

A KEY AND CHECK LIST TO KENYA ORCHIDS

By

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Drawings by E.M. Tweedie

Introduction

This key represents an attempt by three keen orchid-hunters to place before others equally ignorant of systematic botany what it is hoped will prove a fairly comprehensible way of identifying some of the orchids they will find in Kenya.

It may be as well to warn beginners in this hobby that though they will find few specimens spectacular enough to be worth a place in a fancier's orchid-house, they will come across many which, when in flower, well deserve an honoured position in any drawing-room.

We will have attained our object in constructing this artificial key if a few others are not only persuaded by it to share the enjoyment we derive from recognising, drawing and photographing, these plants, but if they also add to our knowledge of them by collecting and preserving new species.

The Botanist in Charge, E.A. Herbarium, Nairobi, will name specimens of orchids sent to him, and advise the beginner on the method of pickling and pressing orchid specimens.

The key has been revised by E.M. Tweedie up to September 1962, and her thanks are due to Mr. V.S. Summerhayes of the Herbarium, Royal Botanic Gardens, Kew, for all his kind help and advice. Also to the staff of the E.A. Herbarium for their help in many ways, especially with the check list; to Dr. F. Piers whose book "Orchids of East Africa" provided many items of information especially on areas east of the Rift; and to Mr. John Powis for the loan of plants.

A study of the East African orchids is still going on, and until that is published some orchid names used in this key are liable to be altered.

A short note on Orchids

General

Orchids are either terrestrial or epiphytic. Most of the terrestrial ones are green-leaved and they feed themselves like any ordinary plant. A few, however, are saprophytes; their leaves if any are colourless and more or less useless and they obtain their food by means of their roots from decaying vegetable matter. See Section No. 19.

The epiphytic orchids are mostly found on trees, sometimes on rocks, and they supply their needs from the air and the rain with their own internal mechanisms. They are not parasites like Loranthaceae and they do no harm to trees which are their hosts.

Our terrestrial orchids vary in size from a mere few inches high, like some species of Disperis to Eulophia porphyroglossa which may reach 12 feet. Among the epiphytes there are several species about 1 in. high but there are others like Vanilla which may climb to a height of 20 ft.

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Roots. The roots of terrestrial orchids are either normal roots, not infrequently rhizomes, or even tubers, which may be either more or less globular or lobed. All orchids possess in their roots mycorrhiza, a fungus species of Rhizoctonea, which usually enters the root by the root hairs and orchid seeds develop a seedling naturally only in the presence of the root fungus. The epiphytes possess what are known as air-roots, the spongy outer layers of which absorb dew and rain and assist in the nourishment of the plants.

Stems. The stems of all terrestrial and some epiphytic orchids are normal stems like those of any other monocotyledonous plant, but some of the epiphytes have what are known as pseudo-bulbous stems. These may have only one internode or several. See Plate I. These pseudo-bulbs, or false bulbs, are reservoirs of food and water. They are of various shapes and sizes, but in the Kenya epiphytic orchids they are generally narrowly conical or elongated.

It is important to be able to distinguish between an ordinary stem and a pseudo-bulbous one with several internodes. The latter may be identified by its nodes being completely ringed and by having roots always at the base of the stem and never emerging at intervals from the sides of the stem. Make a careful study of all the drawings in Plate I.

Leaves. Orchid leaves, as far as we are concerned here, are of two kinds, the foliage leaves and the floral bracts. The latter are very insignificant parts of the plant, but, by their variation, in different species, they sometimes afford a most useful subsidiary means of identifying a species.

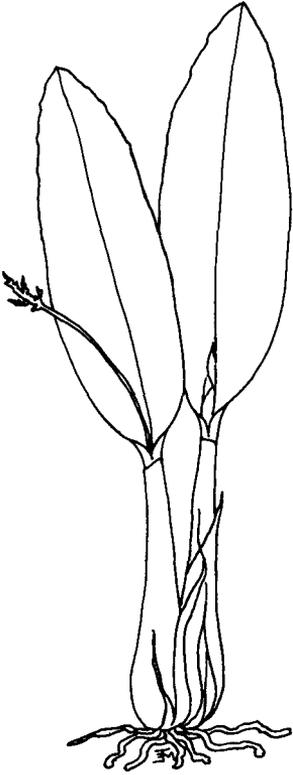
The foliage leaves of terrestrial orchids are of several shapes. A few species have large, round or oval basal leaves which lie flat on the ground. Many have leaves of ordinary leaf-shapes arranged alternately, but in some Disperis species the leaves are opposite each other, on the stems. Many, again, have grass-like leaves, some at the bottom of the stalk that bears the flowers and some on separate stems. These may be 'pleated' or flat.

Epiphytic orchids all have much the same sort of thick leathery, strap-shaped foliage leaves; but they vary in length, breadth and their distances apart. Also their tips may be entire or lobed, and the lobes may be symmetrical or not. One genus, Microcoelia, is leafless; while a number of pseudo-bulbous types with stems consisting of one internode only, have a solitary leaf at the apex of each pseudo-bulb.

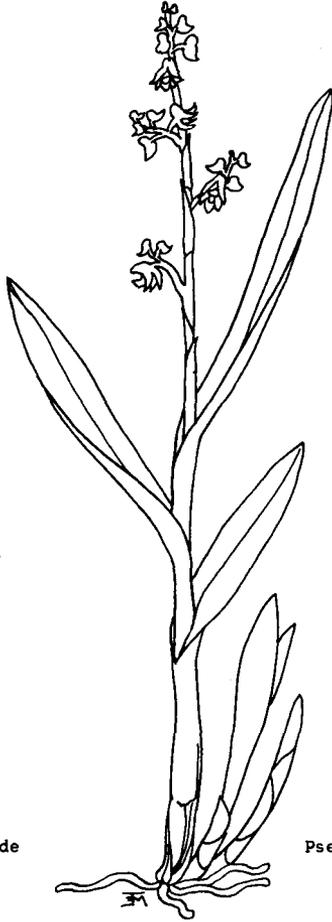
Inflorescences. A very few species of epiphytes, e.g. some of the Tridactyles, produce their flowers singly and directly from their stems, but usually the flowers are produced together in an inflorescence.

As far as we need be concerned here, the types of inflorescences found are spikes and panicles. Technically, many orchids produce flowers in racemes. But in orchids the difference between a spike and a raceme consists in the presence or absence of a small length of stalk below the ovary; it is usually concealed by the bract and in any case is hard to distinguish, see note on the ovary. Therefore for the convenience of amateurs we have not distinguished between a raceme or a spike but refer to both forms as spikes. In spikes all

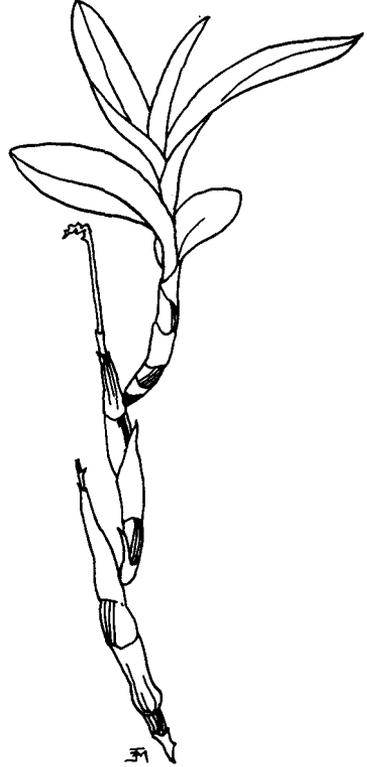
PLATE I Different types of stem



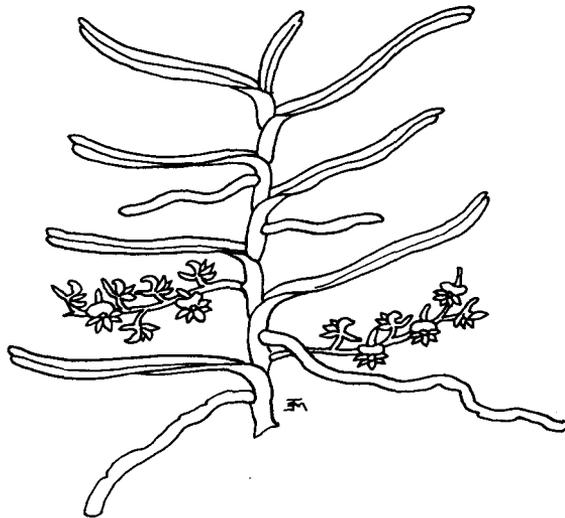
POLYSTACHYA BICARINATA
Pseudobulbous stem, one internode



POLYSTACHYA STRICTA
Pseudobulbous stem, one internode, panicle of flowers



POLYSTACHYA SIMPLEX
Pseudobulbous stem, several internodes

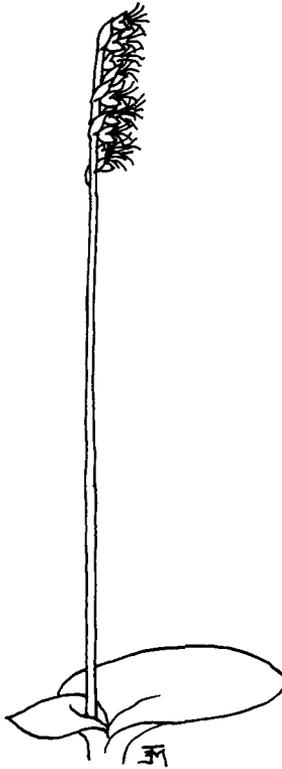


DIAPHANATHE XANTHOPOLLINIA
Ordinary stem, lateral flower spikes, leaves asymmetrically lobed

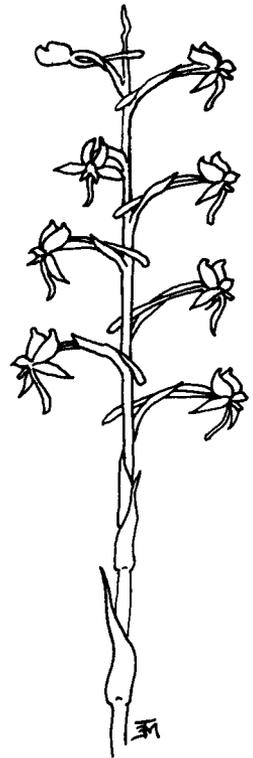
PLATE II Different types of stem and inflorescence



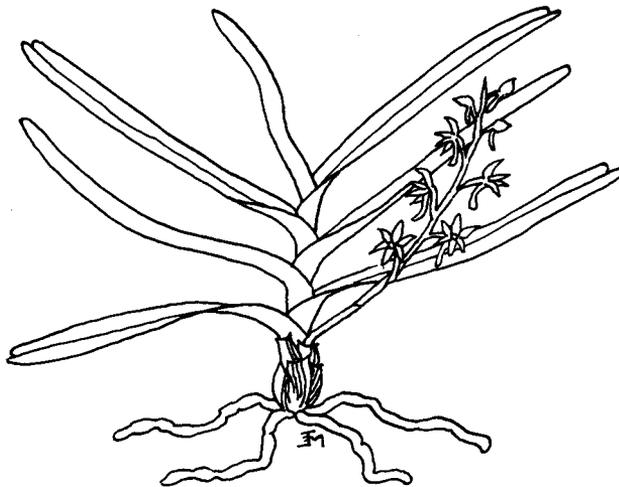
SATYRIUM SACCULATUM
Example of a close spike



HOLOTHRIX ELGONENSIS
Example of basal leaves



HABENARIA HUMILIOR
Example of open spike



RANGAERIS BRACHYCERAS
Ordinary stem, flower spike from base

the flowers are produced on a single, unbranched main stalk while in panicles the flower-bearing stalk is branched.

The spikes may be crowded, when the flowers are closely packed and touching each other; open or loose, when the flowers are some distance apart; or fairly crowded the intermediate stage between crowded and open. Plate II gives illustrations of the different types of inflorescence.

Flowers. The parts of orchid flowers referred to in the Sections and illustrated are:-

The bracts.

The ovary.

The sepals, there are three a lateral pair and an odd one.

The petals, there are three a lateral pair and an odd one called the 'lip'.

A more or less solid structure in the centre of the flower called the column. On this column the peculiar stamens, at the most two, or a stamen, and stigmas are situated. In all the African orchids there is only one stamen.

The Stigmatic Processes, what is probably our commonest genus, Habenaria, is characterised by having its stamen and its stigmas located on elongated arms or processes.

The spur, there may be one or two spurs, sometimes none.

The bracts. These are the small reduced, leaf-like structures, sometimes green, sometimes brown and scale-like, at the base of each ovary, or stalk plus ovary. The main points to notice about them are their colour and their length as compared with the ovary.

The ovary. The apparent stalk of the flower consists either of the ovary alone or of a short stalk and the ovary. Sometimes the stalk is so reduced that it is most difficult to tell whether there is one or not.

The ovary may be smooth or ribbed, sometimes triangular in section, as in Cyrtorchis, green or coloured; but the most important fact about it is that it may or may not be twisted on its axis through 180 degrees.

This means that, if it is not twisted, then the uppermost floral member is the odd petal or lip, while the bottom one is the odd sepal. If, on the other hand, the ovary is twisted, as is probably more often the case than not, then the position is reversed, the odd sepal being at the top and the lip at the bottom. When twisting does take place it does so as the flower is developing. See any spike in which the flowers at the base are open while those towards the apex are still in the bud stage.

The above must seem rather complicated. The illustrations, Plate III. should make the position clear.

It is of the utmost importance to memorise the positions particularly of the paired sepals and petals in twisted and non-twisted flowers as cases are fairly numerous when it is next to impossible to recognise, say the paired petals, unless one knows in

which part of the flower to look for them.

When difficulty is experienced in distinguishing the sepals from the petals, it is as well to examine the flower from the back. The three floral members nearest to the ovary are the sepals. If the reader wants puzzles in deciding which the various floral members are he should examine Satyrium sacculatum or a Disperis.

The Sepals. The sepals and petals may be very nearly alike or very different from each other in shape and colour. The sepals are usually smaller and less conspicuous than the petals, and the odd sepal may be larger or smaller than the pair. All three sepals are often green while the rest of the flower is coloured.

The Paired Petals. The paired petals, like the paired sepals, are invariably similar to each other, but they show great variety in shape and size. One of the Cypripediums, not a Kenya genus, has narrow, ribbon-like petals that are often a yard long.

The lip. The lip is the part of the flower which shows the greatest variety. Perhaps the simplest shapes are in a number of species where it is almost identical in shape and size to the paired petals; or in the genus Disa, where it is small and narrow, often almost thread-like.

In Plate IV there are illustrations of the lips of several Kenya species.

The Column. The column varies in size, shape and colour. One epiphytic species Aeranthis rhodosticta is easily recognisable by its white flowers and bright red column.

The Stigmatic Processes. When examining Habenaria it will be seen that these processes show considerable variation in shape and size, sometimes they are green and sometimes white.

The Pollen Masses. It is not proposed to attempt here any description of the pollen masses or of the amazingly complicated processes involved in the fertilisation of orchids. Readers interested are referred to any fairly advanced textbook on botany or to Darwin's standard work on the subject.

Spurs. One genus common in Kenya, Satyrium, has two spurs; a large number of other genera have one, and others none. Spurs, when present, may vary in length, breadth, colour and place of origin in the flower.

