

Title : Elucidating the taxonomic status of *Uvaria* sp. (Annonaceae) from Thailand using morphology and molecular phylogenetics

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ABSTRACT

Uvaria L. (Annonaceae, Annonoideae, Uvarieae, Uvariinae) is a large genus consisting of about 171 species widely distributed in Palaeotropics plus Australia. Its members are mostly lianas. Although species of *Uvaria* exhibit diverse floral morphologies, they all share a stellate indumentum, which facilitates identification even in the absence of flowers and/or fruits. In Thailand, there are 23 species of *Uvaria* reported. Recent expeditions in Chanthaburi Province, southeastern Thailand have yielded unidentifiable gatherings of *Uvaria*. Molecular phylogenetic analyses using five plastid regions (*matK* and *rbcL* exons; *trnL* intron; *psbA-trnH* and *trnL-trnF* intergenic spacers) have unraveled the phylogenetic position of this *Uvaria* sp. as belonging to a clade that also includes *U. flava* Teijsm. & Binn., *U. grandiflora* Roxb. ex Hornem. and *U. hirsuta* Jack. The relationships in this clade are, however, largely unresolved, with *U. hirsuta* and *Uvaria* sp. being sister groups with weak support. *Uvaria* sp. is dissimilar from *U. hirsuta*, its putative sister group, and from *U. grandiflora*, its morphologically most similar species, by different combinations of features such as indumentum on young twigs, leaf margin and pedicels, leaf base, inflorescence position, degree of petal reflexion at anthesis, and monocarp surface. Therefore, it is concluded that *Uvaria* sp. from Chanthaburi Province represents a new species, which is described and illustrated in this study.

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