

FOREST DIE-BACK IN THE HAKGALA STRICT  
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Woody vegetation of the Hakgala strict natural reserve (altitude between 1920m and 2072m) was studied in 1981 and also in 1988 with a view to investigating the die-back problem. Three plots (25x25 m<sup>2</sup>) were selected in 1981 and all the woody plants above 15cm gbh within each plot were numbered with aluminium tags. Plot boundaries were demarcated with red and white stripes painted on trees immediately outside the plots. In 1988 these plots were re-visited and girth measurements were taken from all the trees encountered and tagged in 1981. Those which had attained 15cm gbh level following the 1981 measurements were also recorded.

Data gathered in 1981 showed 361 individuals in the total sample area (1875m<sup>2</sup>) representing 43 species (23 genera) belonging to 20 families. Among those Myrtaceae (23%), Symplocaceae (20%), Rubiaceae (12%) and Lauraceae (11%) were dominant. Similar data collected in 1988 revealed that of the 361 individuals, 79 ie. 21% of the total, (25 species belonging to 17 genera and 10 families) were dead and another 75 were dying. Of the dead individuals 26% belonged to Myrtaceae while 20%, 33% and 14% belonged to Symplocaceae, Rubiaceae and Lauraceae respectively. These dead individuals represented 5 different girth classes ranging from 15cm to 149cm, of these 82% were below 60cm gbh. These data may indicate that most of these trees have died prematurely irrespective of their age group or species. During the 7 year period from 1981 only 15 individuals attained 15cm gbh. and this is much lower than the number of dead trees, showing the rapid deterioration of montane forest in this region.

## References:

1. Wijesundara, D.S.A., Gunatilleke, C.V.S., and Gunatilleke, I.A.U.N. (1984) Proc. SLAAS (1), 36.