



A consideration of *Cleistopetalum* and a new combination in *Polyalthia* (Annonaceae)

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Abstract

Cleistopetalum is a genus of two species of cauliflorous tree from Borneo and Sumatra. After examining material and photographs it was concluded that *Cleistopetalum borneense* is a synonym of *Polyalthia sinclairiana* and *Cleistopetalum sumatranum* is a synonym of *Polyalthia anomala*, a species better known by another synonym, *Polyalthia clavigera* (which is lectotypified here). While *Polyalthia* in its current delimitation is polyphyletic, it is not immediately obvious how to circumscribe all the clades involved or what generic names should be used. *Cleistopetalum* will need to be considered along with *Monoon*, *Enicosanthum*, *Woodiellantha* and probably others. The new combination *Polyalthia pisocarpa* is made for a species from Java previously referred to as *P. micrantha*, and a neotype is designated.

Key words: generic delimitation, Indonesia, Malaysia, nomenclature, South-East Asia, synonymy, typification

Cleistopetalum Okada (1996: 4)—a recently recognised genus

The Annonaceae are a diverse family comprised of trees and lianas, most of which occur in tropical rain forests. In the Asia-Pacific region the family is represented by many genera most of which were described in the nineteenth century or earlier. Of the small number of genera described in the twentieth century, most have been reduced to synonyms of older genera in recent years (e.g. *Ellipeiopsis* R.E.Fr., *Guamia* Merr., *Mezzettiopsis* Ridl., *Oreomitra* Diels). A few are still considered good genera: *Schefferomitra* Diels, *Woodiella* Merr. (\equiv *Woodiellantha* Rauschert). The genus *Cleistopetalum* H.Okada was only described in 1996 based on two cauliflorous tree species, one from Borneo and the other from Sumatra. It has not received any critical attention since its description. In working on the Annonaceae for the Tree Flora of Sabah and Sarawak it was necessary to evaluate *Cleistopetalum*.

Species of *Cleistopetalum*

The species, *Cleistopetalum borneense* Okada (1996: 4) and *C. sumatranum* Okada (1996: 5), were described as new and not transferred from other genera. Although it has not been possible for me to gain direct access to the type material of either species, by studying the original protologues, paratype material and other collections, and photographs of type specimens, I have been able to identify the two species of *Cleistopetalum* as taxa already published.

Cleistopetalum borneense was designated as the type species of the genus, so I will deal with it first. The collections reported as being *C. borneense*, both from East Kalimantan, are sufficiently similar to what was first described as *Polyalthia macropoda* King (1892: 60) from the Malay Peninsula to be considered conspecific. Given that *C. borneense* is the type of *Cleistopetalum* it is necessary to consider if the genus