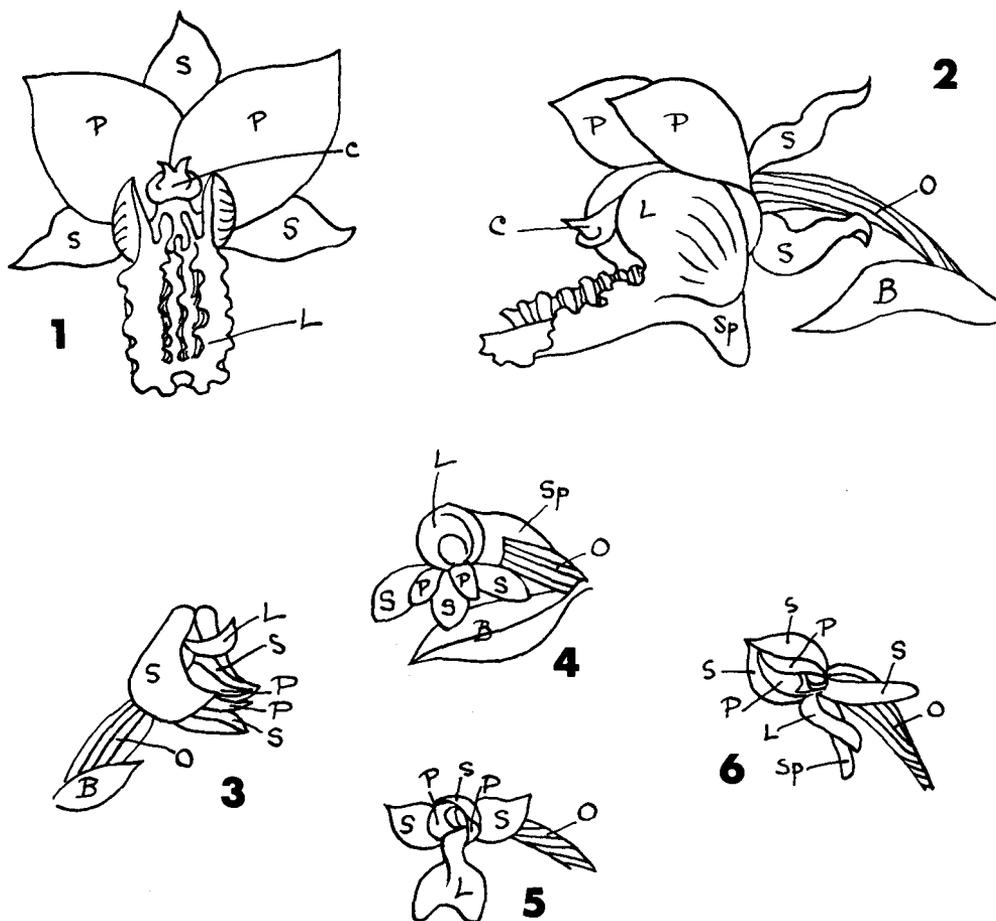
As regards the place of origin. Satyrium has two spurs which start from the back of the lip, which is at the top of the flower as the ovary is not twisted.

Disa has a solitary spur which originates from the back of the upper sepal and the ovary is twisted.

In nearly all other cases of a single spur its place or origin is at the back of the lip.

Diaphananthe and Chamaeanthis have been drawn with the spur uppermost. It always points towards the tip of the inflorescence, but as this may be either erect or drooping, so the spur may appear to point upwards or downwards.

PLATE III Parts of the flower

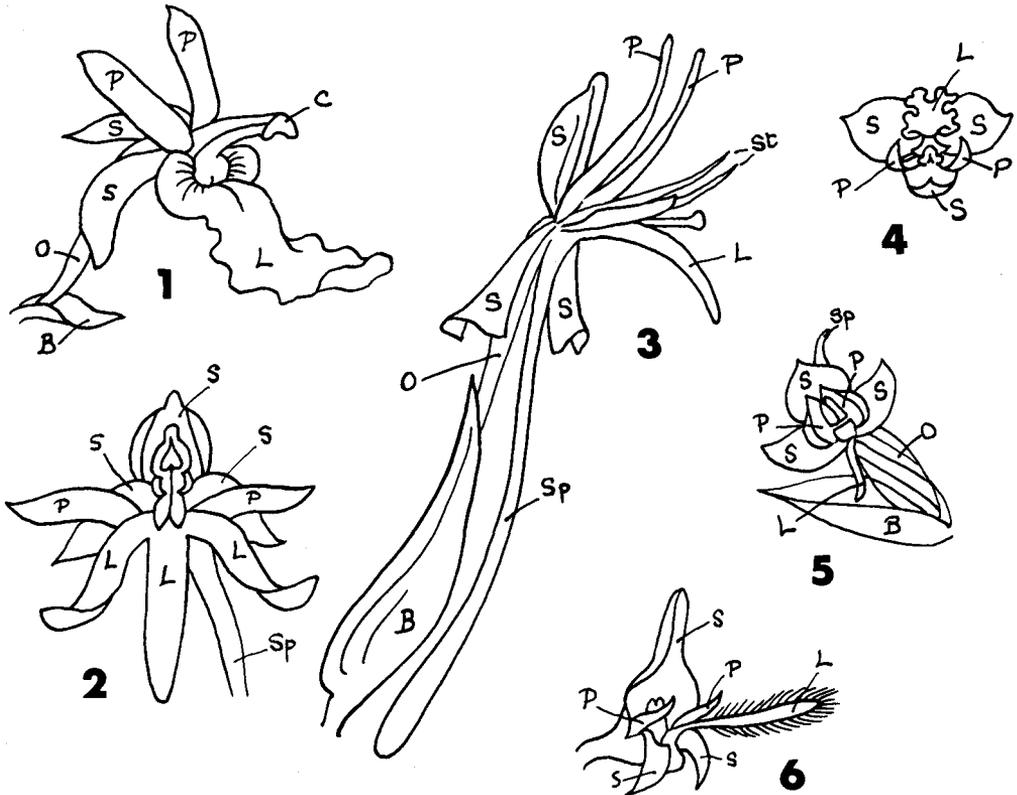


1 & 2. Two aspects of *EULOPHIA PORPHYROGLOSSA* showing the different parts of the flower.

S = sepal	Sp = spur
P = petal	O = ovary
L = lip	B = bract
C = column	

3. *POLYSTACHYA CULTRIFORMIS*, enlarged, showing lip uppermost and ovary non-twisted.
4. *SATYRIUM CARSONI*, showing lip uppermost and ovary non-twisted.
5. *BRACHYCORYTHIS PUBESCENS*, with twisted ovary and lip undermost.
6. *PLATYCORYNE CROCEA*, with twisted stem and lip undermost.

PLATE IV Different types of lip



1. EULOPHIA LIVINGSTONIANA
2. HABENARIA WALLERI
3. HABENARIA HOLUBII, showing the stigmatic processes.
4. POLYSTACHYA BICARINATA
5. DISA SCHIMPERI
6. BULBOPHYLLUM COCHLEATUM, enlarged.

S = sepals
 P = petal
 L = lip
 C = column

St = stigmatic processes
 Sp = spur
 O = ovary
 B = bract

Note: How to use the Key to the Flower
Colour Section.

1. If you don't know the general structure of an orchid plant and flower study the Short Notes on Orchids and the plates.

Decide on the colour or colours of the flower under examination.

This is generally easy enough but there are several flowers that are not of any obvious colour for classification purposes. Eulophia calantha, for instance, has brownish-purple sepals, white paired petals, and a purple and green lip. We must have some rule for dealing with such cases, and it has been thought best to call such flowers by the colour of the paired petals.

Another colour problem is the indefinable border line between pink and mauve. If a flower can be called either mauve-pink or pinky-mauve and the reader fails to find his specimen in the 'pink' section he should refer to the 'mauve' one before deciding that the specimen has been omitted from the book.

The same remarks apply to greenish-yellow and yellowish-green also brownish-orange and orange-brown.

2. Note whether the plant is terrestrial or epiphytic and turn to the section. Glance down the colours at the beginnings of the section headings and see how many sections there are dealing with flowers of the colour or colours of the specimen.

3. If there is only one possible section, as in the case of, say a mauve epiphyte, turn to that section forthwith and if the plant has been included in the book, it should be identified without difficulty.

4. If, on the other hand, there are several sections of the correct colour or colours, examine the headings of those sections and note which parts of the flower are used for further classification. Remove a perfect flower or two from the inflorescence, and examine, and, if necessary, measure, those parts.

This examination will determine the correct section number.

Let us give an example of this procedure: There are four possible sections in which, at first sight, a purple terrestrial orchid could be included. The headings of those four sections show that further classification of the flowers of that colour depends on:-

- (a) The length of the flower from the top of the odd sepal to the tip of the lip.
- (b) Whether there is a spur or not.
- (c) If there is a spur, whether it originates from the back of the odd sepal or the back of the lip. An examination of those features of the flower will show in which of the four sections the specimen should be found.

5. A word about the illustrations. These indicate the exact size of the flower, and generally represent in detail one flower from the spike or panicle. If the flower is very small, an enlarged drawing

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is provided as well; the flower should be observed through a magnifying glass and can be identified by comparing it with the enlarged drawing.

Of the 220 species of orchids listed in the Check List, 125 have been included in the key and about 65 species omitted, most of them little known.

Key

Terrestrial Orchids:	Section
Plants with green leaves:	
Flowers white or cream	1
Flowers purple, violet or mauve:	
Flowers $1\frac{1}{2}$ ins. or more long	2
Flowers less than $1\frac{1}{2}$ ins. long:	
Spurs lacking	3
Spur from back of top of odd sepal	4
Spur from back of lip	5
Flowers green and white:	
Spur at least 4 ins. long	6
Spur from 2 - 4 ins. long	7
Spur less than 2 ins. long or spur not present	8
Flowers all green:	
Stalk and ovary $1\frac{1}{2}$ ins or more long	9
Stalk and ovary $\frac{1}{2}$ - $1\frac{1}{2}$ ins. long.	
Spur at least $\frac{1}{2}$ in. long	10
Spur less than $\frac{1}{2}$ in. long	11
Stalk and ovary less than $\frac{1}{2}$ in. long	12
Flowers nearly plain yellow, or orange with sepals much the same colour as the petals:	
Spur lacking or one only	13
Spurs two	14
Flowers with yellow or orange petals but sepals of a different colour	15
Flowers red, pink or brown:	
Spurs 1 or 2 originating from the back of the top floral member:	
Spur one	16
Spurs two	17
Spur only one originating from the bottom of the floral member	18
Plants lacking green leaves, saprophytes	19

Epiphytic Orchids:	Section
Flowers white or cream:	
Flowers over 1 in. in diam:	
Spurs 4 ins. long or over	20
Spurs less than 4 ins. long	21
Flowers ½ - 1 in. in diam:	
Spurs 2 ins. long and over	22
Spurs less than 2 ins. long	23
Flowers less than ½ in. in diam:	
Spurs present	24
Spurs absent	25
Flowers purple or mauve:	
Stems pseudobulbous:	
Flower stalks produced from below the pseudobulb	26
Flower stalks produced from apex of the pseudobulb	27
Stems not pseudobulbous	28
Flowers green:	
Stems pseudobulbous:	
Flower stalks produced from below the pseudobulb	29
Flower stalks produced from the apex of the pseudobulb...	30
Stems not pseudobulbous:	
Stem long and straggly	31
Stem short and compact	32
Flowers yellow, orange or brown:	
Stems pseudobulbous	33
Stems not pseudobulbous	34
Flowers red or pink	35

NOTE: All drawings are natural size except those marked with an E which are enlarged.

Section No. 1.

Terrestrial Orchids, flower white or cream.

1. BRACHYCORYTHIS OVATA Lindl. subsp. SCHWEINFURTHII (Rchb.f.) Summerh.
A white form with lilac markings, see Section 3, No. 2.

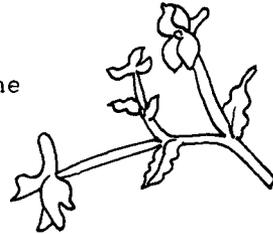
2. DISPERIS ANTHOCEROS Rchb.f.
Erect to about 7 ins., flowers generally 2 - 3 in a cluster at the top of the plant, flower white shaded with green; leaves 2 almost opposite each other, about half way up the stem, purple underneath; stem spotted, lower part pinkish. Found in dense shade.

Mt. Elgon.



3. DISPERIS APHYLLA Krzl.
Erect to 3 or 4 ins., flowers white shaded with green, usually 2 or 3 at the top of the plant; one small leaf halfway up the stem. In deep shade.

Kakamega.



4. DISPERIS KILIMANJARICA Rendle
Erect to 3 ins., one white flower, shaded with green and a line of lilac at the edge of the lip; two leaves at intervals up the stem. In mossy shade.

Elgon.



5. EULOPHIA CALANTHA Schltr.
A slender plant, erect to about 2 ft. with flowers in open spikes. Bracts, ovary and sepals brownish-purple, paired petals white, lip pale green and lilac on white; leaves long and narrow, pleated.

Elgon Nyanza, Kakamega.



6. EULOPHIA MONTIS-ELGONIS Summerh.

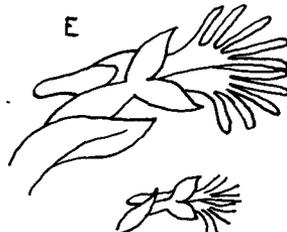
A white form with purple markings, see Section, 5, No. 4

7. HOLOTHRIX ELGONENSIS Summerh.

Erect to about 12 ins.; inflorescence unmistakable owing to its resemblance to a tooth brush, flowers creamy white; leaves large, almost round, flat on the ground, stem bare.

Found at high altitudes in short grass.

Mt. Elgon, Molo, Londiani.



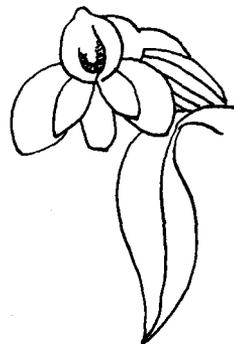
8. PTEROGLOSSASPIS RUWENZORIENSIS Rolfe.

A white form with purple markings, see Section 3, No. 7.

9. SATYRIUM CARSONI Rolfe.

Erect to about 18 ins., flowers white in fairly crowded spikes, spurs two from the back of the lip which as in the case of all Satyriums is at the top of the flower; there are two large round leaves flat on the ground and a few small leaves up the stem.

Mt. Elgon (June - July), Cherangani.



10. SATYRIUM CORIOPHOROIDES A. Rich.

A sturdy plant, erect to 3 ft., spikes crowded, flowers pure white, in shape very like those of S. sacculatum, Section 17, but larger and coarser.

Found in marshy ground.

Nandi, Cherangani.

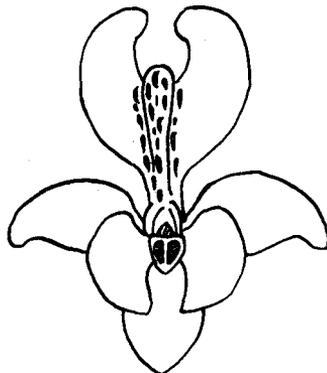


Section No. 2.

Terrestrial Orchids, flowers purple, violet or mauve; 1½ ins. or more long from the top of the odd sepal to the tip of the lip.

1. *BRACHYCORYTHIS KALBREYERI* Rchb.f.
Erect to about 1 ft., spikes open, flowers unmistakable, colour rich purple, or paler mauve; leaves growing up the stem. Found generally growing on rotten, decomposed trees. Beautifully scented.

Itare R. Kericho, Cherangani, Chepalungu Forest.



