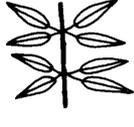


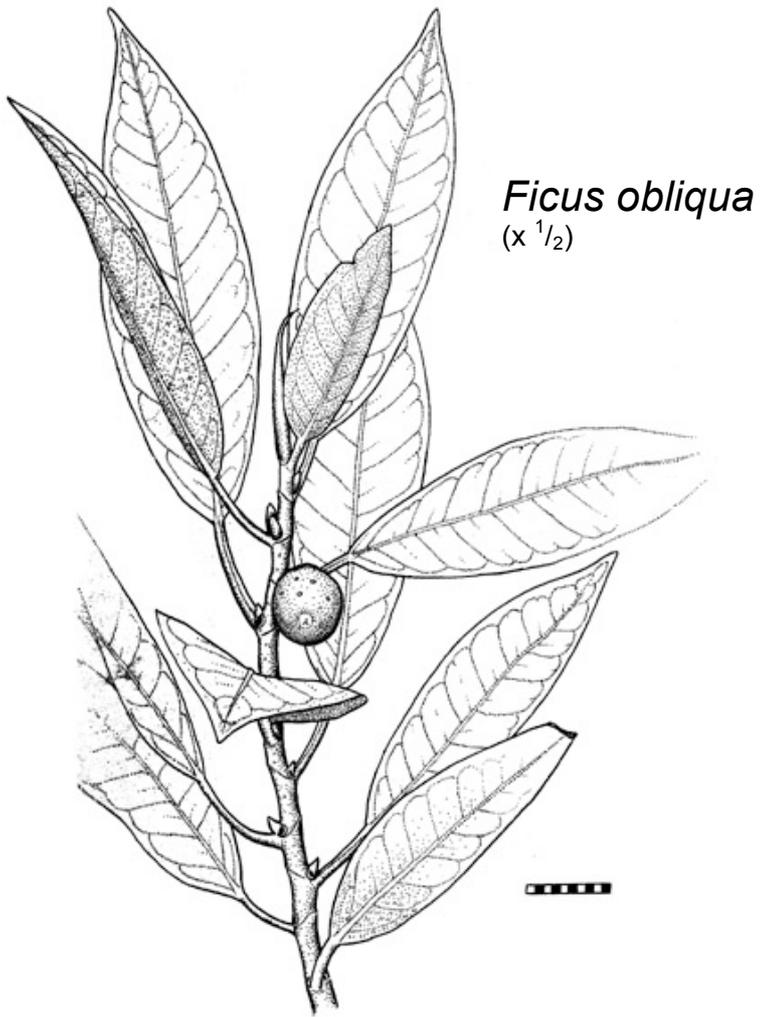
## KEY TO GROUP 4

Plants with a milky white sap present – latex. Although not all are poisonous, all should be treated with caution, at least initially. (May need to squeeze the broken end of the stem or petiole).

