
The paper discusses various factors responsible for poor growth and high mortality of
Eucalyptus spp. in the ravine lands at Vasad (Gujarat). The investigations indicated that high mortality was caused mainly by the inadequate moisture supply, poor water supply, poor water balance and the extreme drought conditions that prevailed during the last two growth seasons. This contention is further supported by the fact that the Eucalyptus plantation in the ravine lands raised during these years by the State Forest Deptt. also failed on different sites excepting a few of those raised in the bed or deep gullies where the soil moisture regime was much more favourable for the plant growth. The other reason for poor growth was attributed to high lime content (in the form of kankar nodules and higher pH). The active lime content and alkalinity of these soils coupled with low soil moisture per cent in the years of drought might also be responsible for inducing iron deficiency and chlorosis in the leaves.