Two new plant species records from Sri Lanka

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Abstract
Two flowering plants, Carissa inermis (Apocynaceae) and Eriolaena hookeriana (Sterculiaceae), so far known only from India, are reported from Sri Lanka for the first time.

Introduction
The National Conservation Review (NCR) performs a comprehensive and methodical assessment of the biological diversity in Sri Lanka's natural forests. It aims ultimately to identify a set of sites representative of the island's biodiversity and hydrological regimes to enable conservation planning. The project commenced in 1991 and is expected to be completed in 1996 (IUCN, 1993; Jayasuriya, 1995).

A cost-effective and rapid method, known as GRADSECT sampling (gradient-directed transects), was selected and developed by the NCR to assess floral and faunal diversity (Austin & Heyligers, 1991; Green, 1992). The efficacy of this methodology is borne out by the quantity of data gathered in the areas so far surveyed, the rediscovery of many plants presumed extinct (Jayasuriya, 1995) and the new information that has become available on the distribution of animals and plants.

The Sri Lankan flora is considered to have been comprehensively investigated (Jayasuriya, 1988). Some remote areas however, still remain to be explored and promise new discoveries that will enrich the information on the island's biodiversity. This article reports the discovery of two flowering-plant species which have not previously been recorded from Sri Lanka (they were known however, from India).

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Results

*Carissa inermis* Vahl, Symb. Bot. 3. 43. 1794 (Apocynaceae) (Fig. 1)

Syn. *C. macrophylla* Wallich ex. A. DC.

*C. suavissima* Beddome ex Hooker f.

Vern. Maha karamba (Sinhala)

A much-branched liana with trunk reaching 10 cm in diameter and ca. 15 m high, among forest canopies and with copious white latex, armed with spines. Spines 2-2.5 cm long, sometimes forked, basally stout up to the length and apically slender, curved and sharp. Leaves ovate, rounded to cuneate at base, acuminate at apex, 3-8 x 2-3.5 cm and with 4-6 mm long petiole. Flowers open in the morning, white, fragrant, solitary or few in short cymes borne terminally or in upper axils. Corolla tube 2-2.2 cm long; lobes overlapping to the right, ca. 1.2 cm long. Fruit a globose berry, 2-2.5 cm across, reddish to brownish purple and sometimes partly greenish; shiny, 1-seeded.

**Distribution and ecology.** *Carissa inermis* occurs in the Eastern and Western Ghats (mountain ranges) of Peninsular India. The present records from Ritigala (8°07’N, 80°39’E), Kuragala (6°37’N, 80°52’E), Kataragama (6°23’N, 81°,20’E) and Ruhuna National Park (6°34’N, 81°22’E) are the first from the wild state in Sri Lanka. Although distributed widely in the dry zone (rainfall less than 2500 mm yr⁻¹), it was met with only rarely and even then only in hilly habitats.

**Notes.** There is a specimen of this species in the National Herbarium at Peradeniya, Sri Lanka (PDA), collected by W. Ferguson at Colombo in 1882; also another collected by A. de Silva at the Gampaha Botanic Gardens, Henaratgoda in 1927. These were almost certainly from cultivated plants introduced from India, probably for their delicious fruits, which resemble *Flacourtia inermis* (Flacourtiaceae; vern., "Uguressa") in colour and taste. The

![Figure 1. Carissa inermis, Ritigala, Sri Lanka, 19.09.1994.](image-url)
fruits are often seen eaten by arboreal animals, especially monkeys (*Macaca* and *Semnopithecus* spp., Cercopithecidae).

*Carissa inermis* is easily distinguished from the other members of the genus in Sri Lanka, namely *C. carandas* and *C. spinarum*, by its high-climbing habit (liana) and curved spines.


*Eriolaena hookeriana* Wight & Arnott, Prodromus 1: 70, 1834 (Sterculiaceae) (Figs. 2 and 3).

Vern. None.

A small, deciduous tree, to 12 m tall, branchlets tomentose, glabrescent. Leaves broadly ovate, cordate, acuminate at apex, irregularly crenate-dentate, 5-10 x 5-16 cm, stellate pubescent beneath. Petiole 2-9 cm long. Cymes 2-7-flowered, with a 2-6 cm long peduncle, bracteoles bipinnatisect, to 2 cm long; calyx lobes linear to lanceolate, to 2 x 0.5 cm; petals yellow, obovate to 1.5 x 1.5 cm with thickened, densely pubescent claws, staminal column elongate, antheriferous throughout. Ovary sessile, globose, stellate-pubescent, 8-10-celled, style to 3 cm long, stigma 8-10 lobed. Capsule ellipsoid-ovoid, woody, 2-3 cm long, 7-8 (-10) valved. Seeds about 5 per locule, winged at apex, 1-1.6 cm long.

**Distribution and ecology.** *Eriolaena hookeriana* has been reported previously only from central and southern India. In Sri Lanka, it was recorded only at Galleletota Other State Forest (OSF) (6°38'N, 80°51'E) in the Ratnapura District, where its occurrence is believed to be natural and nonanthropic. The Galleletota OSF lies in the intermediate climatic zone (rainfall ca. 2400 mm yr⁻¹). The steep, rock-knobbed and relatively exposed hill slopes of this area suffer high soil erosion, exacerbated by firing of grasslands (Fig. 4).

The upland savanna vegetation covering this area consists of a *Cymbopogon nardus* (Poaceae, vern. "mana")—dominated grass matrix with scattered fire-resistant trees such as *Anogeissus latifolia* (Combretaceae, vern., "davu"), *Zizyphus xylopyrus* (Rhamnaceae, vern. "kekuru"), *Phyllanthus emblica* (Euphorbiaceae, vern. "nelli") and *Buchanania axillaris* (Anacardiaceae, vern. "kiri palu"). A small population of six mature trees of *Eriolaena hookeriana* was observed in an area of about 2 ha. between 300-500 m elevation. The thick, fibrous bark of these trees appears to assist survival in this hostile environment (Fig. 5).

As the Galleletota OSF, comprising about 325 ha., is the only known locality for *Eriolaena hookeriana* in Sri Lanka, it is proposed that this site be conserved within the status of a forest reserve.

It was possible to include a short account of this species, as an addendum, in Verdcourt (1995) even while that that work was in press.

**Material.** Ratnapura Distr., Galleletota OSF, 28 November 1993, Jayasuriya 7754; Jayasuriya 8217, 8219 (all specimens in PDA).
Figure 2. *Eriolaena hookeriana*, Gallelatota, Sri Lanka, 27.08.1994.

Figure 3. *Eriolaena hookeriana*, Gallelatota, Sri Lanka, 27.08.1994.

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New plant species records from Sri Lanka

Figure 4. Hill-savanna habitat of *Eriolaena hookeriana*, Gallelatota, Sri Lanka, 27.08.1994.

Figure 5. Burnt hill savanna, habitat of *Eriolaena hookeriana*, Gallelatota, Sri Lanka, 27.08.1994.

**Literature cited**
