

RIPARIAN VEGETATION OF THE WET ZONE OF SRI LANKA

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Riparian means 'pertaining to the shores or banks of rivers'. This term originates from the Latin word *ripa* meaning *bank*. A *riparian zone* is the relatively narrow strip of land along the bank of a river and differs from a flood-plain in that the latter is a more extensive valley floor subject to inundation during floods. *Riparian habitats* are streamside or riverside communities (biological) continually disturbed by floods, erosion, deposition etc. They are transitional between land and water habitats and show high biodiversity and perform complex ecological functions. A riparian vegetation includes both *true riparian plants* and *pseudo-riparian plants*. A recent theory postulates that tropical riparian habitats functioned as 'forest refugia' during the Pleistocene glaciation.

In Sri Lanka riparian habitats have received very limited scientific attention. The present study was carried out to investigate the floristic composition of riparian vegetation communities of Korawak Oya (a tributary of Mahaweli), Kuru Ganga (a tributary of Kalu Ganga near Kuruwita), Kukule Ganga (a tributary of Kalu Ganga near Molkawa) and Gin Ganga (near Neluwa). It was done by recording plant species along a 5m wide, 30m belt on both banks of the streams. Plant specimens were identified at the National Herbarium, Peradeniya. The plants were grouped into seven physiognomic life forms; trees, shrubs, herbs, graminoids, epiphytes, ferns and climbers/creepers and the species in each life form were taken into account.

Korawak Oya study area has 31 plants in 19 families with no endemic species; Kukule Ganga, 73 plants in 40 families with 14 endemic species in the site; Kuru Ganga, 73 plants in 34 families with 12 endemic species in the site; Magal Ganga, 80 plants in 39 families with 18 endemic species in the site; Gin Ganga, 63 plants in 37 families with 6 species in the site. According to the life-form distribution trees dominate in all sites. Therefore the vegetation type studied is a riparian forest/woodland.

The number of true riparian plants is low in all sites. This presumably suggests that the riparian zone is narrower than superficially appears. The sites studied have several introduced species. Sites close to the foothills of the Peak Wilderness (ultra-wet parts) have a higher species-diversity as well as a higher number of endemic species. Generally the species-diversity and habitat-diversity in the riparian sites studied are high, very much like in a wet zone forest.