

SPECIFIC GRAVITY AND TRACHEID-LENGTH VARIATION
IN A TWENTY-YEAR OLD DOUGLAS-FIR CLONE

M. D. McKimmy¹

ABSTRACT

This paper was an analysis of specific gravity and fiber length variation within 12 ramets of a 20-year old Douglas-fir clone all growing in the same location. Increment cores, 10 millimeters in diameter, were taken at breast height and in the crown at one-third of the distance from the ground to top of tree. Results of this study show that environment alone is responsible for a high degree of wood specific gravity and tracheid length variation in trees of uniform genetic stock growing in the same area. However, the range and variance of these wood characteristics were considerably less than those obtained from sampling a natural stand nearby.

¹ Associate Professor, Forest Products Department, Oregon State University.