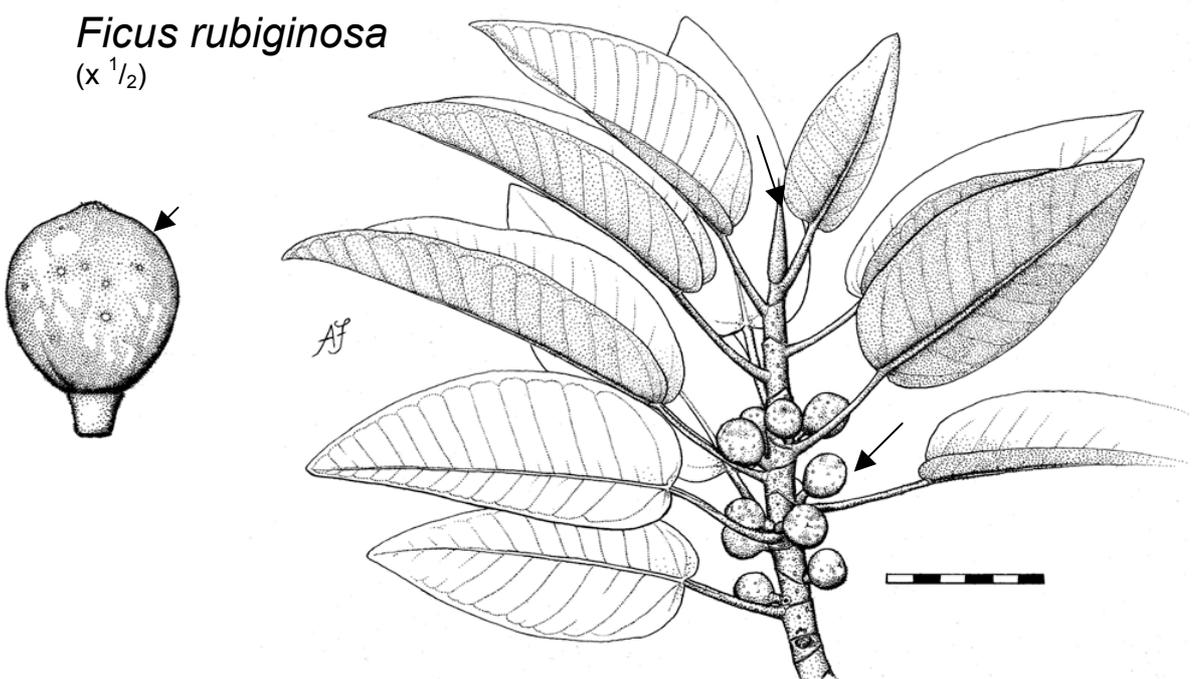
The plants in this group belong to the Apocynaceae, Euphorbiaceae, Moraceae, and Sapotaceae. Although an occasional vine in the Convolvulaceae which, has some watery/milky sap will key to here, please refer to **Group 3. (3.I, 3.J, 3.K)**

		
A. leaves alternate	B. leaves opposite	C. leaves whorled

- |    |  |                        |
|----|--|------------------------|
| 1  | Leaves alternate on the twigs (see sketch A), usually shrubs and |                        |
| 2  | trees, occasionally a woody vine or scrambler                    | go to <b>Group 4.A</b> |
| 1* | Leaves opposite (B) or whorled (C), i.e., more than 2 arising    |                        |
|    | at the same level on the twigs                                   | go to 2                |
| 2  | Herbs usually less than 60 cm tall                               | go to <b>Group 4.B</b> |
| 2* | Shrubs or trees usually taller than 1 m                          | go to <b>Group 4.C</b> |



*Ficus rubiginosa*  
(x 1/2)



**GROUP 4.A Leaves alternate, shrubs or trees, occasional vine (chiefly Moraceae, Sapotaceae).**

*Ficus* spp. (Moraceae)

*Ficus*, the Latin word for the edible fig.

About 9 species have been recorded for the Island. Most, unless cultivated, will be found only in the dry rainforest areas or closed forest, as in Nelly Bay. They are distinguished by the latex which flows from all broken portions; the alternate usually leathery leaves; the prominent stipule (↑) which encloses the terminal bud and the “fig” (↑) or syconia. This fleshy receptacle bears the flowers on the inside; as the seeds mature the receptacle enlarges and often softens (Think of the edible fig!). Some of the common species are:

*Ficus benghalensis* (Banyan Tree – Moraceae)

Banyan, with large, broadly ovate leaves up to 30 x 20 cm, softly pubescent below, base is heart-shaped, stipules coloured, to 3 cm long. Figs paired, up to 2 cm diameter, at maturity orange to red in colour.

**NOTE:** Also recorded on the Island are, *Ficus hispida*, (Rough-leaved Fig) leaf margins indented and figs hanging down in bunches, green to yellow when ripe; and *Ficus superba*, margins smooth, figs stalked.

