

Wild Flowers of Ceylon: I

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C EYLON has been bountifully supplied with wild flowers—many of them beautiful, striking, pleasure-giving. This heritage of flowers is particularly appreciated in a country where the custom of offering flowers at shrines in temples is practised by old and young.

Children also gather wild flowers to deck themselves with, or to brighten homes, and sometimes for the more serious purpose of study. In order to help in identification of the flowers and to give some information about them the present series of articles has been commenced.

Wild flowers are of many different kinds and each kind—that is, having the same characteristics with regard to the structure of the flower—is called a species. The species constitutes the unit of classification. Closely related species, having numerous characters in common and differing only in minor details—together form a genus, while related genera similarly group into a family.

In the botanical naming of any plant, two words are used—the first to indicate the genus and the second to indicate the species. These two words are followed by a third, usually abbreviated, the name of the person who first validly gave that name to the plant.

In the study of relationships, the important characters are those of the flower. In a typical flower there are four series of floral organs.

The outermost series is known as the *calyx*. It is commonly green and it completely encloses the flower when in bud. It is made up of a number of segments called *sepals*.

Next to the calyx is the series of brightly coloured *petals* forming the *corolla*.

The third series consists of *stamens* formed of *filaments* bearing *anthers* containing *pollen*.

The innermost series is the *ovary* composed of *carpels* containing *ovules*. The ovary is prolonged into one or more *styles* ending in *stigmas*.



PLATE I—1. *Anemone ricularis* Ham. 2. *Berberis aristata* DC. 3. *Michelia nilagiriensis* Zenk. 4. *Ranunculus sagittifolius* Hook.

1. *Michelia nilagrica* Zenk.
Val-sapu. (Sinhalese).

Pl. I, fig. 3.

Family.—Magnoliaceae (Magnolia Family).

Description.—A much-branched small tree with a rounded head and smooth grey bark; leaves short-stalked, 3 to 3½ inches long, 1 to 2 inches wide, whitish on the lower side with very fine silky hairs (very silky when young); stipules densely silky, joined to enclose the bud completely; flowers 1¾ to 2 inches in diameter, borne singly at the ends of short twigs, on a short, stout, silky stalk, with usually 12 similar sepals and petals spirally arranged; stamens and carpels numerous, spirally arranged.

Flower.—Sweet-scented, pale sulphur yellow, becoming darker on withering.

Time of flowering.—March, April.

Locality.—Common in forests above 5,000 feet, more rarely extending to 4,000 feet.

Distribution.—Also in the Nilgiri hills in South India.

Uses.—The wood is strong and very durable, providing excellent timber, locally called *Val-buruta*, which has been used for railway sleepers.

Note.—Belonging to the same genus is the well-known "*Sapu*" or "*Champak*" tree, *Michelia champaca* L., much cultivated for its timber.

Description.—A large tree 40 to 50 feet high; leaves 4 to 8 inches long, 2 to 3 inches wide; flower 2½ inches in diameter; seeds scarlet.

Flower.—Yellow, very fragrant.

Time of flowering.—April and May.

Locality.—Introduced into Ceylon and naturalised in secondary jungle.

Distribution.—India and Java.

2. *Ranunculus sagittifolius* Hook.

Buttercup.

Pl. I, fig. 4.

Family.—Ranunculaceae (Buttercup Family).

Description.—A perennial herb with leaves mostly at the base; leaf-stalks very long and hairy; leaf-blades arrow-shaped with rounded lobes at the base; flowering stem upright, 2 to 3 feet high, branched, bearing a few narrow leaves and 4 to 10 flowers; flowers ¾ inch in diameter, with 5 rounded petals and a rounded head of carpels.

Flower.—Bright yellow, shiny.

Time of flowering.—May, June, September.

Locality.—Common in wet or marshy places above 5,000 feet, especially at Horton Plains and Nuwara Eliya.

Distribution.—This species occurs only in Ceylon.

Note.—This is the common buttercup with conspicuous, shiny bright yellow flowers. There is in the same region in damp shady places a perennial, creeping buttercup, *Ranunculus wallichianus* W. & A.

This species has much-divided leaves, and inconspicuous yellow flowers $\frac{1}{3}$ to $\frac{1}{2}$ inch wide. It flowers from April to September. It occurs also in the Nilgiri hills of South India.

3. *Anemone rivularis* Ham.
Wild Anemone.

Pl. I., fig. 1.

Family.—Ranunculaceae (Buttercup Family).

Description.—A perennial herb with leaves mostly at the base, the whole plant more or less hairy; leaf-stalk very long, up to 14 inches long; leaf blade 1 to 4 inches long, 2 to 8 inches wide, divided into 3 almost to the base, each lobe very deeply cut; flower-stem upright, 1 to 3 feet high, with narrower leaves and bearing 7 to 13 flowers; flower $1\frac{1}{2}$ inches in diameter; sepals 5 to 8, usually 7, slightly silky on the outside; petals wanting; stamens numerous; carpels numerous, each with a solitary pendulous ovule; fruit a rounded head of carpels.

