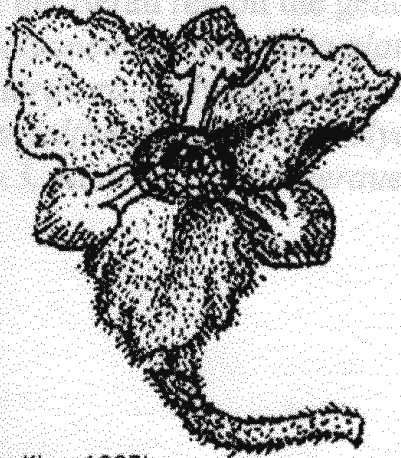


Systematics, phylogeny and reproductive biology of *Mitrephora* (Annonaceae)

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Mitrephora is a genus of shrubs and small to large trees, widely distributed in tropical Asia, extending from China in the north, to India in the west and Australia in the south-east. The centre of diversity lies in the Philippines and Borneo. Most of the species are highly localized and confined to specific habitats such as ultramafic formations, limestone forests and marshy

Mitrephora forests, while a few species are widely distributed in dipterocarp forests.



From: King, 1893b

subsequently appear as either leaf opposed or extra-axillary; only one species possesses solitary flowers. A preliminary phylogenetic analysis has been conducted, using *Orophea* and *Pseuduvaria* as outgroups; this has confirmed the monophyly of the genus, and has elucidated relationships among the species.

Reproductive biological experiments carried out on the Sri Lankan species *M. heyneana* are discussed, including floral phenology and floral biology in relation to pollination. The flowers are self-compatible, but prevents autogamy by protogyny, although geitonogamy is possible. Both artificially selfed and crossed treatments result in fruit set. Fruit set in isolated individuals is evidence of geitonogamy, but is invariably associated with lack of seed germination. The pollinators are Nitidulidae beetles.