*Ficus benjamina* (Weeping Fig – Moraceae)

This tree is commonly found in parks, a strangler, aerial roots present; leaves dark green. Figs 10-12 mm diameter, red to black.

*Ficus microcarpa* (Small-fruited Fig – Moraceae)

Often cultivated, figs small, (to 10 mm diameter) usually reddish to black with small white spots, sessile. Aerial or strangling roots often present. Leaves often appear 3-veined at the base.



*F. benghalensis*

*F. benjamina*

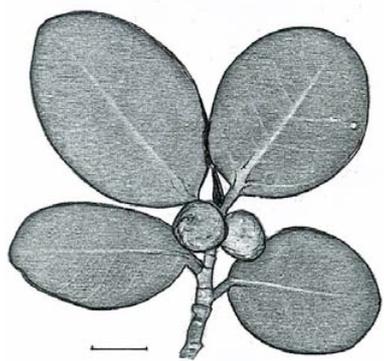
*F. microcarpa*

*Ficus obliqua* (Small-leaved Fig, Large Strangler Fig – Moraceae)

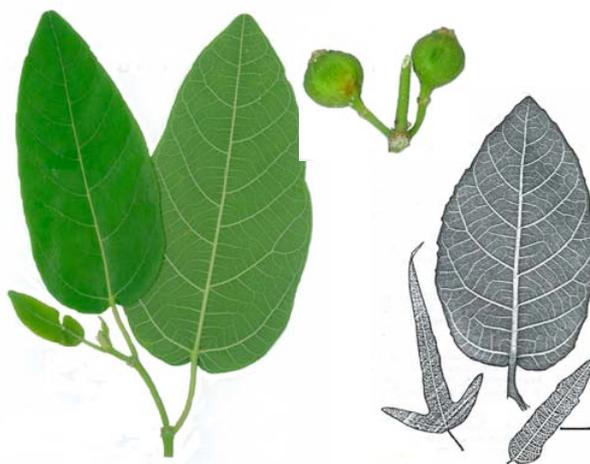
Figs to about 1 cm diameter, at maturity, yellowish-orange to orange-red, frequently with dark spots, usually paired along the branches. Upper surface of leaves glabrous, i.e., they lack hairs, leaves often larger than in illustration.

*Ficus opposita* (Sandpaper Fig – Moraceae)

Shrub or small tree. Juvenile leaves very variable in size and shape. Leaves are rough to the touch, hence the common name “sandpaper fig”. Figs are stalked; reddish-brown is the most common colour at maturity, globular 10-20 mm diameter.



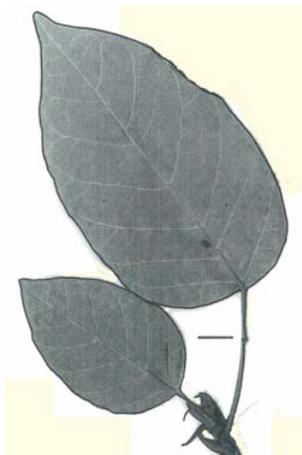
*F. obliqua*



*F. opposita*, fruit not mature

***Ficus racemosa*** (Cluster Fig – Moraceae)

This tree, is easily recognized by the large clusters of figs borne on the stem (cauliflorous). Figs reddish, 3-3.5 x 3.5-4 cm. Stem appears rough because of the remains of these old inflorescences. Leaf margins smooth to 20 x 9 cm.



