

Abstract

The pollen morphology of three genera and 10 species of Lecythidaceae in Thailand, including eight species in *Barringtonia*, one each in *Careya* and *Couropita* was investigated by acetolysis method and studied with the light and scanning electron microscopes. The results showed that some morphological characters of pollen are taxonomically useful for generic delimitation viz. presence syncolpate or colpate and polar area of marginate colpi. Two distinct types of pollen occur in the genus *Barringtonia*. The first type, the *B. asiatica*, is based on marginal ridges and grooves, polar cushions and a rather thin tectum which is reticulate. This type is found in *B. asiatica*, *B. longipes*, *B. macrocarpa*, *B. macrostachya* and *B. pendula*. The second type, the *B. acutangula*, is based on marginal ridges and tectum which is reticulate. This type is found in *B. acutangula*, *B. augusta* and *B. racemosa*