

985. **Anonymous. 1987.** Effect of Bluegum Plantation on Water Yield in Nilgiri Hills. Bulletin No. T-18/O-3, CSWCRTI, Research Centre, Ootacamund, 107 p.

This Bulletin deals with the hydrological investigation of watersheds under permanent vegetation as prevailing at Ootacamund in the Nilgiri hills. The study was undertaken to find out whether large-scale afforestation of *Eucalyptus* plantation on the natural grasslands affect the water levels in the reservoir. The study was initiated by selecting two identical watersheds of 32 ha each at Glenmorgan (24 km from Ootacamund) during 1968 and the collection of runoff data during the precalibration (1968-72) was done. It was found that there was negligible

difference in the total monthly discharge from both the watersheds, thus conforming the hydrological homogeneity of the watersheds. In one of the watersheds, bluegum plantation was raised during 1972 to study the effect of plantation on water yield. At the end of 10 years of plantation (first rotation), the study indicated a reduction of 16% (on an average 87 mm/year) in the expected water yield, from the open grasslands (control) if the bluegum plantations are raised in these watersheds. The authors suggest that caution will have to be exercised while planning large-scale conversion of natural grasslands into bluegum plantations in this region.