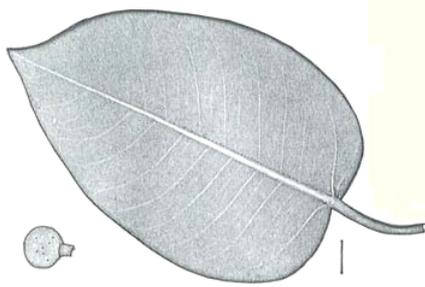
*F. racemosa*

***Ficus rubiginosa*** (Rusty Fig, Rock Fig – Moraceae)

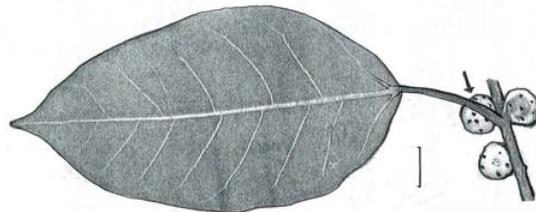
Often found growing over rocky outcrops, leaves thick often with some rusty hairs on the lower surface. Figs yellow turning red, often warty 7-18 mm diameter.

***Ficus virens* var. *sublanceolata*** (White Fig, Native Banyan – Moraceae)

Leaves deciduous, usually a banyan or strangler. Figs paired to 12 mm diameter, greenish-white to brown with white or reddish spots, sessile.



*F. rubiginosa*



*F. virens*

**NOTE:** *Trophis scandens* a vine or scrambler may key to here, see **Group 3.J** for description. Another woody climber or scrambler with latex and long spines that has been collected in Gustav creek is *Maclura cochinchinensis* (Cockspur Thorn).

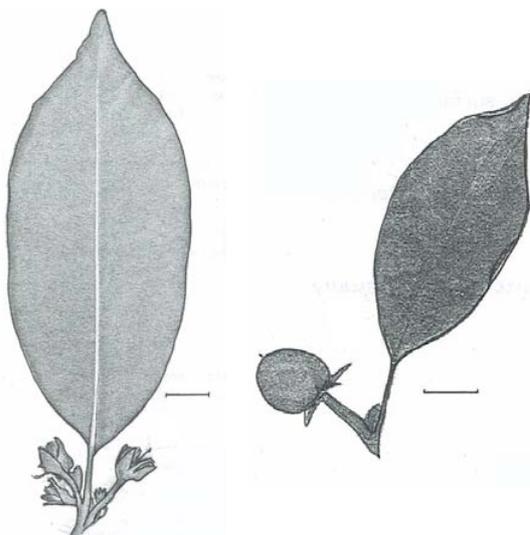
***Mimusops elengi*** (Red Coondoo – Sapotaceae)

*Mimusops*, from the Greek *mimo* – an ape, and *-opsis* – resemblance, the corolla-lobes are supposed to look like the face or upper body of an ape.

This shrub is usually found in beach scrubs; the leaves are quite variable in size, latex in dry weather may be hard to squeeze out. Flowering occurs in March, flowers to 8 mm long, cream, hairy, fragrant. Fruit fleshy, orange-red and more or less globular.

***Planchonella pohlmaniana*** (Yellow Boxwood – Sapotaceae)

*Planchonella*, the diminutive of *Planchonia* a species named after the French Botanist J.E. Planchon, some similarity in the fruits of some species. Species in this genus have also been included in the genus *Pouteria*, which is a local word from Guiana, *pourama pouteri*. Latex sparse, reddish hairs usually present on the stem and leaves. Fruits purplish to about 2.5 cm diameter. *Sersalisia sericea* (Wild Prune, formerly *Pouteria sericea*) has firm leaves which appear rusty-grey because of hairs, often difficult to obtain latex. Refer **Group 8.L**.



*M. elengi*, left-flowers, right-fruit



*P. pohlmaniana*

***Jatropha gossypifolia*** (Bellyache Bush – Euphorbiaceae)\*

*Jatropha*, from the Greek *iatros* – physician, and *trophe* – food, alluding to the medicinal properties of some species. Seeds of all species are toxic.

Shrub to 4m, may form dense thickets, sap milky becoming sticky as it dries; leaves lobed, when young purplish, prominent glandular-tipped hairs (↑) present on stem. Flowers red; fruit a 3-lobed capsule. Declared plant.



