Models for the Sustainable Management of Pine Plantations of Durango, Mexico

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Abstract

The are covered by forest plantations is rapidly expanding in Mexico. However, models to predict volume, taper, biomass, diameter structures, growth and yield, & carbon sequestration of forest plantations are scarce in the Mexican scientific literature. This report presents several empirical models developed with pine forest plantation data collected for stem analysis, biomass studies, and stand measurements of a chronosequence of forest stands measured in Durango, Mexico. The results present models for estimating volume, taper functions, biomass components, diameter structures, growth and yield, and carbon stocks in aboveground standing biomass. These models are required for the sustainable management of pine plantations of Durango, Mexico.