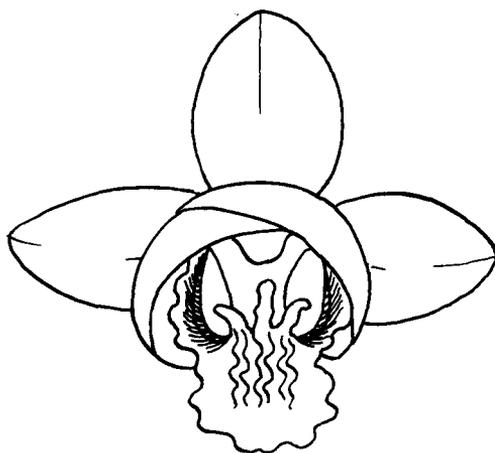
2. *EULOPHIA CUCULLATA* Steud.
(= *Lissochilus arenarius* Lindl.)
Erect to about 2 ft., ovary nearly 1 in. long, sepals brownish-purple, paired petals and lip purple, there are two dark purple projections in the throat, column and throat whitish; leaves pleated, and appearing after the flower. Found in grass. There is a variant with a paler flower, less bell-like, the projections pale yellow and no spots on the throat.

Elgon, Trans-Nzoia, Nyanza Province, Coast.



3. *EULOPHIA LATILABRIS* Summerh.
A sturdy plant, erect to about 4 ft., with ovary green, sepals purplish-brown, paired petals pale mauve, lip white below, mostly yellow above, sometimes purple at base, with 3 - 4 tonsil like projections in the throat, leaves unknown.

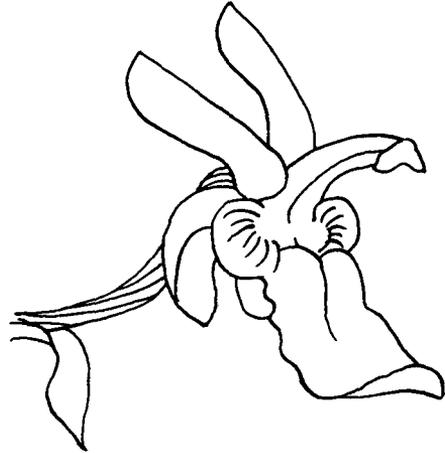
Malikisi, Elgon Nyanza.



4: *EULOPHIA LIVINGSTONIANA* (Rchb.f.) Rendle
 (= *Lissochilus mediocris* Rendle)

Erect to about 3 ft., spikes open, sepals and paired petals mauve, the latter being folded backwards along their long axes, lip darker in colour with two brown projecting ridges towards base; leaves pleated, appearing after the flowers.
 Found in grass after earliest rain.

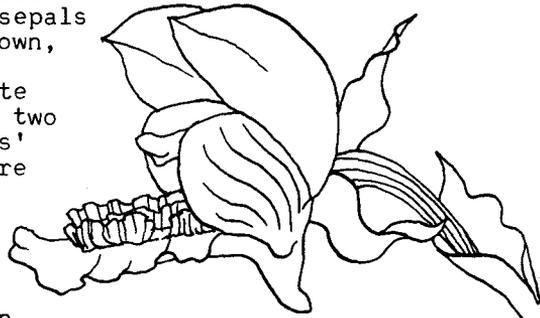
Shimba Hills, Uasin Gishu, Nyanza Province.



5. *EULOPHIA PORPHYROGLOSSA* (Rchb.f.) Bolus.

Erect to 12 ft. but more usually about 6 ft., sepals and ovary purplish-brown, paired petals and lip purple, there are white frills on the lip and two purplish-brown 'cheeks' at its base; leaves are up to 4 ft. long and 4 ins. wide, deeply pleated. In wooded swamps.

Common in highlands on river banks and in swamps.

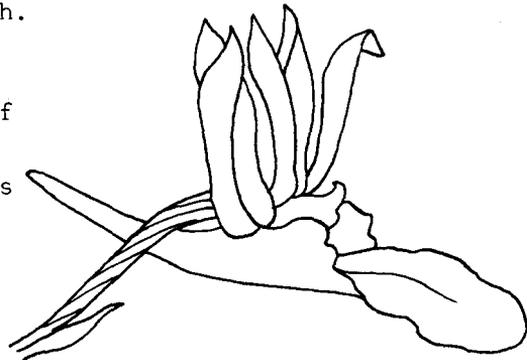


6. *EULOPHIA QUARTINIANA* A. Rich.

Erect to 18 ins. Flowers in rather open spikes. Lip pale pinkish-mauve and white with a flash of deeper mauve, sepals and petals brownish-mauve shaded with green; leaves up to 15 ins. long and 4 ins. wide, pleated, not fully developed when the flowers appear. In bush and light shade, often among rocks.

Elgon, (April) and Nyanza Province.

Note:- This should not be confused with *E. quineensis* which occurs in the same area. This has a slightly pointed lip and the leaves appear before the flowers.



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Section No. 3.

Terrestrial Orchids, flowers purple, violet or mauve; less than 1½ ins. long from the top of the odd sepal to the tip of the lip; spurs lacking.

1. BRACHYCORYTHIS BUCHANANII (Schltr.) Rolfe

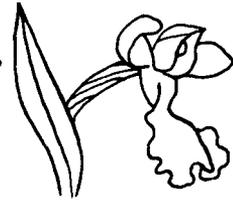
A slender erect plant to about 18 ins., flowers in rather close spikes, bracts green, much the same length as the dark brown ovary, sepals and paired petals rather pinky-mauve, lip a somewhat darker mauve with two broad lateral and one narrow central lobe; leaves alternate up to the stem about 1 in. long and 4/5 in. wide. Found in swampy ground.



Kakamega (June - July).

2. BRACHYCORYTHIS OVATA Lindl. subsp. SCHWEINFURTHII (Rchb.f.) Summerh. (= B. grandis Krzl. var. ugandensis Braid)

Erect to some 20 ins., flowers purple and white in fairly crowded spikes, ovary green, throat generally purple; leaves short and broad, growing thickly up the stem. Found in grass.



Mt. Elgon (May), Kakamega, Cherangani.

3. BRACHYCORYTHIS PUBESCENS Harv.

Very similar to the above except that the ovary is brown, the lip marked with yellow and the leaves are velvety.



Elgon (May), Elmenteita, Londiani, Kedowa.

4. CYNORKIS ANACAMPTOIDES Krzl.

Erect to 2 ft. but often much less, flowers purple in short close spikes, ovaries purplish-brown, bracts green and much shorter than the ovaries; stem covered with short stiff hairs, ovary and bracts with fine globular gland tipped hairs, leaves elliptic, acuminate, in a rosette at the base of the stem and along it but decreasing in shape and size into bracts towards the flower spike.

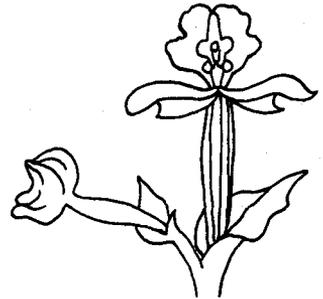


In swamps, often associated with Satyrium crassicaule.

Kikuyu, Elgon, Cherangani.

5. *DISPERIS DICEROCHILA* Summrh.
Erect to 6 ins., flowers pinky-mauve and white, ovary and stem green spotted with purple, two leaves opposite on stem.

Elgon (June).



6. *DISPERIS REICHENBACHIANA* Welw. ex Rchb.f.
Erect to 6 ins., flowers pinky-mauve and white, 2 - 5 in number, ovary dull purple $\frac{1}{2}$ - $\frac{3}{4}$ in. long; leaves 2 - 3, alternate on stem, dark green with pale green veins on upper surface, dull purple below; stem dull purple.

Found in shady forest.

Mt. Elgon (June - July), Mt. Kenya, Kinangop, Kakamega.



7. *PTEROGLOSSASPIS RUWENZORIENSIS* Rolfe.
Slender plants, erect to about 2 ft., flowers dingy purple or white with purple markings, spirally arranged in a close cluster at the end of the stem, bracts erect and much longer than the green ovary; leaves narrow and pleated.

Found in grass.

Mt. Elgon (June).

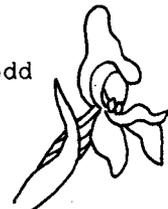


Section No. 4.

Terrestrial Orchids, flowers purple, violet or mauve; less than $1\frac{1}{2}$ ins. from the top of the odd sepal to the tip of the lip; with spurs from the back of the top sepal.

1. *DISA CONCINNA* N.E.Br.
Erect to about 1 ft., flowers white or lilac streaked with purple, in rather crowded spikes, ovary and stem often speckled with brown, the odd top sepal combines with the paired petals to form the hood; leaves short and wide at intervals up the stem.

Found in short grass.
Mt. Elgon (March - May), Kakamega.



2. *DISA HIRCICORNIS* Rchb.f.

A sturdy plant, erect to about 2 ft., flowers dark pinky-purple in densely crowded spikes, bracts purplish, the odd sepal combines with the paired petals to form the hood; leaves broad and up to 6 ins. long growing up the stem. Found in swamps.



Mt. Elgon (August), Trans Nzoia.

3. *DISA STAIRSII* Krzl.

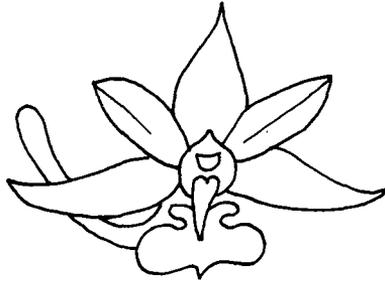
Erect to 2 ft., flowers deep purple-pink in rather crowded spikes, see Section 16, No. 4

Section No. 5.

Terrestrial Orchids, flowers purple, violet or mauve; less than 1½ ins. from the top of the odd sepal to the tip of the lip; with spurs from back of lip.

1. *CALANTHE CORYMBOSA* Lindl.

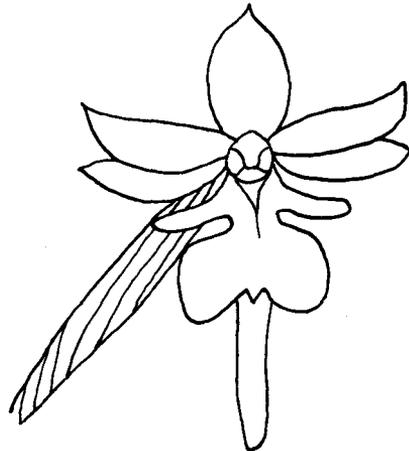
Erect to about 1 ft., flowers in open spikes, violet in colour but turning brown when fading; leaves elliptical, pleated, in a cluster at the base of the plant, from small pseudobulbs buried in leaf-mould.



Nyeri.

2. *CALANTHE VOLKENSII* Rolfe.

Erect to about 3 ft., spikes open, sepals and paired petals pale mauve, lip dark mauve which turns orange when fading; leaves long and up to 3 ins. wide. Always found in dense shade.



Mt. Kenya, Abardares, Mau, Kericho, Chyulu Hills.

Note: In the Jombeni Hills there is a similar plant with flowers about twice the size of the above, while in the Chyulu Hills there is a white flowering variety.

3. CYNORKIS KASSNERIANA Krzl.

Erect to about 10 ins., spikes open; one or two large leaves at the base and a number of smaller leaves up the stem.
Found growing on grassy banks but also on rotten, decomposed trees.



Mt. Kenya, Kericho, Aberdares, Cherangani, Mau.

4. EULOPHIA MONTIS-ELGONIS Summerh.

Erect to 3 ft., flowers pinky-mauve or pale mauve with purple markings, rather flattened, in fairly open spikes, median lobe of lip coarsely hairy on upper surface; leaves narrow and pleated, stem leafless but with a few dry bracts.
Found in grass.



Mt. Elgon (May).

Section No. 6.

Terrestrial Orchids, flowers green and white, spurs at least 4 ins. long.

1. BONATEA STEUDNERI (Rchb.f.) Dur. & Schinz., see Section 9, No. 1.

2. HABENARIA MACRURA Krzl.

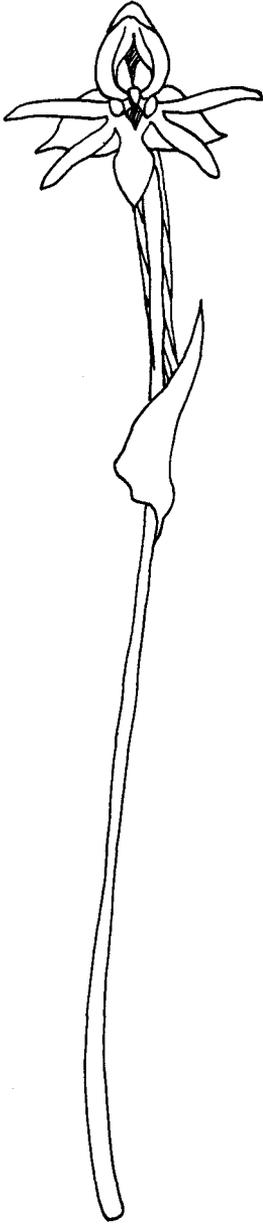
Erect to 18 ins., flowers 3 - 5 in open spikes, spur 4 - 5 ins. long, usually lying against the stem and enclosed by the bracts; leaves all up the stem, pleated. See page 20.
In grass.

Cherangani, Trans Nzoia.

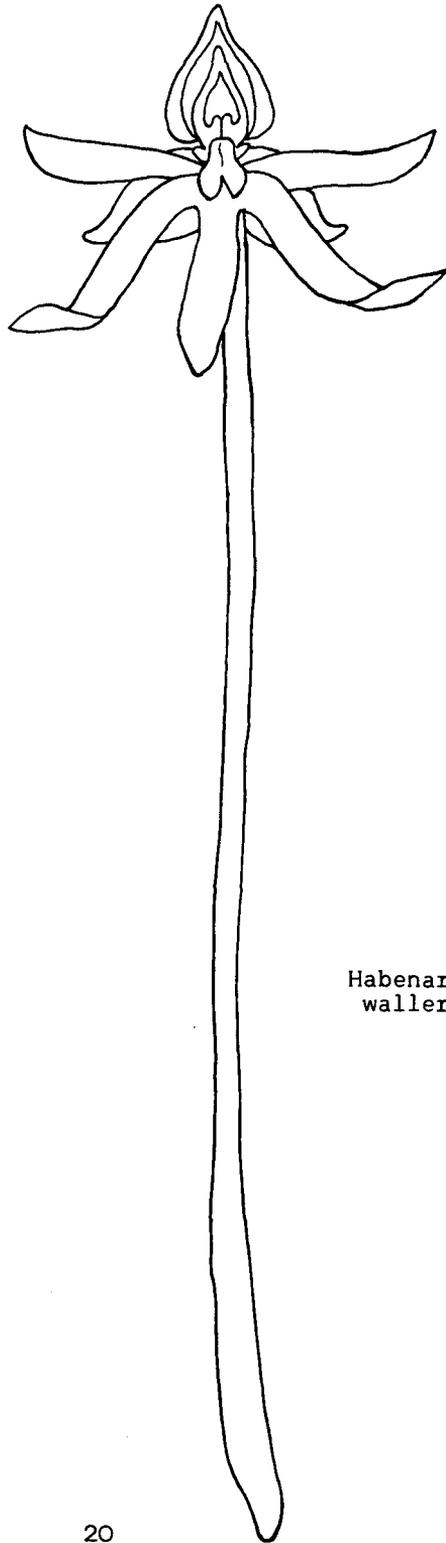
3. HABENARIA WALLERI Rchb.f.

Erect to 3 ft., open spikes of 3 - 6 flowers, the 5 - 6 ins. long spur lies against the stem enclosed by the bracts.
In grass. See page 20.

Elgon, Trans Nzoia.