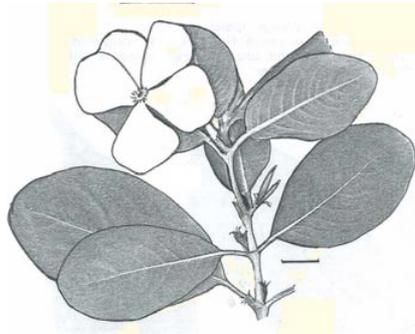
*J. gossypifolia*

**GROUP 4.B Herbs usually less than 60 cm tall. (Apocynaceae, Euphorbiaceae)**

*Catharanthus roseus* (Pink Periwinkle – Apocynaceae)\*

*Catharanthus*, from the Greek *katharos* – pure, and *anthos* – flower.

Erect herb to about 60 cm, often growing in sandy areas. Flower tubular, pink, mauve or white. A garden escapee originally from Madagascar.



*C. roseus*

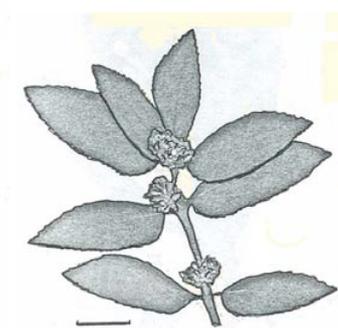
*Chamaesyce hirta* (Asthma Plant – Euphorbiaceae, sometimes described as *Euphorbia hirta*)\*

*Chamaesyce*, from the Greek *chamai* – on the ground, and *sycon* – fig, referring to its dwarf habit, some species are referred to as a 'ground fig'.

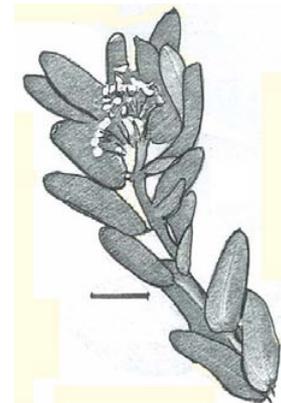
Plant with copious sap, leaves with serrated margins, hairs are present on the lower surface. Flowers clustered into leaf axils.

*Chamaesyce macgillivrayi* (sometimes as *Euphorbia macgillivrayi*– Euphorbiaceae)

An erect or procumbent herb, usually growing on dunes, the terminal or sub-terminal flowers are white. A similar species is *Chamaesyce atoto* but this plant is more robust and the leaf margins are smooth and lack shallow serrations.



*Ch. hirta*



*Ch. macgillivrayi*

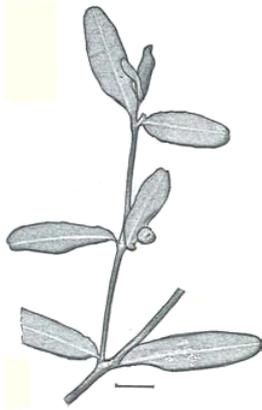
*Euphorbia* spp. (Euphorbiaceae)

*Euphorbia*, from the Latin *euphorbea* – named for Euphorbius, a Greek physician in 1<sup>st</sup> Century AD who used the latex for medicinal purposes.

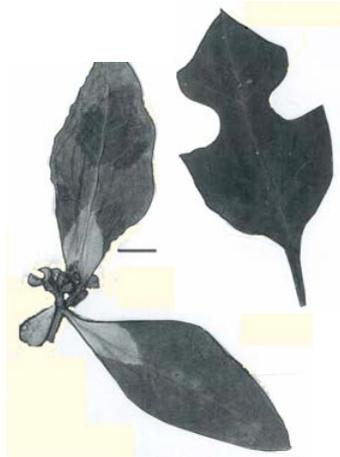
*Euphorbia tannensis* An erect herb often branched, leaves alternate towards the base of the stem, opposite above, usually found growing in sandy areas.

