, stems, leaves and seed-pods, is covered with velvety silvery-grey tomentum. Another plant which does not object to salt spray is *Capparis galeata*. This fleshy-leafed, scrambling shrub is frequently found on the low coral cliffs of the shore. The large flowers which appear to consist largely of stamens, are white when they open, but soon turn pale mauve. Very young buds pickled in salt and vinegar make an excellent substitute for capers.

A few climbing plants are worth a mention.

Strophanthus verrucosus, from Arabuko Sokoke, climbs to 30 feet or so, supporting itself by means of curious triangular, corky projections. The flowers are fairly large bells, white, yellow and maroon inside. The petals, like those of *S. mirabilis*, are produced into tails, in this case six or eight inches in length. *S. courmontii*, from the Shimba Hills, is a much larger plant. The bell-shaped flowers, two and a half inches across, are white with red and yellow stripes inside, but the petals are orthodox in shape. Even larger is *Landolphia florida*. The large, white sweet-scented flowers are jasmine-like and are followed by fruits which, externally at least, could very easily be mistaken for big, yellow lemons.

Combretum paniculatum could be described as a very large climber, or almost as a very scandent tree. The countless small, scarlet flowers are borne on the upper surface of horizontally growing branchlets. If constantly cut back, it can be treated as a large shrub, and very handsome it can be. *Vanilla roscheri*, an orchid which may climb to a height of 30 feet or so, looks like a long string of green sausages draped over the scrubby forest in which it is found, but the few flowers are very lovely. They are large and white, with five outer petals and a central trumpet, salmon-pink inside, and slightly frilled.

The seeds of *Caesalpinia bonduc*, another scrambling and spiny shrub found growing in pure sand very near the sea, are borne in attractive, canoe-shaped pods growing horizontally and opening on the upper surface only. They are roundish, about two-thirds of an inch in diameter, extremely hard when ripe and pale blue-grey in colour. They are collected locally for use as counters in the game of 'Bau'. The seeds of another small legume are somewhat unusual in that they are quite a bright blue when ripe; and there are plenty of others which could make an interesting and amusing collection for the children. A word of warning to the seed collector, however. *Mucuna pruriens*, a climber found south of Mombasa on the fringe of the mangrove swamps, bears pods from three to five inches long, in pairs. These sometimes resemble in miniature the horns of a buffalo and are covered in what looks like velvet. It consists, in fact, of minute, barbed, and probably poisoned spines which cause intense irritation if allowed to settle on the skin. This can happen if one stands under a ripe fruit and shakes the plant gently.

Most ground orchids just refuse to flower if transferred from their chosen habitat,

but it might be worth experimenting further in damp soil with two fairly common Coast species. The flowers of *Eulophia wakefieldii* are an inch across and very bright golden-yellow in colour. Those of *E. cucullata* may be nearly double this size and a lovely clear mauve-pink colour. Both grow to three feet or more in height.

Finally, *Kaempferea aethiopica*, which from a little distance could easily be mistaken for a ground orchid, bears delicate bright pink and yellow flowers two inches in diameter, on stems from six to 15 inches in height. It prefers some shade and fairly moist conditions, but given that, it does not object to being transplanted, and is very well worth growing.

Tastes differ, and there are doubtless scores more species as colourful or as interesting as those mentioned; but it will be very many years before more than a fraction of them are given a trial run. Here are enough for a sample plot.

Fig. 6. *Vanilla roscheri*