*Habenaria
macrura*



*Habenaria
walleri*

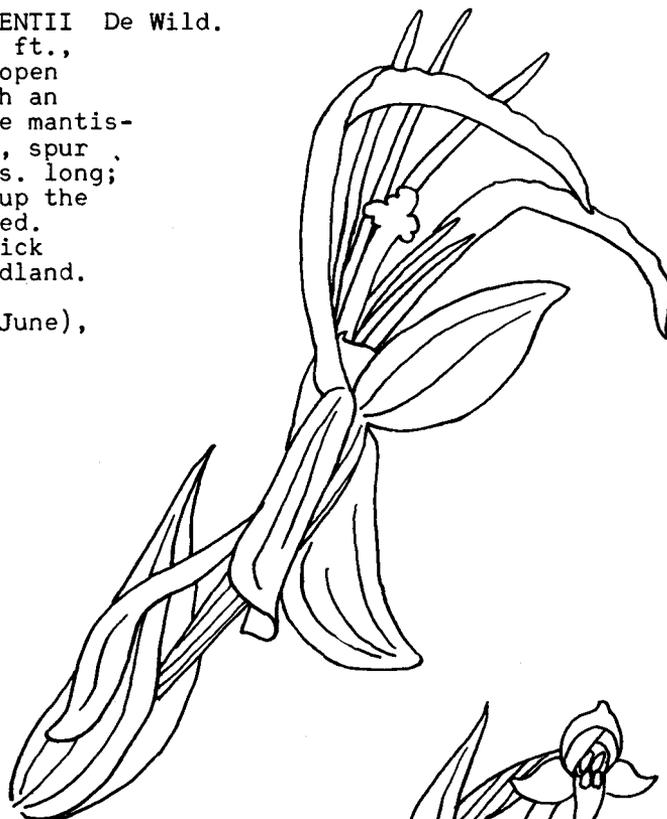
Section No. 7

Terrestrial Orchids, flowers green and white with spurs 2 - 4 ins. long.

1. HABENARIA LAURENTII De Wild.

Erect to 2½ ft.,
flowers in open
spikes, with an
unmistakable mantis-
like flower, spur
nearly 3 ins. long;
leaves all up the
stem, pleated.
Found in thick
bush or woodland.

Mt. Elgon (June),
Nandi.



2. HABENARIA ZAMBESINA Rchb.f.

Erect to some 2½ ft., spikes rather
crowded, sepals white, broad, spurs
up to 2½ ins. long; leaves all up
the stem, pleated.
Found in swamps.

Malakisi (July), Elgon Nzanza.

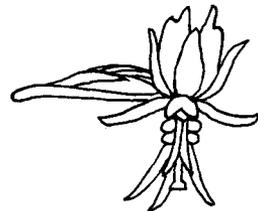


Section No. 8.

Terrestrial Orchids, flowers green and white, with spurs less than 2 ins. long or with no spurs.

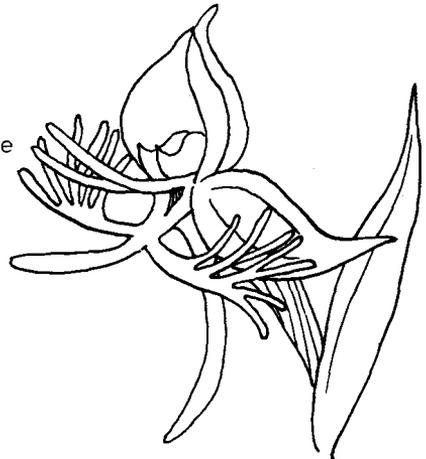
1. *DISPERIS ANTHOCEROS* Rchb.f.
Erect to 6 ins., flowers white and green.
Found in deep shade and generally near water, see Section 1, No. 2.
2. *DISPERIS APHYLLA* Krzl., see Section 1, No. 3.
3. *DISPERIS KILIMANJARICA* Rendle, see Section 1, No. 4.

4. *HABENARIA CHIRENSIS* Rchb.f.
Erect to 3 ft., spikes rather open, flowers with an unpleasant smell, the white parts of the flower are the column and the upper of the stigmatic processes, leaves on the flowering stem pleated.
Found in swamps or shallow, wet soil over rocks.



Mt. Elgon (July), Nandi, Limuru, Kiambu, common.

5. *HABENARIA KENIENSIS* Summerh.
Erect to 28 ins., spikes open, flowers mistakable only for those of the following species. Compare the drawings and study the description of *H. splendens* and *H. quartiniana*. Leaves up stem and pleated.
Found in thick bush and woodland.

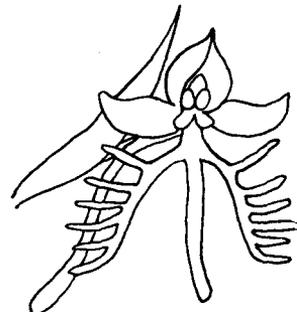


Formerly confused with *H. praestans* Rendle

Mt. Elgon (May - June), Aberdares, Mau Summit, Eldama Ravine, Eldoret.

6. *HABENARIA LINDBLOMII* Schltr., see Section 10, No. 7.
The flower is green, but the centre is conspicuously white.

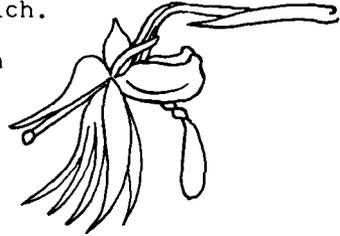
7. *HABENARIA QUARTINIANA* A. Rich.
Erect to 2 ft., often associated with *H. keniensis*, it differs from this by the flower being smaller and the lip less elaborate.
In thick bush and woodland.



Elgon.

8. *HABENARIA SCHIMPERIANA* Hochst. ex A. Rich.

Erect to about 2 ft., flowers on ½ in. stalks pendulous in fairly open spikes, the only white parts of the flower are the paired petals and the top of the column, spur less than ½ in. long, spirally twisted and thickened towards the apex; leaves up the stem.
Found in long grass.



Kakamega (August), Trans Nzoia, Aberdares.

9. *HABENARIA SPLENDENS* Rendle.

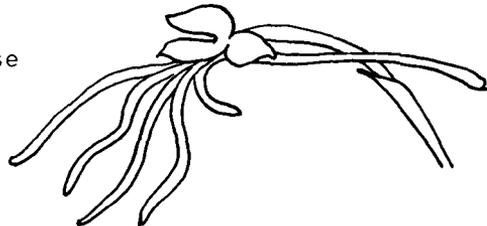
A sturdy plant, erect to some 18 ins., spikes open, flowers faintly scented, mistakable only with those of the preceding species, in this species the flower is larger than in *H. keniensis* but the stem tends to be shorter. Compare the drawings, noting shape of spur, lip and stigmatic processes; leaves up the stem, wide and pleated.
Found in thick bush and woodland.



Mt. Elgon (June), Kaimosi.

10. *HABENARIA TRILOBULATA* Schltr.

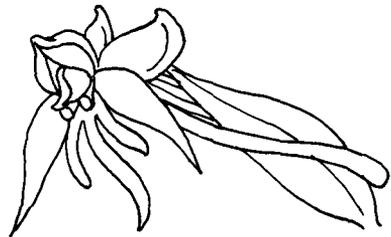
Thin stem to 12 ins., with no leaves except for two flat ones at the base, these are wide, pointed and with conspicuous parallel veins. Flowers green but paired petals white, few, in open spikes.
In open forest.



Coast, Sokoke Forest.

11. *HABENARIA TWEEDIEAE* Summerh.

Erect to 3 ft., spikes rather open, odd sepal forms a small hood which has white edges; leaves up the stem, pleated.
Found in thick bush. There is an abnormal form which is often seen on Elgon.



Mt. Elgon (October).

Section No. 9.

Terrestrial Orchids, flowers all green with ovary $1\frac{1}{2}$ ins. long or more.

1. *BONATEA STEUDNERI* (Rchb.f.) Dur. & Schinz.
(= *B. ugandae* Rolfe and *B. arabica* (Deflers) Cortesi).

Erect to $3\frac{1}{2}$ ft., with many flowers in fairly open spikes, bracts green, petals and sepals have a little white at the base, ovary about 3 ins. long, spurs 5 ins. long or more; large leaves up the stem, not pleated. Found in the open.

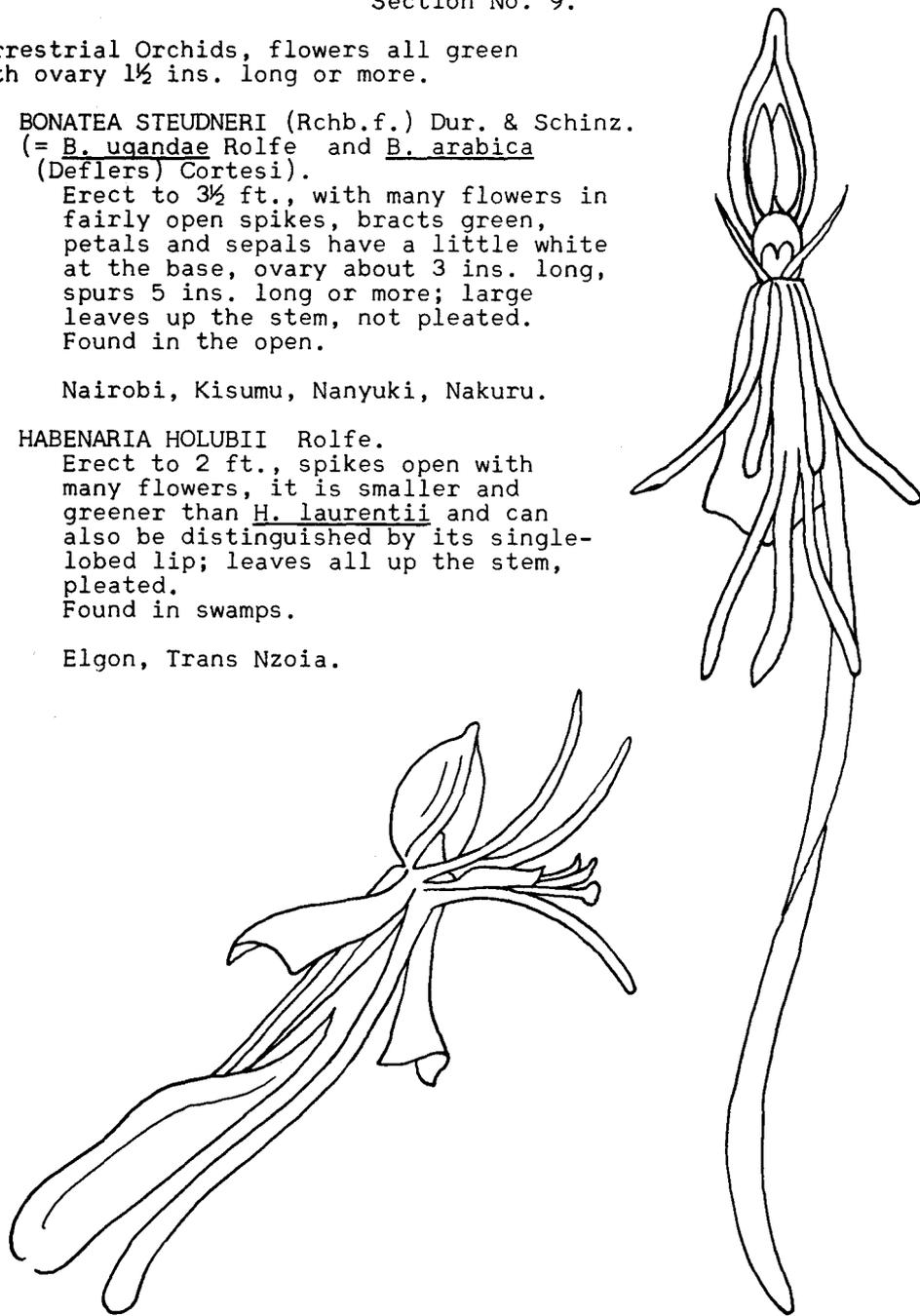
Nairobi, Kisumu, Nanyuki, Nakuru.

2. *HABENARIA HOLUBII* Rolfe.

Erect to 2 ft., spikes open with many flowers, it is smaller and greener than *H. laurentii* and can also be distinguished by its single-lobed lip; leaves all up the stem, pleated.

Found in swamps.

Elgon, Trans Nzoia.

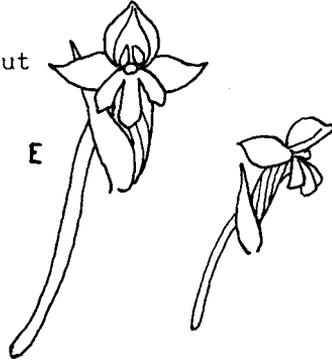


Section No. 10

Terrestrial Orchids, flowers all green, with ovary $\frac{1}{2}$ - $1\frac{1}{2}$ ins. long, spur at least $\frac{1}{2}$ in. long.

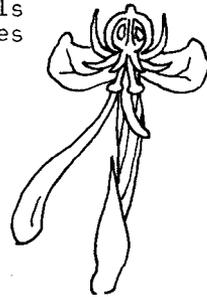
1. *HABENARIA BRACTEOSA* Hochst. ex A. Rich.
 To 2 ft., rather like Nos. 3 and 5, but
 spike longer and flowers larger and
 more crowded.
 Near water.

Elgon (September).



2. *HABENARIA CORNUTA* Lindl. (= *H. ruwenzoriensis* Rendle)
 Erect to 18 ins., spikes rather open, the
 odd sepal forms a small hood, paired petals
 two-lobed, lip one-lobed and narrow; leaves
 up the stem, pleated.
 Found in grass.

Mt. Elgon (July), Simba Valley.



3. *HABENARIA FILICORNIS* Lindl.
 Erect to about 2 ft., spikes rather
 open, flowers tiny and mosquito-like;
 leaves all up the stem, pleated.
 Found in grass.

Mt. Elgon (July), Kakamega.



4. *HABENARIA HELICOPLECTRUM* Summerh.
Erect to about 2 ft., spikes very open, there are 2 large round leaves flat on the ground and smaller ones up the stem.
Found in dry stony country.

Isiolo.



5. *HABENARIA HOLOGLOSSA* Summerh.
Erect to 18 ins., flowers green rather like those of *H. filicornis* but the lip is not trilobed; leaves up the stem.
In grass.

Elgon (July - August).



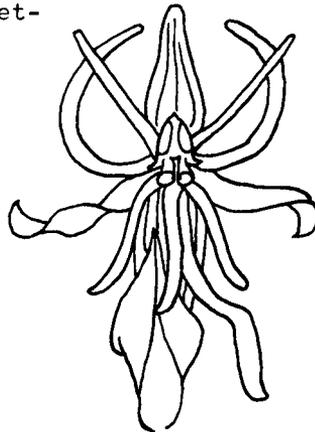
6. *HABENARIA HUMILIOR* Rchb.f.
(= *H. hochstetteriana* Krzl. and *H. cuculifera* Rendle)
Erect to 18 ins., flowers very sweet-scented, in open spikes; leaves all up the stem, pleated.
Found in swamps or in shallow, wet soil over rocks.

Elgon, Kakamega, Tinderet, Kapenguria, Teita Hills, common.



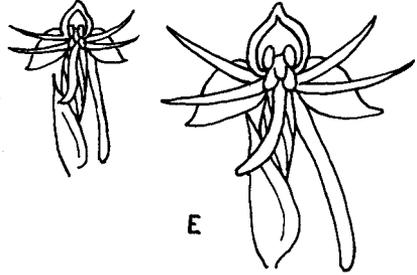
7. *HABENARIA LINDBLOMII* Schltr.
Erect to 18 ins., flowers very sweet-scented, rather like *Lanoline*, in open spikes, column and stigmatic processes white. Note deeply ridged ovary. A distinguishing feature of this plant is a pair of large basal oval leaves lying flat on the ground as well as leaves up the stem.
Found in grass.

Mt. Elgon (June), Trans Nzoia.



