LITTER PRODUCTION IN A DRY MIXED EVERGREEN FOREST OF SRI LANKA

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Amount of litterfall, its seasonal variations and wood input in a dry mixed evergreen forest in Sri Lanka were studied as part of an investigation on its mineral cycling. Litter production was monitored for a twelve months period in four sites each 50x50m in size. At each site litterfall was measured in five 0.5x0.5m traps. The average total litter production for the four sites was 7598 kg ha^{-1} yr^{-1}. The litter was separated and measured as nonwoody and the woody materials (non-woody materials 6364 kg ha^{-1} yr^{-1} and woody materials 1234kg ha^{-1} yr^{-1}) and there were no significant differences ($P>0.1$) between the sites.

Leaf litter collected on litter traps was separated upto species level as far as possible. Contribution to the litterfall by each species was also calculated. *Drypetes gardneri* (Thw.) (Thw.) Pax & Hoffm *(Euphorbiaceae)* was found to be a major contributor to the non-woody litterfall (17% of the total non-woody (mainly leaves) litterfall).

Two peaks of literfall were observed in April and October. Lowest litterfall was recorded in the month of December. Significant correlation ($p=0.01$) between the litterfall and the rainfall was found. Input of carbon, nitrogen and phosphorous to the soil was calculated using chemical analysis of litter samples. 3600 kg ha^{-1} yr^{-1} of carbon, 123 kg ha^{-1} yr^{-1} nitrogen and 6.6 kg ha^{-1} yr^{-1} phosphorous were added to the forest floor as litter materials. Wood input was measured using five (5x5m) plots. Size classes of wood were separated and the average wood input was 1148 k ha yr^{-1}.

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