

**WEERASOORIYA, A. D. AND R.M.K. SAUNDERS : CHARACTER UTILITY AND SPECIES DELIMITATION IN MITREPHORA (ANNONACEAE)**

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**ABSTRACT:** No attempt has previously been made at comprehensively revising the genus *Mitrephora*, and there are unresolved taxonomic problems both within the genus and with related genera. Several of the gross morphological characters used in past studies are shown to be of limited value for species delimitation as they exhibit considerable ecologically correlated variation. The present taxonomic revision has enabled a re-evaluation of character utility for species delimitation. Leaf indumentum and venation patterns are particularly important, and their utility is illustrated with reference to doubtful species such as *M. vulpina*, *M. winitii* and *M. collinsae*. Three types of inflorescences have been determined within *Mitrephora*, viz.: (1) true terminal inflorescences (observed in only *M. celebica*); (2) pseudo-axillary inflorescences, in which the uppermost axillary shoot overtops the terminal inflorescence and the peduncle becomes laterally positioned (e.g., *M. maingayi*); and (3) pseudo-axillary inflorescences, in which the overtopping shoot fuses with the peduncle (e.g., *M. polypyrena*). The value of floral characters (such as pedicel length, and the shape and size of median bracts, sepals, inner and outer petals, stamens and carpels) and fruit characters (such as size and indument of pedicels, stipes and monocarps) are also discussed and evaluated.