Forest Products Research, 1960

Department of Scientific and Industrial Research

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THERE is something in this report for everyone who is associated with timber and timber products, but the items of most interest to foresters are the investigations dealing with Sitka spruce and lodgepole pine (*Pinus contorta*) species which now constitute approximately 70% of our planting programme.

Different quality classes of Sitka spruce were drawn from eleven geographical regions mainly to study the variations in the strength and specific gravity of the timber to see if these properties were related to the region of growth or were associated with site factors.

The analysis of variance showed no significant difference between regions, but significant differences were found between sites within regions and between trees within a site, indicating that differences in strength and specific gravity arise more from site factors than from various climatic conditions.

An assessment of the permeability of Sitka spruce showed its resistance to impregnation with wood preservative. This peculiarity was observed by the E.S.B. many years ago when they hoped to use it for transmission poles and resulted in its rejection for such purposes. A rather disturbing feature is its tendency to collapse under the treatment used. While this is most undesirable, it is pointed out that under slightly milder temperature/pressure combinations there should be no trouble from collapse, so presumably it is a question of too severe treatment rather than a reflection on the material.

Sawmillers could profit from the chapter on air-drying. A comparison is made between roofed and unroofed stacks. Commencing in October the investigations showed that the roofed material began to dry immediately and was down to 30% moisture content by the end of the year. During that period the unroofed material did not dry-out at all and in fact no drying took place until towards the end of March. It is suggested, however, that the influence of the roof on the rate of

drying is less marked in the spring and summer months than in the autumn and winter.

A brief report is given of the general investigation on a consignment of *Pinus contorta* supplied from Ballyward, Blessington Forest. This species which has long been thought of here as the Cinderella of the conifers, planted only where no other species could be expected to grow, is now being regarded as a useful constructional timber. It saws well, is found to be very tolerant of severe drying conditions and shows very little tendency to check or split when kiln-dried.

In addition the report deals with current research in entomology, mycology, chemistry and physics which will be of special interest to the research worker.

P.M.J.