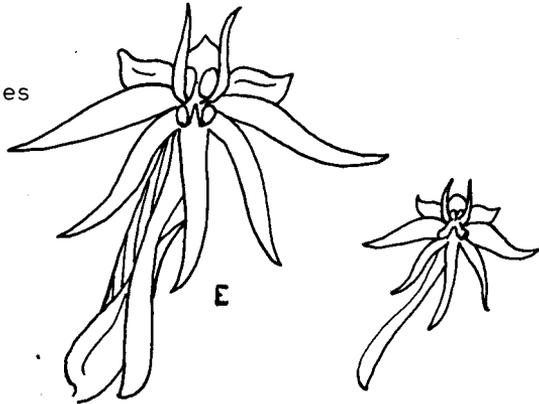
8. *HABENARIA MALACOPHYLLA* Rchb.f.
 Erect to 3 ft. 6.ins., spikes fairly open; leaves up the stem, wide and pointed but not pleated. Found in forest.

Mt. Elgon, Kakamega, Kamasia, Chyulu Hills.



9. *HABENARIA NDIANA* Rendle.
 Erect to 18 ins., spikes fairly open, sepals turned backwards over the ovary; leaves all up the stem, pleated. Found in grass.

Mt. Elgon, Ndi Hills, Chyulu Hills, Rabai.

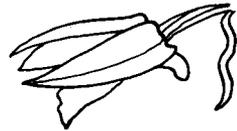


Section No. 11

Terrestrial Orchids, flowers all green, ovary ½ - 1½ ins. long, spurs less than ½ in. long.

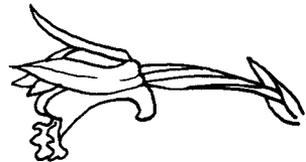
1. *EULOPHIA ADENOGLOSSA* (Lindl.) Rchb.f.
 A stout plant, erect to 2 ft., spikes fairly open; leaves undeveloped at flowering stem, thin and pleated.

Malakisi, Elgon Nyanza.



2. *EULOPHIA CHLOROTICA* Krzl.
 Erect to some 3 ft., spikes open sepals and paired petals green with parallel brown lines, lip pinkish-mauve on the upper surface, spur short, bright green; leaves long and narrow, pleated. Found in swampy ground.

Trans Nzoia (April), Kakamega (July-August).



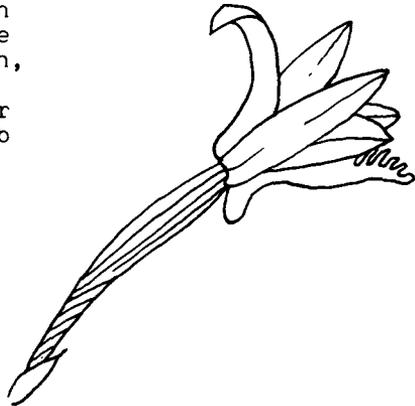
Kenya Orchids

3. EULOPHOA PETERSII Rchb.f. (= E. schimperiana A. Rich.)

Rather a slender straggling plant, erect to some 6 ft., flowers in very open panicles, sepals pale brown, paired petals pale green, lip white, colour variable in intensity; leaves three to four from the apex of the pseudobulb like some epiphytic orchids. Found at low altitudes.

Turkana, Nairobi, Baringo, Coast, West Pokópt.

N.B. At the time of revision the final names of several species or subspecies of this plant are not yet decided.



Section No. 12.

Terrestrial Orchids, flowers all green with ovary less than ½ in. long.

1. HABENARIA PERISTYLOIDES A. Rich. (= H. rendlei Rolfe)

Erect to nearly 3 ft., spikes crowded; leaves all up the stem, large, broad and pleated. Found in grass.

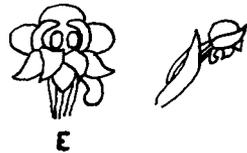
Mt. Elgon (June), Trans Nzoia, Kakamega, Nandi, (July - August), Kericho, Mau, common.



2. HABENARIA PETITIANA (A. Rich.) Dur. & Schinz. (= Peristylus petitianus A. Rich.)

Erect to 18 ins., spikes rather open, leaves all up the stem, not pleated. Found in thick bush and woodland.

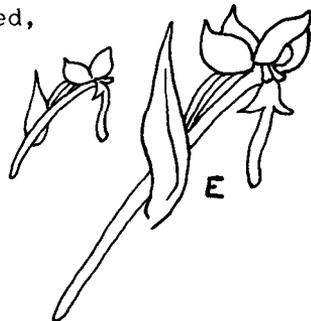
Mt. Elgon (July), Timberoa, common at high altitudes.



3. HABENARIA VAGINATA A. Rich.

Erect to 6 ins., spikes fairly crowded, flowers rather like those of H. filicornis but this plant has a large rounded basal leaf as well as small scale-like leaves up the stem. Found in short grass, at fairly high altitudes.

Mt. Elgon 8,000 ft., Nairobi, Ngong, Limuru.



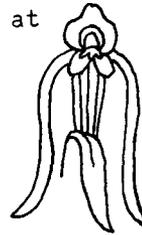
4. SATYRIUM SCHIMPERIANUM Hochst.
 Erect to 18 ins., flowers green in crowded
 spikes, leaves up the stem.
 In grass at high altitudes.

Timboroa, Ol Kalau, Londiani.



5. SATYRIUM VOLKENSII Schltr. (= S. dzygoceras Summerh.)
 Erect to 18 ins., spikes fairly crowded,
 flowers green or greenish brown, two spurs at
 back of the lip which is at the top of the
 flower; leaves up the stem.
 Found in grass.

Mt. Elgon (April-May), Kakamega, Kinangop,
 Ol Kalou, Molo, Londiani.

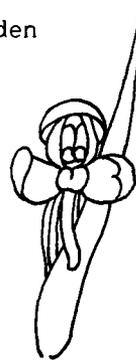


Section No. 13.

Terrestrial Orchids, flowers nearly plain yellow, or orange with
 sepals much the same colour as the petals, spur one or none.

1. DISA OCHROSTACHYA Rchb.f.
 To 18 ins. in dense spikes, flowers golden
 yellow.
 In grass at high altitudes.

Ainabkoi, Kipkabus.



2. EPIPACTIS AFRICANA Rendle.
 Erect to 8 ft. with a long spike
 on which flowers are continually
 opening and dying, flowers greenish-
 yellow with a good deal of russet-
 brown veining, ovary brown, bracts
 green. Heavily veined leaves sheathe
 the stem, decreasing in size till
 they become reduced to bracts.
 In shade on the edges of streams
 and swamps.

Mt. Elgon, Aberdares, Thika.

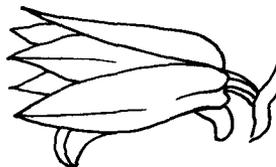


Kenya Orchids

3. EULOPHIA SHUPANGAE (Rchb.f.) Krzl., see Section 18, No. 3

4. EULOPHIA SUBULATA Rendle.

Erect to 15 ins., flowers bright yellow, with an orange patch on the lip, spikes short and close; leaves pleated, long and narrow.
Found in grass.



This orchid is common in Uganda. It is doubtful whether the gathering from Elgon was found on the Kenya side.

Elgon.

5. EULOPHIA WARNECKEANA Krzl.

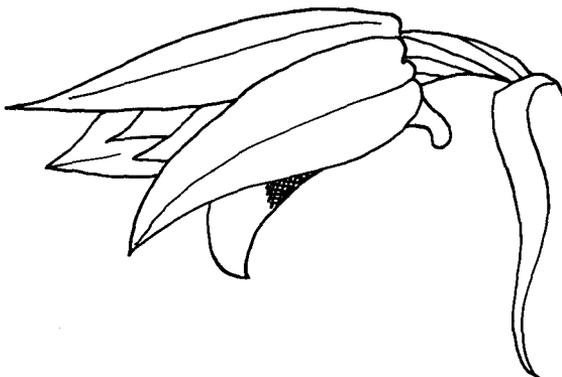
Erect to 12 ins., spikes fairly open, flowers yellow with reddish-orange lip and spur, and green ovary; leaves narrow and pleated.
In grass.



Broderick Falls (April).

6. EULOPHIA ZEYHERI Hook.f.

Erect to 15 ins., spikes short and very close, flowers bright yellow with a dark-reddish brown patch on lip and throat; leaves pleated.



Kakamega.

7. NERVILIA KOTSCHYI (Rchb.f.) Schltr.

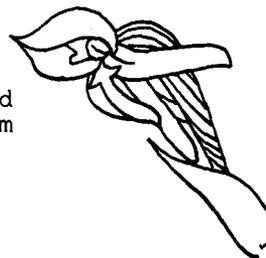
Erect to 6 ins., spikes open, sepals and paired petals greeny-yellow, lip cream with pink streaks; stems reddish-brown; flowers appear before leaves.
Found in short grass.



Kakamega, Broderick Falls.

8. PLATYCORYNE CROCEA (Schweinf. ex Rchb.f.) Rolfe
(= P. montis-elgon (Schltr.) Summerh, also formerly confused with P. buchaniana (Krzl.) Rolfe.

Erect to some 14 ins., spike few flowered and crowded, flowers golden yellow, the odd sepal and the paired petals combine to form the prominent hood; leaves up the stem.
Found on shallow wet soil over rocks.



Mt. Elgon, Eldoret, Shimba Hills.
Common but local.

Section No. 14.

Terrestrial Orchids, flowers nearly plain yellow or orange with sepals much the same colour as the petals, spurs two.

1. SATYRIUM SCEPTRUM Schltr.

Erect to some 30 ins., flowers orange in densely crowded spikes; leaves up the stem. Found in rather swampy ground.

Cherangani (June), Elgon 8,000 ft. (June), Aberdares, Molo, Londiani.



Section No. 15.

Terrestrial Orchids, flowers with yellow or orange petals, sepals of a different colour.

1. EULOPHIA ANGOLENSIS (Rchb.f.) Summerh.

(= E. lindleyana (Rchb.f.) Schltr.

= Lissochilus paludicolus (Rchb.f.) Summerh.)

Erect to 4 ft. with fairly open spikes sometimes weighed down by the numerous flowers, sepals greenish-yellow at base shading to dull red at the tips, paired petals and lip golden yellow, lip marked with dull red; leaves tall, pleated.

Found in swamps, it is sold in Nairobi as a cut flower.

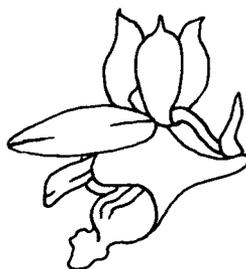
Nairobi area, Fort Hall, Nandi.



Kenya Orchids

2. EULOPHIA ORTHOPLECTRA (Rchb.f.) Summerh.
(= Lissochilus bellus Schltr.)

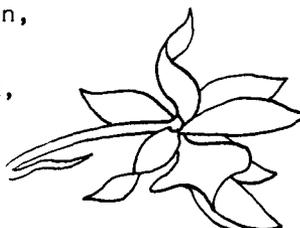
Erect to about 2½ ft., spikes open, sepals dark brown, petals and lip bright yellow on upper, streaky red on lower surface. Flowers unmistakable, appearing in the dry season without leaves which are leathery, these appear during the wet season, dying down before the flower spikes emerge. Found in grass.



Elgon (November - March), Trans Nzoia.

3. EULOPHIA PAIVAEANA (Rchb.f.) Summerh. subsp. BOREALIS Summerh.
(= Lissochilus oliverianus Rchb.f.)

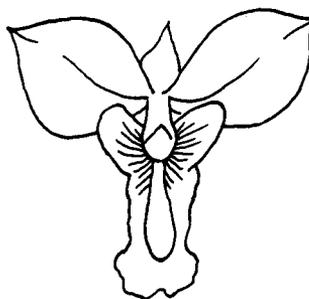
Erect to about 4 ft., spikes very open, sepals green with brownish flecks, paired petals plain yellow; spur short, purplish; leaves thin, pleated, up to 2 ft. long, appearing April - May. Found both in bush and in the open.



In the highlands, common and widespread, flowering from late June onwards, especially October.

4. EULOPHIA WAKEFIELDII (Rchb.f. & S. Moore) Summerh.

Erect to 3 ft., sepals greeny-brown, paired petals and lip bright yellow; leaves broad, not pleated. Found in both rocky and marshy ground.



Trans Nzoia (May), Coast, Kisumu, Endo.

Section No. 16.

Terrestrial Orchids, flowers red, pink or brown, with only one spur originating from the back of the top floral member.

1. DISA DECKENII Rchb.f.

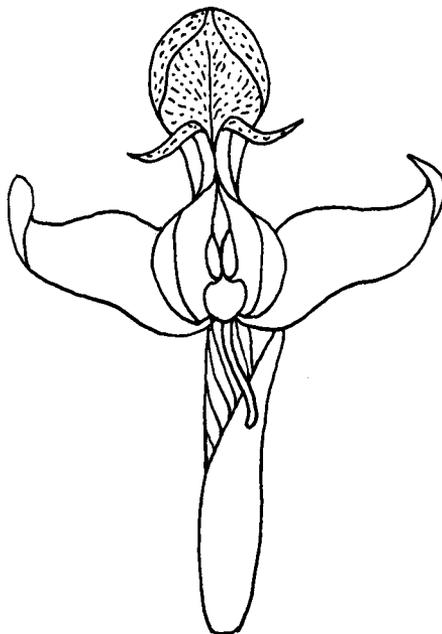
Spikes crowded, flowers pink, very like those of D. subaequalis, but stem shorter, 8 ins. or less; leaves up the stem. A plant of high altitudes.



Mt. Kenya, Aberdares, Cherangani.

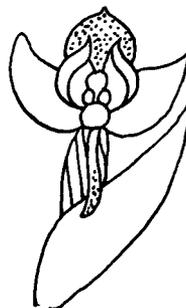
2. *DISA ERUBESCENS* Rendle.
 A very grotesque yet handsome orchid, flowers few in open spikes, in shades of orange and pink, the spoon-shaped upper sepal is golden yellow with pink dots; leaves separate narrow and pleated also small ones sheathing the stem, which is 14 - 18 ins. tall.
 Found in rather swampy grassland.

Cherangani, Elgon,
 Kakamega.



3. *DISA SCUTELLIFERA* A Rich. (= *D. schimperi* N.E.Br.)
 A sturdy plant, erect to 30 ins., flowers rose-pink, in crowded spikes, hood and lip spotted with deeper pink; leaves up the stem.

Mt. Elgon, Cherangani.



4. *DISA STAIRSII* Krzl.
 Erect to 2 ft., flowers deep purple-pink in fairly crowded spikes; leaves up the stem, at base of stem broad and long.
 Found at fairly high altitudes near water.

Mt. Elgon above 10,000 ft., Cherangani Hills,
 Aberdares, Mt. Kenya.



Kenya Orchids

5. *DISA SUBAEQUALIS* Summerh.

Erect to about 2 ft., flowers rose-pink, in crowded spikes, hood and lip not spotted, thus distinguishing this from *D. scutellifera*; leaves up the stem. Found in swamps.



Trans Nzoia (July), Nandi (July), Kakamega.

Note: Disa is at present being revised.

Section No. 17.

Terrestrial Orchids, flowers red, pink or brown, with two spurs originating from the back of the top floral member.

1. *SATYRIUM CRASSICAULE* Rendle

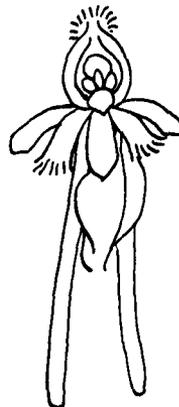
A stout plant, erect to 4 ft., flowers rose-pink with two spurs in densely crowded spikes; leaves up the stem. Generally found near water.



Elgon, Trans Nzoia, Kikuyu, Limuru, Nandi, Timboroa.

2. *SATYRIUM FIMBRIATUM* Summerh.

Erect to about 1 ft., flowers unmistakable, pale pink, in rather close spikes; leaves up the stem and also two large round leaves flat on the ground.



Cherangani (June), Aberdares, Maralal, Molo, Londiani.

3. *SATYRIUM SACCOLATUM* (Rendle) Rolfe.

