A taxonomic review of the Kokoona and Lophopetalum genera (Celastraceae R.Br.) from Southern and South-Eastern Asia and Australia

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Résumé

A taxonomic review of the species, subspecies and synonyms in Kokoona and Lophopetalum (Celastraceae R.Br.) is presented. It reflects new taxonomic data and geographical distributions of all species in different areas of the world, based on modern studies in different herbaria (BKF, BO, , CDBI, E, HN, IBSC, K, P, KUN, LE, MW, MHA, PE, PNH, SING) and morphological analysis of some characters, especially floral, fruit and seed structures. The new data can be used for further floristic studies in Southern and South-Eastern Asia and Australia.

The main diagnostic characters of Kokoona and Lophopetalum are: 1) habit – tall trees with decussate leaves; 2) inflorescences many-flowered, axillary, thyrsoid; 3) ovary trilocular with (4-6)8-18 ovules in each locule; 4) large, many-seeded loculicidally dehiscent capsules with sclereid groups in mesocarp; 5) a large winged seeds with massive embryo and endosperm absent. They grow in lowland rain forests (some species in dryland or peat-swamp and freshwater-swamp forests).

The main diagnostic characters of each genus are summarized below.

Lophopetalum (19 spp.): flowers large, with fimbriate or lamellate petals, stigma obscure, not lobed, disk fleshy, massive, in the form of a broad, 5-angular or 5-lobed platform, seeds with surrounding discoid wing

Kokoona (10 spp.): flowers small, with naked petals, stigma faintly 3-lobed, disk cupular, seeds long winged

Mots-Clés: Keywords: Celastraceae, Kokoona, Lophopetalum, taxonomic review, morphological analysis, floral structure, fruits structure, seeds structure, Southern Asia, South, Eastern Asia, Australia.

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