

FLORISTICS OF RIVERINE VEGETATION IN KALA OYA BASIN

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Riparian or riverine zones consist of important vegetation that helps to stabilize the stream banks, trap silt and enhance the quality of stream water. However during the last century riverine vegetation has been heavily degraded due to human impact.

The study in the Kala Oya basin covered Kala Oya and fifteen of its tributaries. The NCR GRADSECT sampling methodology was adopted and 5m width 100m or more length 67 plots were randomly set out considering the length of the streams. All the trees, >10cm dbh, saplings >1m height and < 10cm dbh, seedlings, 1m height were recorded.

The results reveal 81 species of seedlings, 81 species of saplings and 61 species of trees in the study site. The recorded endemicity of seedling: sapling: tree is 4:2:2. Among the 1080 individuals recorded 532 were >20cm dbh, 539 were >10m in height and 431 had > 3m canopy cover. The most recorded tree species were *Terminalia arjuna* (270), *Pongamia pinnata* (161), and *Ficus racemosa* (91).

The stream wise species to individual ratio vary from 0.128 to 0.600. Five streams recorded over 20 species and they are Kala Oya (30), Siyabalanduwa Oya (27), Dambulu Oya (25), Welamitiyawa Oya (24) and Kalankuttiya Oya (23).

The most interesting finding is that there is natural regeneration within the zone and only basic silvicultural treatment is required to enhance the process. However in sites where heavy human impacts were observed planting of suitable species have been recommended.