Erect to about 3 ft., flowers in densely crowded spikes, unmistakable, being bright red and the bracts usually reddish; leaves up the stem. Found in grass.



Elgon (June), Trans Nzoia, Nandi, Kakamega; very common.

Section No. 18.

Terrestrial Orchids, flowers red, pink or brown, with only one spur originating from the bottom of the floral member.

1. EULOPHIA PARVULA (Rendle) Summerh.

Erect to about 18 ins., spikes open, bracts very short, sepals and paired petals greeny-brown, lip yellow above; leaves appearing after the flowers, up to about 8 ins. long from apices of underground pseudobulbs, which are short and fat.
Found in rather dry country in the open.



Maralal.

2. EULOPHIA QUARTINIANA A. Rich. Flowers pinky-mauve, see Section 2, No. 6.

3. EULOPHIA SHUPANGAE (Rchb.f.) Krzl. (= E. propinqua Hutch.).

Erect to 2 ft. 6 ins., spikes fairly close and up to 3 ins. long, flowers variable in colour between dark maroon and yellow shaded with reddish brown, lip rather hairy above, bracts shorter than the ovary; leaves long, grass-like, pleated.
Found in long grass.



Kakamega, Elgon.

Section No. 19.

Terrestrial Orchids, plants lacking green leaves (Saprophytes).

1. EPIPOGIUM ROSEUM (Don) Lindl.

Erect to about 8 ins., spikes open, stem pinkish at base, flowers rather a dirty white with greyish-purple spots.
Found growing in leaf mould in forest.



Elgon (March).

2. EULOPHIA GALEOLOIDES Krzl.

Erect to 6 ins., root large, woody and covered with brown scales, spikes rather open, flowers cream; brown scale leaves on stem.
Found in forest.



Kakamega (February).

Kenya Orchids

Section No. 20.

Epiphytic Orchids, flowers white or cream, over 1 in. in diameter, with spurs 4 ins. long or more.

1. AERANGIS CORIACEA Summerh.

A short but strongly growing plant, spikes open and with few flowers, flowers white with a faint blush, spurs long, twisted, pinkish; leaves to 8 ins. long and 1½ ins. wide, faintly mottled and rather bilobed. See page 37.
In fairly deep shade.

Mt. Kenya, Kikuyu, Nyambeni Hills.

2. AERANGIS FRIESIORUM Schltr.

Distinguished from A. kirkii by its long spurs and longer pointed petals and sepals; leaves very bilobed, widening towards the tip. See page 37.

Nairobi and other places east of the Rift Valley.

N.B. At the time of revision the name of this species had not been finally settled.

3. AERANGIS KOTSCHYANA (Rchb.f.) Schltr.

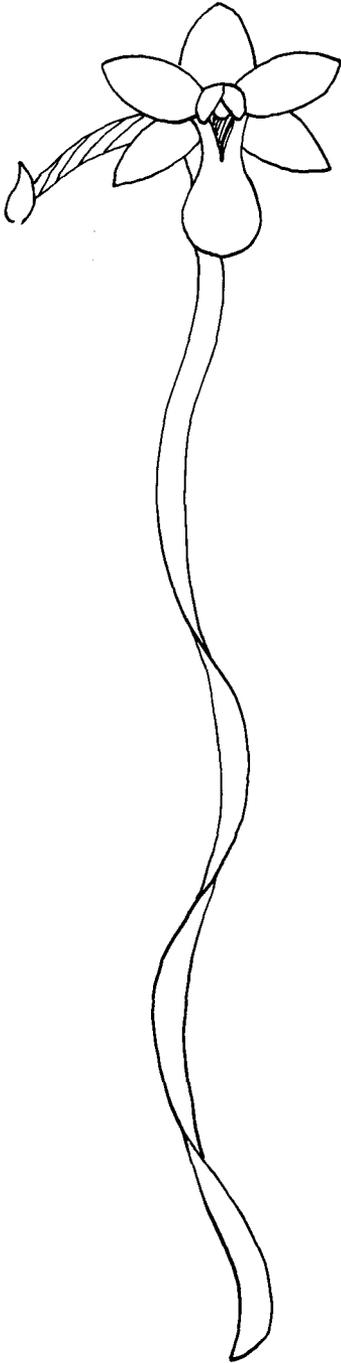
Spikes up to 3 ft. long, flowers pure white with pinkish corkscrew spur, about 9 ins. long; leaves 6 - 10 in number and about 10 ins. long. See page 38.
Found in dense shade.

Kwale, Rabai, Shimba Hills, Nyanza Province.

4. AERANGIS THOMSONII (Rchb.f.) Schltr.

Flowers waxy white with pinkish spurs 4 - 5 ins. long, in open lateral spikes; leaves up to 8 ins. long and 1 in. wide. A plant of high altitudes. See page 38.

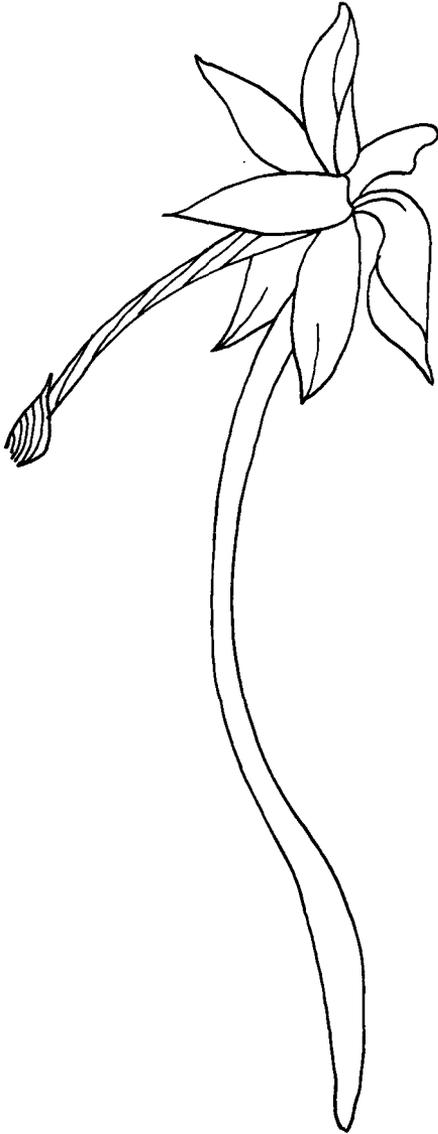
Common in highlands over 7,000 ft.



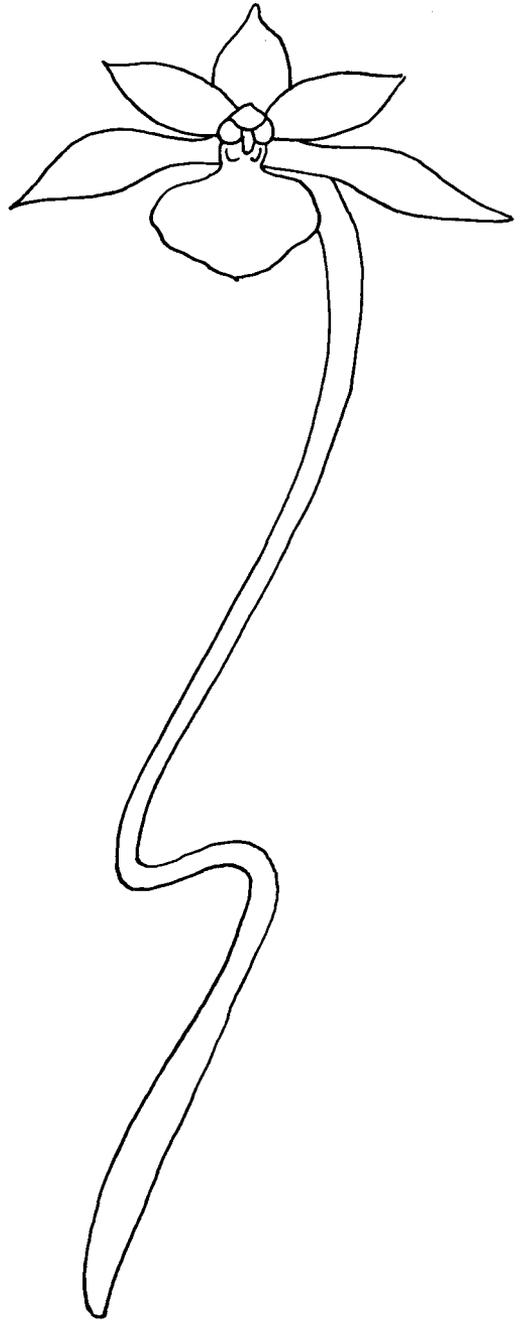
Aerangis coriacea



Aerangis friesiorum



*Aerangis
thomsonii*



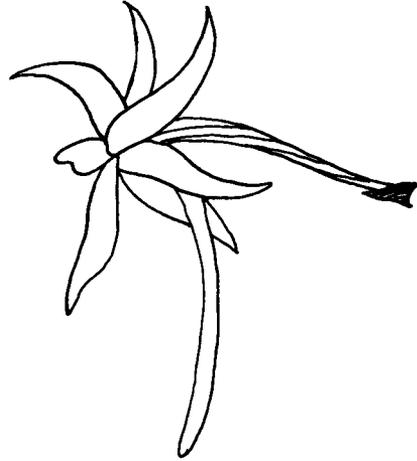
*Aerangis
kotschyana*

Section No. 21.

Epiphytic Orchids, flowers white or cream, over 1 in. in diam. with spurs less than 4 ins. long.

1. AERANGIS KIRKII (Rolfe) Schltr.

A sturdy leafy plant, spikes very open and up to 1 ft. long, flowers opening first at the tip, pure white or sometimes tipped with pale pink, spur and ovary light brown; leaves 3 - 6 ins. long much broader at the apex, see Section 20, No.2. Found in light shade.

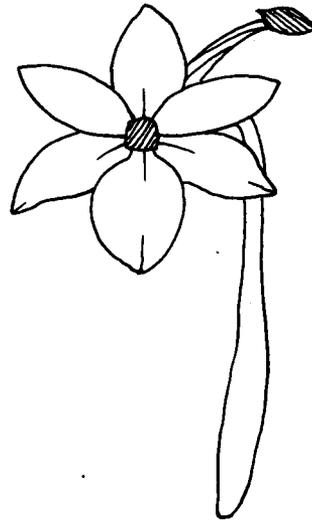


Coast.

N.B. At the time of revision the name of this plant had not been settled; further species exist which are somewhat similar.

2. AERANGIS RHODOSTICTA (Krzl.) Schltr.

Spikes open with flowers all lying in the same plane, pure white except for the bright red column, unmistakable. Small plants found in dense shade, frequently on wild coffee bushes.

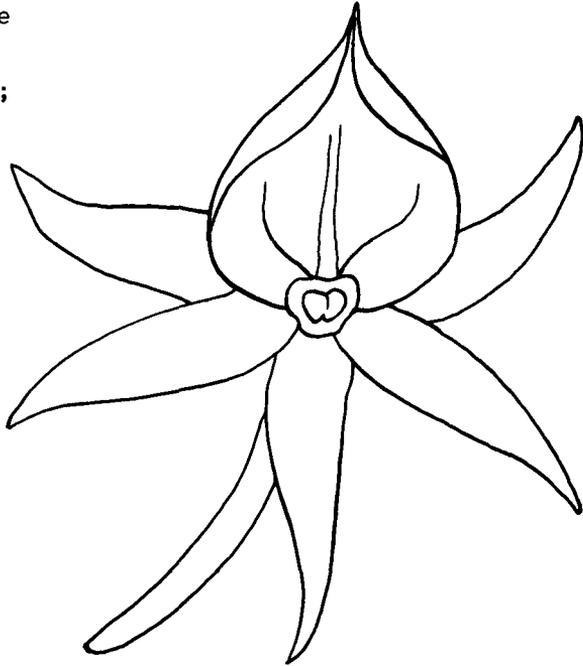


Kakamega Forest (May - July), Thika, Kericho, rivers on east of Mt. Kenya, Nyambeni Range.

3. *ANGRAECUM GIRYAMAE* Rendle

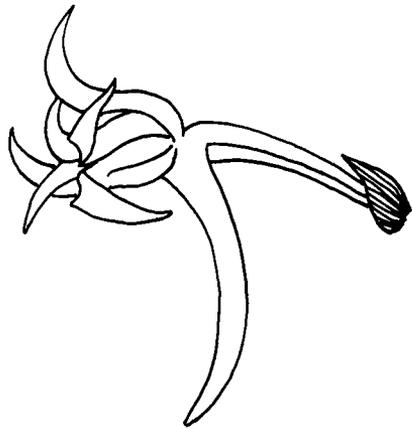
A large robust plant, flowers pale green with a pure white lip; strongly scented and turning yellow when they fade, the ovary is so extremely twisted that the lip is uppermost. Found growing on low coral cliffs within reach of the salt spray, as well as on trees. A very beautiful orchid.

Coast.



4. *CYRTOCHIS ARCUATA* (Lindl.) Schltr. subsp. *VARIABILIS* Summerh. (= *C. sedeni* (Rchb.f.) Schltr. and formerly confused with *C. whytei* (Rolfe) Schltr.)

There are a number of forms of this species with flowers very similar in appearance, i.e. waxy white in colour, with 3-angled ovaries, pointed sepals and petals and tapering spurs; flowers turn orange when fading. The plants are generally strong growing, leafy and untidy and there are generally two open spikes of flowers on each plant; leaves stiff and leathery.



Kakamega (dry season), Mt. Elgon, Trans Nzoia, Mt. Kenya, Aberdares, Kericho, Mau, Tinderet, Londiani, Coast.

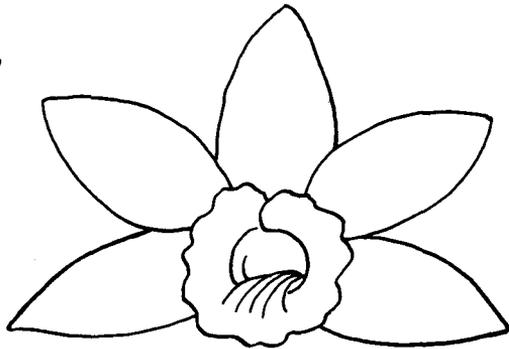
5. *RANGAERIS AMANIENSIS* (Krzl.) Summerh.
Spikes open, bracts short, dark brown;
flowers white, spurs about 3 ins. long,
cream tipped with pale pink; leaves
about 2 ins. long, very stiff and
close together. A short sturdy plant
found in light shade, very
floriferous and common around Nairobi.

Nairobi, Ngong, Narok, Teita Hills,
Machakos, Mt. Kenya, Nanyuki.



6. *VANILLA ROSCHERI* Rchb.f.
Large leafless climber with
strong succulent stems,
flowers pure white with
apricot shading in throat,
no spur.
In forest and dry scrub.

Coast and Nyika.



Section No. 22.

Epiphytic Orchids, flowers white or cream, $\frac{1}{2}$ - 1 in. in diameter, with spurs 2 ins. long and over.

1. RANGAERIS MUSCICOLA (Rchb.f.) Summerh.
(= Aerangis floribunda Summerh.).

Fairly strong growing plants, flowers sweet scented, pure white, but turning orange when fading, in slender few-flowered spikes, from the base of the plant, bracts very short, dark brown, ovary green, spur 3 - 4 ins. long; leaves 3 - 6 ins. long and $\frac{1}{2}$ - $\frac{3}{4}$ in. wide, crowded. Found in dense shade at fairly high altitudes.

Mt. Elgon, Kericho, Kakamega, Kiambu.



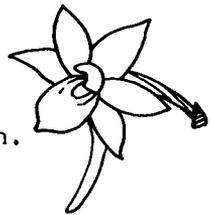
Section No. 23.