*Euphorbia cyathophora* (Dwarf Poinsettia, Painted Spurge)\*. An annual to about 70 cm tall, lower leaves opposite but upper ones alternate, some of the uppermost leaves are partially red resembling the cultivated Poinsettia. Latex present.

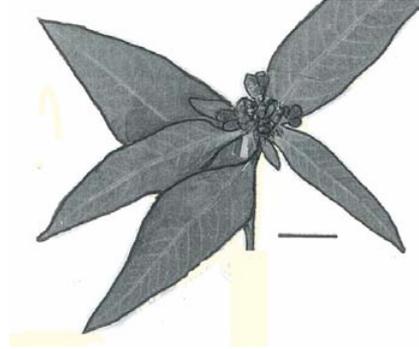
***Euphorbia heterophylla*** (Wild Poinsettia, Mole Plant, Milkweed)\*. May grow to over 1 m tall, latex present. Leaves very variable from linear to fiddle-shaped, even on the one plant, upper leaves may have some small red blotches present.



*E. tannensis*



*E. cyathophora*



*E. heterophylla*

**GROUP 4.C Shrubs or trees, rarely less than 1 m tall. (Apocynaceae).**

*Alyxia spicata* (Chain Fruit – Apocynaceae)

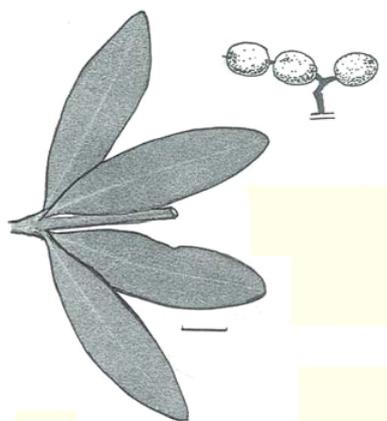
*Alyxia*, from the Greek *alYSIS* – chain, referring to the fruit.

A scandent shrub with leaves in whorls of 3-4. The small **cream to yellowish** flowers are fragrant and occur in axillary spikes. The fruit consists of 1-2 glossy black segments or articles, chained together. A similar species is *Alyxia grandis* but here the fruit is orange – not recorded on the Island.

*Carissa ovata* (Currant Bush – Apocynaceae)

*Carissa* is an old Indian name from Sanskrit.

A spreading, much-branched shrub with sharply pointed leaves. The flowers are **white** and fragrant, and the ripe fruits are purplish-black and edible.



*A. spicata*



*C. ovata*

*Tabernaemontana orientalis* (Eastern Gondola Bush) and *Tabernaemontana pandacaqui* (Banana Bush, Gondola Bush – Apocynaceae).

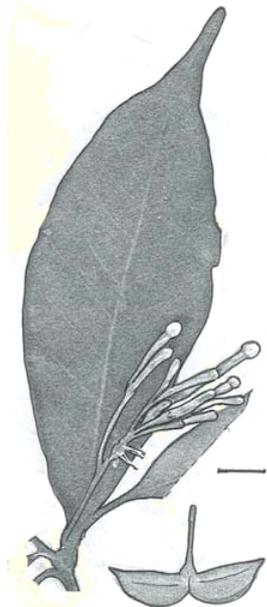
*Tabernaemontana* is the Latinized form of Jacob Theodore of Bergzaben, a German herbalist and physician who died in 1590.

These shrubs have **creamy** tubular flowers with 5 twisted petals, that are followed by a pair of orange boat-shaped fruits, each 1.5-3 cm long. The leaves of *Tabernaemontana orientalis* are glabrous or pubescent with lateral and tertiary veins prominent on the lower surface, whilst the leaves of *Tabernaemontana pandacaqui* are thinner, lack hairs and the veins are obscure on the lower surface.

*Ochrosia elliptica* (Scarlet Wedge Apple – Apocynaceae)

*Ochrosia*, from *ochros* – pale yellow, referring to the colour of the flowers.

