Abstract

A study on population density, structure, distribution and early growth characteristics of Tarchonanthus camphorates was carried out on a Tarchonanthus-dominated woodland. A line plot transect 4 km in length was laid out in a woodland along the altitudinal gradient capturing most of the observed vegetation variation. In total 34, 20· 20 m plots were evaluated for their horizontal population structure and species composition. In addition, six more plots dominated by Tarchonanthus were monitored for coppice and shoot development for a period of 8 months. Understanding of growth and population characteristics of the dominant species in woodland is necessary for its effective management. Results indicate that the woodland can be delineated into three distinct stands by using cluster analysis based on location and composition. The diameter size class distribution of the woodland follows a reverse J curve, which indicate a normal uneven-aged forest. Tarchonanthus camphoratus has a high regenerative power after cutting or burning, which indicates its high potential for sustainable management. It was concluded that the woodland could be stratified into distinct stands for management. Permanent sample plots should be established to determine the sustained yield, as size-class distribution alone is insufficient. A management and utilization schedule based on distinct stands is recommended.