Epiphytic Orchids, flowers white or cream, $\frac{1}{2}$ - 1 in. in diameter with spurs less than 2 ins. long.

1. AERANGIS UGANDENSIS Summerh.

A strongly growing plant, flowers pure white in open spikes up to 6 ins. long produced from the base of the plant; leaves broader towards apex than at base, rather leathery, asymmetrically lobed at apex. The curious absence of any midrib is a useful aid to identification. Found in dense shade in damp localities.

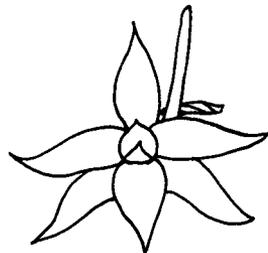
Kakamega, Kericho, Kaimosi, Elgon, Trans Nzoia.



2. ANGRAECUM ERECTUM Summerh.

Flowers white, solitary or in pairs, opposite a leaf, stalk and ovary pinkish, spur yellow or pale brown; leaves up to 2 ins. long very asymmetrically lobed at apex, and produced alternately up the stem.

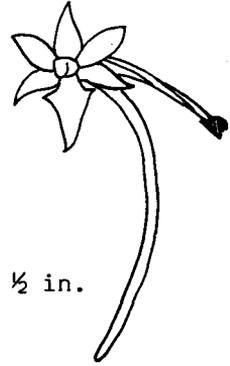
Nairobi, Aberdares, Elgeyo, Kamasia, Mt. Kenya.



3. *YPSILOPUS LONGIFOLIA* (Krzl.) Summerh.

Flowers white, opening first at the tip of the spike; narrow tough stiff leaves; woody stem, usually pendulous.

Nairobi, Ngong, Aberdares.

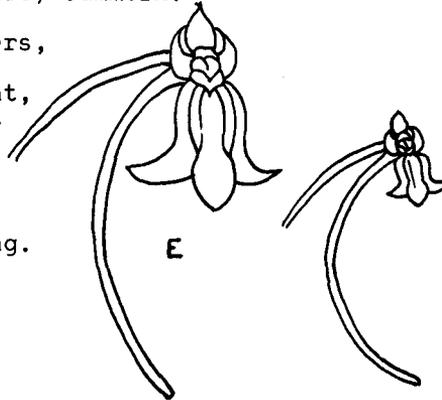


Section No. 24.

Epiphytic Orchids, flowers white or cream, less than ½ in. in diameter, with spurs.

1. *ANGRAECOPSIS GRACILLIMA* (Rolfe) Summerh.

A smallish plant, spikes open, with very few flowers, on slender stems rising from the base of the plant, flowers pure white except for a pale orange coloured spot near the top of the ovary, spur about 1¼ ins. long; leaves few 3 - 4 ins. long. Found in shade.



Kakamega Forest, Kericho, Chepalungu Forest.

2. *ANGRAECUM HUMILE* Summerh.

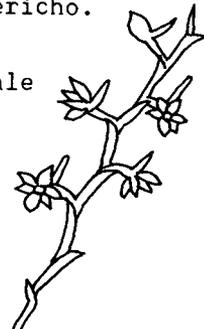
A minute plant ½ - 1½ ins. high, spikes fairly open, lateral, rising opposite the alternate leaves, flowers white, rather less than 1/10 in. across, ovary and spur, which is constricted in the middle, green; leaves about ½ in. long and 1/10 in. wide growing alternately up the stem. Found in dense shade.



Kakamega (August - September), Thika River, Kericho.

3. *MICROCOELIA GUYONIANA* (Rchb.f.) Summerh.

Leafless plants consisting of a very short pale brown scaly stem; a mass of roots radiating more or less horizontally from the stem; and, in their season, very numerous slender stalks bearing open spikes of minute white flowers. They often cling to the undersides of branches.

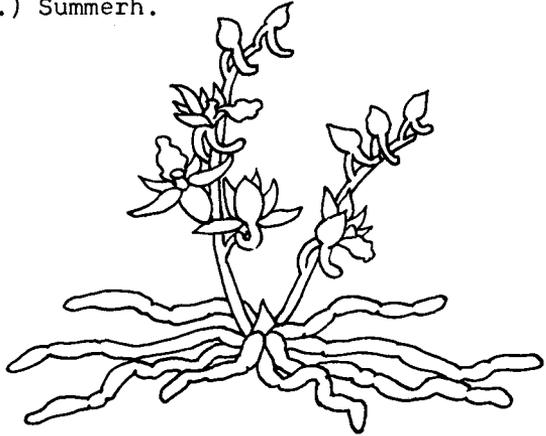


Nairobi, Eldama Ravine, West Pokot, Kakamega.

4. *MICROCOELIA KOEHLERI* (Schltr.) Summerh.
(= *M. pachystemma* Summerh.)

Leafless plant with numerous short open spikes of white flowers shaded with pale pink.

Nyando Valley, Kisumu, Kakamega.

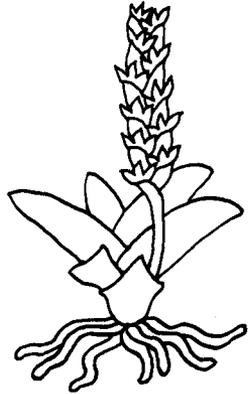


Section No. 25.

Epiphytic Orchids, flowers white or cream, less than ½ in. diameter, without spurs.

1. *BOLUSIELLA IMBRICATA* (Rolfe) Schltr.
Plants up to about 2 ins. high, spikes crowded, unilateral, flowers pure white minute, with pointed sepals and petals; leaves leathery arranged fan-wise.

Kakamega, Kaimosi, Katamayu, Kavirondo Gulf.



2. *POLYSTACHYA ADANSONIAE* Rchb.f., see Section 30, No. 2.
3. *POLYSTACHYA EURYCHILA* Summerh.

Erect to 6 ins., pseudobulbs single, green, spikes crowded, the flowers appear when the plant is leafless, paired sepals white, narrowly edged with mauve, odd sepal and paired petals white, lip yellow edged mauve.

Mt. Elgon, Cherangani.



4. POLYSTACHYA LATILABRIS Summerh.

Small plant to 4 ins, pseudobulbs very narrow and ending in a single leaf, flowers white with a purple column, 2 - 4 on a stalk from the tip of the pseudobulb.



Aberdares, Kericho, Elgon.

Section No. 26.

Epiphytic Orchids, flowers purple or mauve, stems pseudobulbous, flower stalks produced from below the pseudobulbs.

1. BULBOPHYLLUM BEQUAERTII De Wild. var. BRACHYANTHUM Summerh.

Erect to 12 ins. pseudobulbs single, elongated, spikes crowded, unilateral, flowers deep brownish-purple; leaves up to 6 ins. long and $\frac{3}{4}$ in. wide, 1 - 2 at the ends of the pseudobulbs.



Kakamega Forest, (May - June), Kericho, Kaimosi.

2. BULBOPHYLLUM CONGOLANUM Schltr.

Erect to about 4 ins. pseudobulbs 4-angled, spikes rather close, ends of flowering stalk somewhat bulbous and fleshy, flowers deep purple; leaves about 3 ins. long growing in pairs at the apices of the pseudobulbs.



Coast.

3. BULBOPHYLLUM ENCEPHALODES Summerh.

Pseudobulbs single, markedly 4-angled, short, spikes crowded, bilateral on long stalk, bracts brownish-purple, more conspicuous than the flower, flowers brownish-purple, column purple; leaves up to 4 ins. long and 1 in. wide, solitary on each pseudobulb.



Kakamega (August - September), Kericho, Kaimosi.

Section No. 27.

Epiphytic Orchids, flowers purple or mauve, stems pseudobulbous, flower stalks produced from apices of the pseudobulb.

1. LIPARIS NEGLECTA Schltr. (formerly L. deistellii Schltr.)

Small plant to 9 ins., with plump pseudobulb and pleated pale green leaves, 4 - 6 leaves, the smallest near the base, flowers dull purple or pale green in a short open spike.



Mau Summit, Cherangani, Elgon, Kitale.

N.B. This species and L. deistellii still await final identification.

2. POLYSTACHYA BICARINATA Rendle

Flowers in panicles pinky-mauve with an elaborate white lip, drooping on a thin stalk; leaves up to 8 ins. long and 2 ins. wide, solitary at the ends of the pseudobulbs.



Mt. Elgon (February), Kericho.

3. POLYSTACHYA CULTRIFORMIS (Thou.) Lindl.

Flowers pale yellow, pale pinky-mauve, deep or medium pinky-mauve, white, see Section 33, No. 4.

4. POLYSTACHYA FUSIFORMIS (Thou.) Lindl.

Pseudobulbous with several internodes, flowers in rather drooping panicles, dull purple, the overblown flowers persist on the ovary as it develops; leaves 3 - 5 on pseudobulbs.



Nandi, Kakamega.

5. POLYSTACHYA INCONSPICUA Rendle

Erect to about 4 ins., spikes short, fairly crowded, flowers generally yellowish-green but sometimes purplish, the conspicuous part of the flower is the relatively tall hood with a groove down the centre; leaves up to about 3 ins. long and ½ in. wide, solitary at the apices of the pseudobulbs.



Mt. Elgon, Kakamega, Eldoret, Rumuruti, Mt. Kenya, Aberdares, Kericho.

6. POLYSTACHYA SIMPLEX Rendle (= P. aristulifera Rendle).

Erect to about 1 ft., spikes occasionally panicles, fairly close, at the apex of the stalk, drooping, flowers brownish-purple with pale yellow lip; stem pseudobulbous with several internodes, leaves 2 - 4 ins. long and about 1 in. wide, several on each pseudobulb.

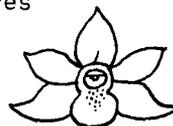


Mt. Elgon, and throughout highlands at medium altitudes.

7. POLYSTACHYA TAYLORIANA Rendle (= P. miranda Krzl.)

Erect to about 1 ft., flowers pinky-mauve, with a white mark on lip, in panicles, the inflorescence appears when the plant is leafless; leaves numerous on the pseudobulb. There is a white form.

Growing on rocks among lichens in a shady situation.



Chyulu Hills, Teita Hills, Northern Frontier.

Section No. 28.

Epiphytic Orchids, flowers purple or mauve, stems not pseudobulbous.

1. DIAPHANANTHE RUTILA (Rchb.f.) Summerh.

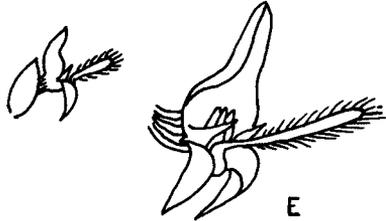
Flowers sometimes a rather dingy mauve, for further description see Section 31, No. 1.

Section No. 29.

Epiphytic Orchids, flowers green, stems pseudobulbous, flower stalks produced from below the pseudobulb.

1. BULBOPHYLLUM COCHLEATUM Lindl.

Plants erect to about 6 ins. including the solitary pseudobulb and leaves, flowers sessile in short erect, two-sided spikes on slender stalks rising from the base of the plant but enveloped in membranous scales as far as the base of the leaves, bracts brown, scaly, sepals and paired petals yellowish-green, lip rather reddish-brown hinged at base. Leaves generally two, 3 - 6 ins. long and 1/2 in. wide at apices of the pseudobulbs, nearly symmetrically lobed at apex.



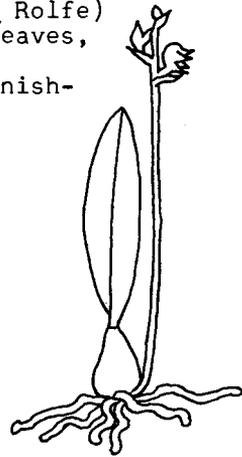
Kakamega Forest (July), Mt. Elgon, Trans Nzoia, Nandi, Kericho.

2. BULBOPHYLLUM INTERTEXTUM Lindl. (= B. viride Rolfe)

A very small plant as shown in drawing, leaves, pseudobulbs and flowers pale green, petals and sepals tipped with darker brownish-green.

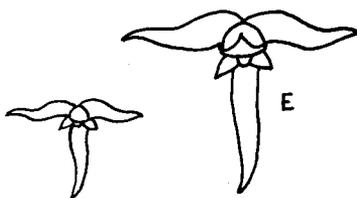
Found in forest.

Nyanza Province.



3. *BULBOPHYLLUM SCHLECHTERI* De Wild.

Plants erect to about 10 ins., stems of single conical pseudobulbs about 1½ ins. high and nearly 1 in. across at base, flowers in pendulous spikes up to 12 ins. long rising from the base of the plant, bracts brownish-red, about half the length of the sepals; flowers rather yellowish-green; leaves up to 8 ins. long and 1 in. wide pointed at apex, one only at the apex of each pseudobulb.



Kaimosi, Nandi Forests, Kericho.

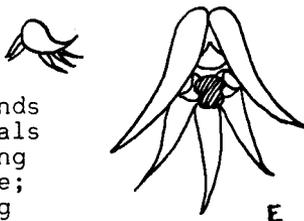
Section No. 30.

Epiphytic Orchids, flowers green, stems pseudobulbous, flower stalks produced from apices of the pseudobulb.

1. *LIPARIS NEGLECTA* Schltr., see Section 27, No. 1.

2. *POLYSTACHYA ADANSONIAE* Rchb.f.

Erect to some 6 ins., spikes rather crowded, flowers rather variable in colour but generally pale yellowish green with a touch of mauve at the ends of the paired sepals and column, sepals and petals all with long points giving the spike a somewhat hairy appearance; leaves three to four, 2 - 4 ins. long and nearly 1 in. wide. Found in light shade.



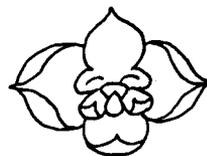
Kakamega (early rains), Elgon, Rongai, Londiani.

3. *POLYSTACHYA CAMPYLOGLOSSA* Rolfe.

Erect to about 5 ins., spikes open few-flowered, bracts short, sepals green, paired petals green, small, column and lip white; leaves 2 - 3 at apices of pseudobulbs.

Note: There are considerable colour variations in this plant. The flowers are sometimes pinkish inside.

Found in light shade, scrub etc. in rather dry country.



Nanyuki, Machakos, Molo, Donyo Sabuk, Elgon, Aberdares, Tinderet.

4. *POLYSTACHYA EURYGNATHA* Summerh.

Pseudobulb with several internodes and drooping panicles of bright green flowers, with a purple column.

Kericho, where it is common.



5. POLYSTACHYA GOLUNGENSIS Rchb.f. (= P. coriacea Rolfe)

The stem composed of a pseudobulb with a single internode, flowers are yellowish-green, in panicles, and rising from the apex of the pseudobulb; leaves some 4 - 6 ins. long and about 1 in. wide.



Nyando Valley.

6. POLYSTACHYA INCONSPICUA Rendle.

Flowers generally yellowish-green but sometimes purplish; for fuller description see Section 27, No. 5.

7. POLYSTACHYA SHEGA Krzl.

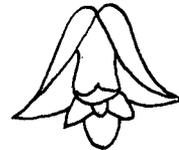
Erect to about 1 ft., flowers in open spikes on slender stalks, bracts short, brown, sepals brownish-green, petals rather yellowish-green, pseudobulbs small and rounded; leaves 2 - 3 up to about 8 ins. long and just over ¼ in. wide. Found in very light shade.



Nairobi, Ngong.

8. POLYSTACHYA TRANSVAALENSIS Schltr. (= P. nigrescens Rendle)

Erect to 1 ft. or more, flowers bright green, in panicles rising from the apex of the pseudobulb; leaves 2 - 5 ins. long and about ½ in. wide, 5 or more to a single pseudobulb. A plant of high altitudes.



