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Taxonomic position of *Mesua stylosa* (Thw.) Kosterm. (Clusiaceae) - A morphological and anatomical approach

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Thwaites in 1858, initially recognized *Kayea stylosa* Thw. which was retained by both Thwaites, (1874) and Trimen (1893) in their respective taxonomic treatments for the genus. During the revision of the Flora of Ceylon, however, Kostermans (1980) synonymised *K. stylosa* under the genus *Mesua* as *M. stylosa* (Thw.) Kosterm. This new placement of *Kayea* has been questioned by a recent taxonomic study. The present study was undertaken to examine the taxonomic position of *M. stylosa* (Thw.) Kosterm. within the genus *Mesua* occurring in Sri Lanka, using anatomical and morphological characters. The generic treatment by Kostermans (1980) has been used as the base for this study. Morphological studies were carried out by studying live and herbarium specimens in detail for different vegetative and reproductive features. At least three specimens per species were studied. Leaf venation studies were carried out by clearing leaves and observing their patterns. Anatomical studies were carried out by obtaining microtome sections of wood and leaves.

The detailed morphological and anatomical studies of the different *Mesua* species recognized as occurring in Sri Lanka resulted in several variations among them separating *M. stylosa* from the rest of the *Mesua* species. It differed from the rest of the *Mesua* species by having the smallest leaves and flowers; raceme type inflorescence; numerous flowers in a terminal raceme; stalked flowers; subulate stigma; small fruits with fully enclosed by woody, enlarged sepals; randomly distributed pentagonal areoles; smallest number of sub-veins between two secondaries; solitary, rounded, diffuse porus vessel arrangements; broadly banded apotracheal axial parenchyma; heterogeneous multiseriate rays with uniseriate tail where the tail are shorter than the body of the ray cells; length of the multiseriate rays are variable and phloem occurs in the adaxial side of the leaf lamina.
The above distinct variations identified in *M. stylosa*, several of which are noval leaf and wood anatomical characters, support reverting its position under the genus *Kayea* and consequently resurrection of the species *K. stylosa* Thw.

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