Flower.—Bluish pink or white.

Time of flowering.—March, April.

Locality.—Locally abundant near streams above 5,000 feet, especially at Nuwara Eliya, Ambewela and Horton Plains.

Distribution.—In the higher mountains of India, abundant in the Himalayas.

4. *Berberis aristata* DC.
Barberry.

Pl. I., fig. 2.

Family.—Berberidaceae (Barberry Family).

Description.—A perennial, erect, much-branched, thorny shrub; leaves in fascicles of 3 to 6, i.e., on very short branches from the axils of strong 3-branched spines (modified leaves) which are $\frac{1}{4}$ to $\frac{3}{4}$ inch long and very sharp; leaves 1 to $1\frac{1}{2}$ inches long, $\frac{1}{2}$ to $\frac{3}{4}$ inch wide, stiff, ending in a sharp point; flowers about $\frac{1}{2}$ inch in diameter, in clusters of 6 to 20 from the leaf-fascicles and longer than them; sepals 6, in 2 rows, the inner row twice as large as the outer; petals 6, in 2 rows, rather longer than the sepals; stamens 6, opposite the petals and slightly joined to the base of the petals; anthers opening by two upwardly recurved lids; ovary smooth, with 1 carpel, with a short style and a thick stigma.

Flower.—Bright yellow; fruit purple, with a white "bloom" which is easily rubbed off.

Time of flowering.—April to June and most other months.

Locality.—Very common in bushy open places above 5,000 feet.

Distribution.—In India, throughout the Himalayas from 6,000 to 10,000 feet and in the Nilgiri hills.



PLATE II—1. *Lawsonia inermis* L. 2. *Jussiaea suffruticosa* L. forma *villosa* (Lamk.) Alst.
 3. *Woodfordia fruticosa* (L.) Kurz. 4. *Ammannia octandra* L. f.

Uses.—The wood is yellow and hard. The root-bark is used in India as a bitter tonic in fevers and an extract from the wood is used there as a local application in chronic ophthalmia.

Note.—The stamens are irritable, and bend over the stigma if touched at the base.

5. *Woodfordia fruticosa* (L.) Kurz.

Malitta (Sinhalese)

Pl. II., fig. 3.

Family.—Lythraceae (Loosestrife Family).

Description.—A straggling shrub with many long arching branches covered with fine white hairs; bark cinnamon-brown, shredding off in fibres; leaves without stalks, 3 to 4 inches long, $\frac{1}{2}$ to 1 inch wide, finely velvety on both sides; flowers in short clusters of 4 to 10, often on the old wood; calyx over $\frac{1}{2}$ inch long, red and hairy outside, of six sepals, forming a slightly curved, somewhat inflated funnel-shaped tube with the tips of the sepals free and very short; petals 6, very small, inserted on the tube between the calyx segments; stamens 12, projecting much beyond the calyx-tube; ovary with 2 cells and numerous ovules; fruit about $\frac{3}{8}$ inch, enclosed in the calyx-tube which becomes vertically-split.

Flower.—Bright brick-red.

Time of flowering.—March, April and September to November.

Locality.—At 3,000 to 5,000 feet elevation, in open sunny places; abundant on the Uva patanas as at Wilson's and Bandarawela.

Distribution.—India, China and Madagascar.

Note.—The stamens are of 3 forms.

6. *Ammannia octandra* L. f.

Pl. II., fig. 4.

Family.—Lythraceae (Loosestrife Family).

Description.—An annual erect herb, 1 to 2 feet high, with ascending branches; leaves on the main stem $1\frac{1}{2}$ to $2\frac{1}{2}$ inches long, $\frac{1}{8}$ to $\frac{1}{4}$ inch wide, but smaller on the branches; flowers about $\frac{1}{3}$ inch in diameter, in clusters of 3, on very short stalks; calyx of 4 sepals; petals 4; stamens 8; fruit broadly ovoid, enclosed in the calyx-tube.

Flower.—Bright pink.

Time of flowering.—March, April, July and September.

Locality.—Rather common in the dry region, as at Jaffna, Kurunegala, Matale and Dambulla.

Distribution.—Also in South India and Malaya.

7. *Lawsonia inermis* L.

Marutonti (Tamil). —Henna, Tree Mignonette

Pl. II., fig. 1.

Family.—Lythraceae (Loosestrife Family).

Description.—A much-branched shrub, the lateral branchlets often ending in a sharp point; leaves $\frac{1}{2}$ to $1\frac{1}{2}$ inches long, $\frac{1}{3}$ to $\frac{3}{4}$ inch wide; flowers numerous, under $\frac{1}{2}$ inch in diameter, arranged in a pyramid-like cluster 6 to

12 inches long and 4 to 8 inches wide at the base, with its axes reddish ; calyx of 4 sepals with a very short calyx-tube ; petals 4 ; stamens 8, inserted in pairs ; ovary 4-celled, with numerous ovules ; fruit globose, under $\frac{1}{4}$ inch in diameter.

Flower.—With pinkish sepals and cream-yellow petals, very fragrant.