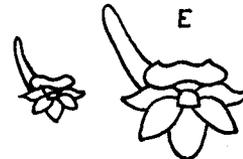
Mt. Elgon, Aberdares, Molo, Ngong Hills.

Section No. 31.

Epiphytic Orchids, flowers green, stems not pseudobulbous, long and straggly.

1. DIAPHANANTHE RUTILA (Rchb.f.) Summerh.
(= Rhipidoglossum rutilum (Rchb.f.) Schltr.)

A medium sized plant generally growing out at right angles to the tree, flowers dull green to dull purple, spirally arranged on slender pendulous lateral spikes; leaves purplish underneath, stem purplish.



Kakamega, Kericho, Mt. Kenya, Aberdares, Nairobi, Shimba Hills.

2. DIAPHANANTHE XANTHOPOLLINIA (Rchb.f.) Summerh.
(= Rhipidoglossum xanthopollinium Schltr.)

Rather like D. rutila, but the plant is larger, there is no purplish tinge, and the flowers are pale yellowish-green.



Kakamega.

Kenya Orchids

3. TRIDACTYLE SCOTTELLII (Rendle) Schltr.

A straggly, untidy plant up to about 18 ins. long, flowers a rather dirty green, but turning more or less orange as they fade, growing solitary or in clusters of up to three on the stem; leaves alternate 2 - 4 ins. long and rather less than ½ in. wide. Frequently on the new growth of a long bare stem, flowers will be found.



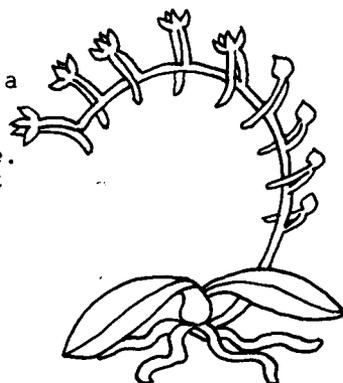
Mt. Elgon, Kaptagat, Aberdares, Nanyuki, Londiani, Tinderet, Nairobi.

Section No. 32.

Epiphytic orchids, flowers green, stems not pseudobulbous, short and compact.

1. ANGRAECOPSIS AMANIENSIS Summerh.

Minute plant with 2 small leaves and a tangle of dull green roots, flower stalk 2 ins. long, flowers green and opening first at the tip of the spike. Found in the upper branches of forest trees.

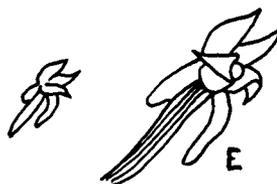


Elgon, Kakamega, Kaimosi.

2. ANGRAECUM DIVES Rolfe.

Small yellowish green flowers in an open spike.

All parts of the Coast, common especially on baobabs.



3. ANGRAECUM GIRYAMAE Rendle.

Flowers pale green with a white lip, see Section 21, No. 3.

4. ANGRAECUM SACCIFERUM Lindl.

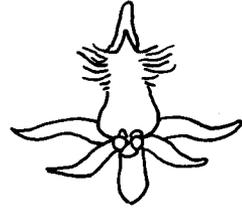
A tiny plant about 2 ins. high, spikes 1 - 3 flowered on very slender stalks about 2½ ins. long, rising from the base of the plant, flowers pale green about 1/5 in. across, ovary and spur are twisted together but as the flower fades, the ovary straightens; leaves thin, 4 - 6 in number, up to 1½ ins. long and 1/5 in. wide. Found in deep shade.



Nandi Forest (June - July), Mt. Kenya, Aberdares, Ngong, Elgon, Mau Summit.

5. DIAPHANANTHE FRAGRANTISSIMA (Rchb.f.) Schltr.

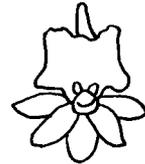
A robust plant, pendulous when mature, but not straggly, flowers pale green and transparent, on very numerous lateral spikes, usually longer than the leaves; leaves fleshy and asymmetrically lobed, up to 12 ins. long and $1\frac{1}{2}$ ins. wide.



Kericho.

6. DIAPHANANTHE PULCHELLA Summerh.

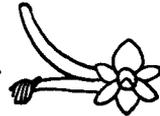
A strongly growing plant, spikes slender pendulous, lateral, flowers yellowy-green, transparent, lip rolled back towards the spur; leaves up to about 4 ins. long and $\frac{1}{2}$ in. wide. Found in light shade.



Mt. Elgon, Mua Hills, Ngong.

7. DIAPHANANTHE QUINTASII (Rolfe) Schltr.

Flowers bright green, 4 - 6 on an open drooping spike, not transparent as are most Diaphanantes. A plant of high altitudes.



Aberdares, Mau- Molo, Elgon.

8. RANGAERIS BRACHYCERAS (Summerh.) Summerh.

Flowers yellowish-green, sweet-scented in very slender spikes rising from the base of the plant; leaves narrow, bilobed 4 - 6 in number, 3 ins. long, $\frac{2}{5}$ in. wide.



Mt. Elgon, Kakamega, Kaimosi, Kapsabet.

9. TRICERATORHYNCHUS VIRIDIFLORUS Summerh.

An almost minute plant, flowers pale green, about $\frac{1}{5}$ in. across, in few-flowered spikes on very slender stalks about 1 in. long rising from the base of the plant; leaves 3 - 6 somewhat leathery, $\frac{1}{2}$ - $\frac{3}{4}$ in. long and nearly $\frac{1}{5}$ in. wide, asymmetrically lobed at apex. Found in forest.



Kakamega (July - August), Elgon.

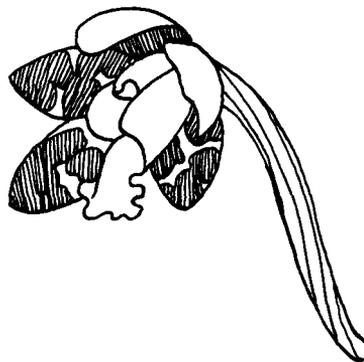
Kenya Orchids

Section No. 33.

Epiphytic Orchids, flowers yellow, orange or brown, stems pseudo-bulbous.

1. *ANSELLIA AFRICANA* Lindl.

Erect to about 2 ft.6 ins. with 8 - 10 leaves at the end of long stem-like pseudobulbs, an old plant will make a very large clump; flowers greenish-yellow, so heavily blotched with dark brown as to appear almost black, the column and lip are marked with light brown, and the tip of the column and the frilled part of the lip are bright yellow; they grow in open panicles at the tip of pseudobulbs. Found in deep shade.



Southern foothills of Elgon.

2. *ANSELLIA GIGANTEA* (Rchb.f.) var. *NILOTICA* (Bak.) Summerh.

The Leopard orchid. Erect to about 2 ft. 2 ft. with 8 - 10 leaves at the end of long stem-like pseudobulbs, flowers yellow with brown blotches, in large handsome open panicles terminating the pseudobulbs. Usually epiphytic but sometimes found on tree roots and rocks, in the open or in very light shade; an old plant makes a very large clump of stems. Flowers and inflorescences vary greatly in size.



Coast, West and East Pokot, Elgon foothills, etc. Very widespread.

3. *POLYSTACHYA BELLA* Summerh. (formerly confused with *P. obanensis* Rendle).

Erect to some 10 ins., spikes open, the whole flowers are yellow, rather long and narrow for a *Polystachya*. Pseudobulb green, very flattened; leaves 3 - 4, up to about 5 ins. long and nearly 1 in. wide. Found in damp shady localities.



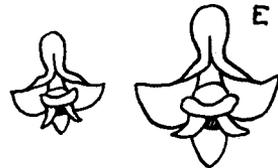
Kericho (September and March).

4. *POLYSTACHYA CULTRIFORMIS* (Thou.) Lindl.
Erect to 1 ft. and more, from the apex of the pseudobulb, flowers in panicles, pale yellow or deep, medium or pale pinky-mauve; leaves up to 6 ins. long and nearly 2 ins. wide, growing singly at the apex of the pseudobulb.



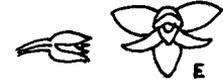
Common throughout the highlands.

5. *POLYSTACHYA SPATELLA* Krzl.
Flowers greenish-yellow, (sometimes tinged with purple) in open spikes of 3 - 6 flowers, scented by day; leaves soft, narrow, dark green, on thin erect to pendulous pseudobulbs of several internodes.



Common throughout the highlands.

6. *POLYSTACHYA STEUDNERI* Rchb.f.
Erect to 8 ins., flowers appear in dry weather when plant is leafless, spikes open, flowers with green sepals and yellow petals, sometimes in panicles; leaves up to about 5 ins. long and $\frac{3}{4}$ in. wide.
Common in light shade.



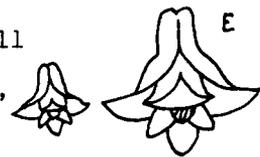
Mt. Elgon (January), Nandi, Kakamega, Northern Frontier.

7. *POLYSTACHYA STRICTA* Rolfe.
Erect to nearly 1 ft., pseudobulbs long and narrow, flowers yellow sometimes in panicles; leaves several, 2 - 4 ins. long and nearly 1 in. wide.
Common.



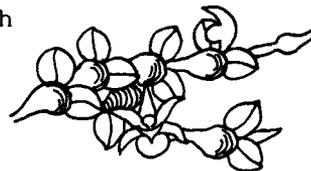
Kakamega (dry season), Nandi, Elgon, Londiani, Tinderet, Kaimosi.

8. *POLYSTACHYA UGANDAE* Krzl.
Erect to 8 ins., a delicate plant with small spikes with 2 - 6 blooms, flowers yellow with orange in centre; leaves soft, narrow, pale green, on thin pseudobulbs of several internodes.



Elgon, Kakamega, Trans Nzoia.

9. *STOLZIA REPENS* (Rolfe) Summerh. (= *Polystachya repens* Rolfe and formerly confused with *Bulbophyllum cupuligerum* Krzl.)
Creeping plant often making a thick mat, pseudobulbs are very small with a terminal thickening and usually two small leaves, flowers appear singly and are yellow or reddish-brown covered with reddish-brown veining.



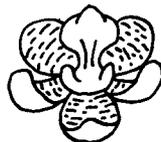
Nairobi, Ngong, Kinangop, Kakamega, Elgon.

Section No. 34.

Epiphytic Orchids, flowers yellow, orange or brown, stems not pseudo-bulbous.

1. *ACAMPE PACHYGLOSSA* Rchb.f.

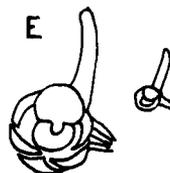
A large leafy succulent plant, spikes short and rather close, on a stalk about 4 ins. long, sepals and paired petals yellowish with reddy-brown spots not touching each other, there is a variation with the sepals and paired petals definitely pinkish, lip white, turning yellow with age, with a short pointed spur; leaves thick and fleshy 4 - 6 ins. long. Found in shade or in the open.



Coast.

2. *CHAMAEANGIS ODORATISSIMA* (Rchb.f.) Schltr.

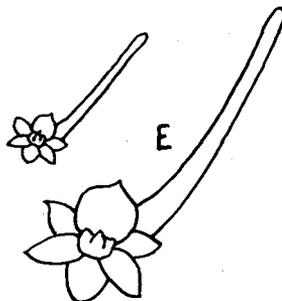
A stout leafy plant, generally pendulous, flowers yellow, in whorls, on long narrow pendulous lateral spikes; leaves numerous, 4 - 6 ins. long and about 1 in. wide.



Mt. Elgon (July), Trans Nzoia, Kericho, Kaimosi, Kakamega.

3. *CHAMAEANGIS ORIENTALIS* Summerh.

Flowers pale brownish-orange in whorls on upright narrow spikes up to nearly 1 ft. long rising from near the base of the plant; leaves drooping, brownish-green, fleshy, often looking shrivelled, up to 10 ins. long.



Mt. Elgon, Uasin Gishu, Kapsabet, Cherangani, Mt. Kenya, Chyulu Hills, Nyambeni Hills.

4. *CHAMAEANGIS VESICATA* Schltr.

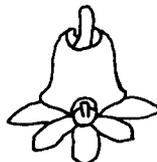
Flowers yellow or pale greenish-yellow, in whorls on upright spikes; leaves dark green, fleshy, often looking shrivelled. Plant very like *C. orientalis* but larger. Common east of the Rift at medium altitude.



Kamasia.

5. *DIAPHANANTHE LORIFOLIA* Summerh.

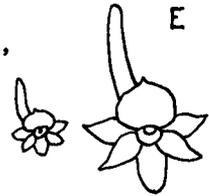
Flowers cream tipped with orange, translucent, in lateral spikes 4 - 5 ins. long; leaves thick, stout, crowded on the stem, up to 7 ins long and 1 in. wide, all lying in the same plane.



Mt. Elgon, Kakamega (June), Kericho, Kaimosi, Cherangani, S.W. Mau.

6. DIAPHANANTHE SUBSIMPLEX Summerh.

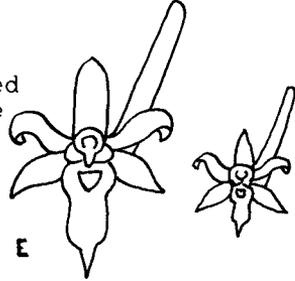
A plant with a long, straggling stem with leaves, roots and flowers at irregular intervals, flowers rather a dull yellow, translucent, in slender lateral spikes about 2 ins. long; leaves 1 - 2 ins. long and about ½ in. wide.



Mt. Elgon, Mau Forest, Bahati Forest, Aberdares, Mt. Kenya, Chyulu Hills.

7. TRIDACTYLE ANTHOMANIACA (Rchb.f.) Summerh.

A large straggling plant with buff coloured flowers produced in ones and twos from the stem; leaves asymmetrically lobed.

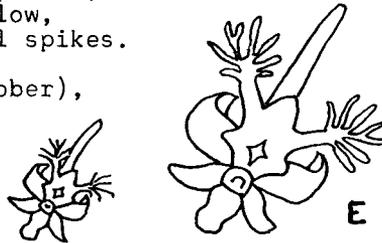


Kakamega.

8. TRIDACTYLE BICAUDATA (Lindl.) Schltr. (= T. fimbriata Schltr.)

A plant with an elongated leafy stem, flowers unmistakable, pale yellow, often very numerous, in lateral spikes.

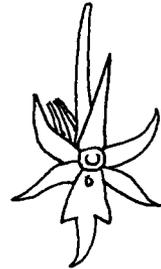
Kakamega (October), Elgon (October), Aberdares, Nairobi, Coast.



9. TRIDACTYLE FURCISTIPES Summerh.

A more compact plant than T. bicaudata, flowers buff, in lateral spikes, they open all at once and lie all on one plane. A plant of high altitudes.

Kinangop, Mau-Molo, Cherangani.

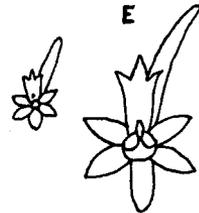


10. TRIDACTYLE SCOTTELLII (Rendle) Schltr.

The flowers of this plant first open a dirty green but turn orange as they fade, see Section 31, No. 3.

11. TRIDACTYLE TRIDENTATA (Harv.) Schltr.

A pendulous branched leafy plant, flowers in axillary clusters on the stem, buff-coloured; leaves alternate, narrow, and up to 2 ins. long.



Kakamega.

Kenya Orchids

Section No. 35.

Epiphytic Orchids, flowers red or pink.

1. POLYSTACHYA BICARINATA Rendle.
Flowers pinky-mauve, see Section 27, No. 2.
2. POLYSTACHYA CULTRIFORMIS (Thou.) Lindl.
Flowers dark purple, pinky-mauve or yellow, see Section 33,
No. 4.
3. POLYSTACHYA TAYLORIANA Rendle.
Flowers pinky-mauve, see Section 27, No. 7.

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(Received for publication 1st. November 1962)