Generic monophyly of *Disepalum* (Annonaceae): Correlating changes in floral morphology with changes in pollination system in *Disepalum*

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A taxonomic opinion regarding the delimitation of *Disepalum* (Annonaceae) has been divided it into: *Disepalum s.l.* (characterised by pollen octads and monocarps borne on a 'carpophore'); and *Disepalum s.str.* (restricted to those species with a calyx of only two sepals and a fused corolla). Three excluded species with typical trimerous floral structure have been placed to another genus *Enicosanthellum*. Phylogeny of *Disepalum s.l.* and its related taxa as a framework have been reconstructed to clarify the generic delimitation and to test the hypotheses regarding morphological character evolution and putative shifts of pollination system. Maximum parsimony, maximum likelihood and Bayesian methods based on sequences of chloroplast regions were used. A well-resolved and strongly supported topology was resulted that retrieved *Disepalum s.str.* and *Enicosanthellum* as a sister groups. Although this topology is consistent with both the narrow and broad delimitations of *Disepalum*, the distribution of morphological synapomorphies provides greater support to the inclusion of *Enicosanthellum* within *Disepalum s.l.* To investigate whether the morphological changes were possibly adaptive, characters of particular functional importance were mapped onto the phylogeny using a parsimony approach. Pollination studies on representatives of each clade are being undertaken to investigate evolutionary shifts of pollination system, and to test congruency with floral morphology.