Time of flowering.—February, March.

Locality.—In the dry and arid regions especially near the sea coast as at Mannar, Batticaloa and near Chilaw ; it is abundant by the lagoons at Jaffna ; in the moist region it is cultivated only.

Distribution.—Also in Western India, Kabul and Persia, and much cultivated elsewhere.

Uses.—This is the “ henna ” the leaves of which are used for staining the finger-nails and teeth and for applying to the head.

8. *Jussiaea suffruticosa* L. forma *villosa* (Lamk.) Alst. Pl. II., fig. 2.

Family.—Onagraceae (Willowherb Family).

Description.—A perennial branched herb 2 to 3 feet high, thickly covered with short spreading hair ; leaves 2 to 4 inches long, $\frac{1}{4}$ to 1 inch wide, thickly hairy on both sides ; flowers $\frac{3}{4}$ to $1\frac{1}{4}$ inches in diameter ; calyx hairy, of 4 sepals ; petals 4, rounded, yellow ; stamens 8 with very short filaments ; ovary below the sepals, with 4 or 5 cells, hairy ; style very short, stigma large ; fruit about 1 inch long, splitting lengthwise ; seeds very numerous.

Flower.—Bright chrome yellow.

Time of flowering.—September, October.

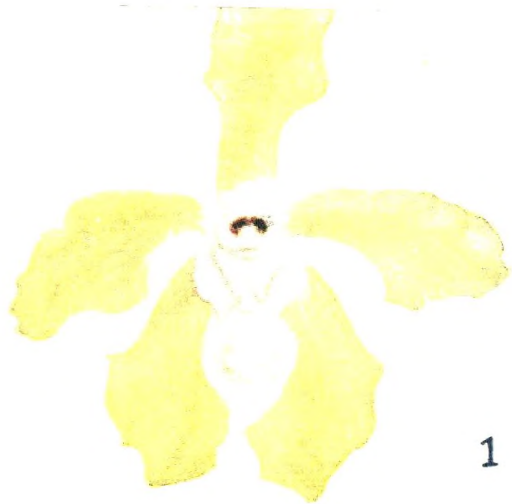
Locality.—Common in wet places from sea level to 3,000 feet elevation.

Distribution.—Throughout the world in warm countries.

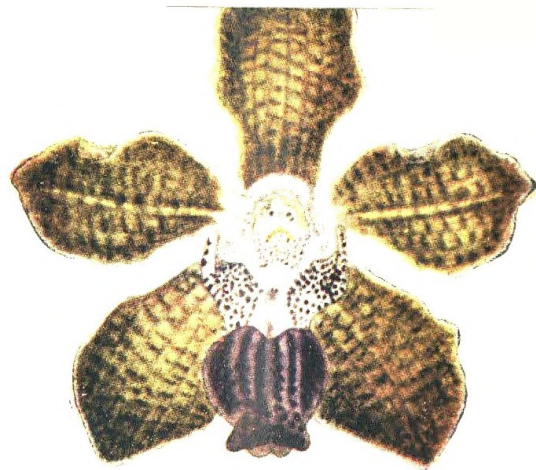
Acknowledgement

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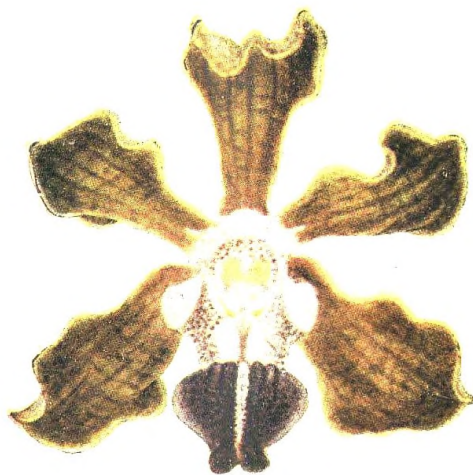
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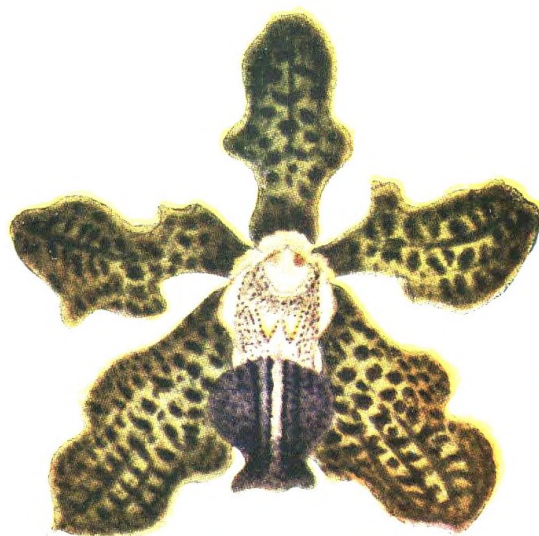
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6

3 Inches

PLATE IV—*Vanda tessellata* (Roxb.) Hook. 1. yellow form, 2. forma *lutescens* Alst.