Abstract

Michoacán is one of the states with greater activity on forest plantations, the rate of destruction of forest resources in the zone is estimated at 200 ha/year caused by different agents of disturbance. The objective was to determine the feasibility of using the Pinus patula Schl. et Cham., in reforestation and protection and commercial plantations in the Sierra Purépecha, Michoacán. Growth rates in plantations with this species reported in “Barranca de Cupatitzio” experimental forest camp located at 1 780 meters, with a mean age of 18.8 years showed an average annual height growth (AAHG) of 0.85 to 1.13 m, and average annual diameter growth (AADG) from 1.3 to 2.2 cm. At an altitude of 1 800 m and an age 9.6 years in mixed plantations with P. teocote, P. oocarpa and P. patula, AAHG was obtained from 0.60 to 0.75 m and AADG of 0.8 to 1.5 cm. In Angahuan to 2 200 m and an age of 17.6 years of 1.11 m achieved AAHG and AADG of 0.8 cm; in Paracho at 2 200 m and age of 5.5 years received an AAHG from 0.55 to 0.60 m and AADG from 0.7 to 0.8 cm. We conclude that Sierra Purépecha has areas that have deep soils with less than 15% slope and precipitation over 1 000 mm, which are appropriate for the establishment of reforestation and protection and commercial plantations with this species.

Keywords

Growth increments, forest plantations, Pinus patula, Michoacán.