

Gordonia - a genus with fascinating endemics in Sri Lanka

by Aruna Weerasooriya

Gordonia is a genus of the family Theaceae, the same family of plants to which tea (*Camellia*) belongs. The plants of this genus are generally evergreen, small to large, well-branched trees. They have simple, rather thick, dark green leaves. What is perhaps most striking about its members are their conspicuously reddish-brown young leaves at the tips of branches, and their large, attractive flowers visible even from a distance. In appearance the flowers resemble those of cultivated tea plants, but they are many times larger and are borne among the leaves, either solitary or in clusters of two to three. The fruits are ovoid-cylindric, bluntly angulate, woody capsules. The small seeds are light and flat with a compressed, membranous wing, which helps the seeds carry with the wind.

About 70 species of *Gordonia* are known world wide, most of them from Southeast Asia and North America. Because of their attractive flowers, many *Gordonia* species are cultivated as ornamentals.

In Sri Lanka the genus is represented by four endemic species, *Gordonia ceylanica*, *G. speciosa*, *G. elliptica* and the recently-described *G. dassanayakei*, all confined to montane (upper elevation) forests. Another species, *G. axillaris*, was introduced to the Hakgala botanic garden for its large, attractive white flowers. In recent field expeditions, several young plants of this species have been observed in the forest adjoining the Hakgala Botanic Garden, which is evidence of its naturalisation in the island.

Gordonia ceylanica was first described by the botanist Wight in 1840. It is a medium-sized tree with comparatively small white flowers and elongated leaves.

In 1847, George Gardner, the director of the Peradeniya Botanic Gardens, described two new species: *Carria speciosa* from Ramboda and *Gordonia elliptica* from Elephant Plains in the Nuwara Eliya District. In 1855, the botanist Jacques Denis Choisy changed the name of this most remarkable of Sri Lankan plants from *Carria speciosa* to *Gordonia speciosa*: it is distinguished from other species of *Gordonia* by its large, beautiful, crimson-coloured flowers. In the past it was found gregariously in forests in the Ramboda area but due to extensive clearing of forest, it has now become rather rare.

Gordonia elliptica is a large tree and as the name implies bears ellipse-shaped leaves, which are crowded at the extremities of the branchlets, and produces white flowers rather larger than those of *G. ceylanica*. It is most often seen at higher elevations of Matale, Kandy, Nuwara Eliya and Badulla Districts.

In all the Sri Lankan species of *Gordonia*, the petals are firm and fleshy; in contrast, the petals of *G. axillaris* are very delicate and thin.



Above: The recently-discovered pink flowered *Gordonia dassanayakei* with its greenish yellow stigmas, dull-orange stamens and elongated leaves with smooth margins. Right: Professor M. D. Dassanayake, after whom the species is named.



A new species of *Gordonia* was discovered as recently as 1996 by Mohan Wadhwa and myself during the British ODA-funded Ceylon Flora Revision Project. It was named *dassanayakei* in honour of Professor M.D. Dassanayake, the general editor of the ongoing series, *A revised handbook to the flora of Ceylon*, for his valuable contribution to the Botany of Sri Lanka. This species produces dazzling pink flowers with a reddish tinge and has only been recorded from a few localities in the Badulla, Nuwara Eliya and Kandy Districts.

All the *Gordonia* species of Sri Lanka are very ornamental and they have a high potential horticultural value. Known by the Sinhala name 'mihiriya', some of them are also used in the treatment of fractures in ayurvedic medicine. The genus *Gordonia* was named by the botanist J. Ellis for James Gordon (1708–1780), a famous British horticulturist and contemporary of Linnaeus.



Three endemic *Gordonia* species of Sri Lanka (a, b, d) and one exotic species (c). (a) the brilliantly red-flowered *G. speciosa* with yellow stigmas and stamens and reflexed leaves— note the reddish brown young leaves; (b) the white-flowered *G. elliptica*, with greenish yellow

stigmas, pinkish cream stamens and narrowly elliptic leaves with smooth edges; (c) the introduced white-flowered *G. axillaris* with yellowish stigmas and stamens and leaves with serrate edges; and (d) the white-flowered *Gordonia ceylanica* with green stigmas, yellow stamens and relatively narrow pointed leaves.