This small tree, often found on rocky headlands, has leaves in whorls of 4, rarely 3. The **white** or **cream** flowers to 17 mm wide are followed by the distinctive bright red fruits, usually paired, and elongated with a ridge along both sides, 5-6 cm long, 2-3 cm wide.



*T. orientalis*



*O. elliptica*

***Nerium oleander*** (Oleander – Apocynaceae)\*

*Nerium*, from the Greek *nerion* meaning wet or fresh, probably referring to the sap. Dioscorides referred to this plant by this name.

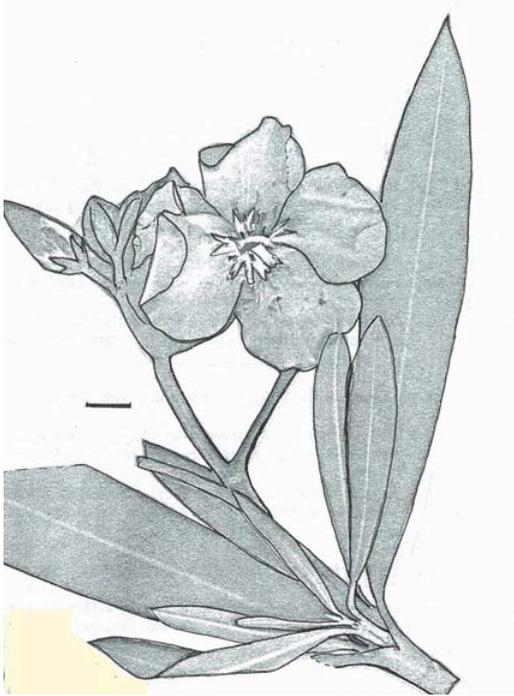
Some specimens of this hardy plant have escaped from cultivation. Leaves leathery, arranged in pairs or whorls of three on the stem. Flowers are borne in clusters on each branch. The corolla has 5 spreading lobes and comes in a range of colours, from white to red and even yellow. Fruits are follicles up to about 23 cm long, which split to release numerous plumed seeds dispersed by wind and water. **ALL PARTS OF THIS PLANT ARE TOXIC.**

***Cascabela thevetia*** (Yellow Oleander, Be-still-tree, Cook Tree, formerly

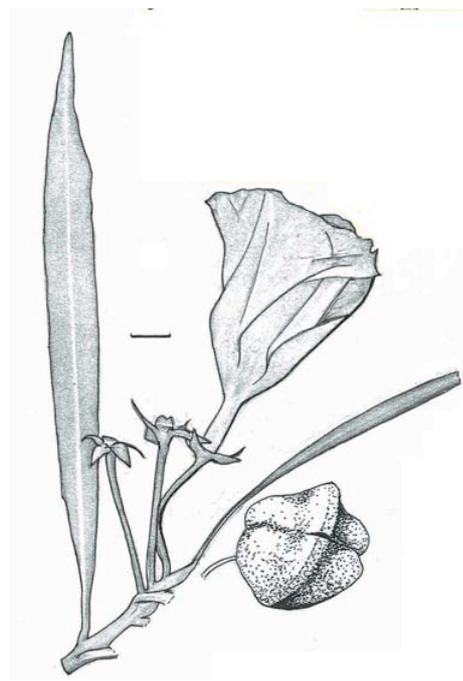
*Thevetia peruviana* – Apocynaceae)\*

*Cascabela*, meaning is obscure, could be derived from a Spanish word for 'little bell'. However Casca, according to Shakespeare, was initially a mild chap who turned nasty and stabbed Caesar!

Another garden escapee, the yellow flowers are bell-shaped; the angular, somewhat fleshy fruits are black when ripe. **ALL PARTS OF THIS HARDY PLANT ARE TOXIC.**



*N. oleander*



*C. thevetia*