

D-23 Aglycone and glycoside pattern of flavone and flavonol compounds in Family Piperaceae *

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According to Trimen, [Hand Book to the Flora of Ceylon (Part III)], there are 2 genera, *Piper* and *Peperomia* in the Family Piperaceae in Sri Lanka. In the Revised Flora of Ceylon (Dassanayake and Fosberg Vol. VI, 1987) Herbert Huber has revised the family with 2 tribes, Pipereae with 2 genera *Piper* and *Lepianthus* and Peperomieae with the genus *Peperomia*. Although the species are separated by their morphological characters, the economically important species such as *Piper nigrum* has a large number of cultivars with morphological variations. *Piper subpeltatum* (Mala labu) given by Trimen has been renamed under a different genus by Herbert Huber as *Lepianthes umbellatum*.

In this study, the flavone and flavonol aglycones and glycosides were studied to find out the basic differences between species and relate that to the above classifications. Flavonoid content has been examined in leaves of 6 selected species representing the 2 tribes. Paper chromatography and UV - Visible absorption spectrometry have been used in the isolation and identification of compounds. According to the findings the tribe Pipereae has the 3 flavonol aglycones, Myricetin, Quercetin and Kaempferol whereas Peperomieae has only Myricetin aglycone. Within the tribe Pipereae, only the species *Piper nigrum* has Kaempferol and Quercetin is absent in *Lepianthes umbellatum*. A common flavone glycoside and a flavonol glycoside is present in all 6 selected species analysed, whereas certain flavone and flavonol glycosides were characteristic to certain species. Observations of the study support the revised classification of the family Piperaceae given by Herbert Huber in the Revised Flora.

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