

conditions prevailing during autumn and winter, the spring being exceptionally wet and the summer a very dry one; so it may be concluded that the weather-conditions throughout the year were not altogether conducive to good results, and adverse conditions had to be contended with. With careful management, however, very satisfactory results were obtained in the seed-beds, the crop of seedlings being an exceptionally fine one. In spite of the dry summer, the growth made by all lined-out stock has been very satisfactory.

Seedling Trees.

Seed-sowing was conducted under somewhat unfavourable conditions as regards weather, heavy winds greatly interfering with the sowing operations. The soil was, however, in fine condition, and the resulting crop of seedlings showed that there was nothing more to be desired in this respect. Though the grass-grub made its appearance in grass land and pastures in many places about the district, notably the Spa grounds and in many gardens in the township, there is no sign of the pest in any part of the nursery. Their absence from the seed-beds may be put down to the constant and thorough working of the ground for the twelve months previous to seed-sowing, and thus keeping the soil free of all growth that would be likely to afford food for the grubs; to a judicious sowing of apterite in the beds during seed-sowing operations and to a periodical thorough soaking of the beds during the growing season, thus practically drowning out any grubs that may have hatched out. Their absence among lined-out stock may mainly be attributed to constant, deep, and thorough cultivation of the vacant areas during the twelve months of their fallow prior to transplanting operations. The total number of seedlings raised during the year is 1,587,100, valued at £1,608 2s., the total number raised to date being 9,760,975.

Larix europaea.—From 120 lb. of seed sown, a crop of 900,000 sturdy plants was raised, a very big advance on the previous season's production, though 48 lb. less seed was sown.

Pinus Laricio.—A good sturdy crop of 300,000 young plants was raised from 74 lb. of seed.

P. ponderosa.—A total of 200,000 young trees was raised from 30 lb. of seed, the plants being very sturdy and well grown.

P. Benthamiana.—From the 10 lb. of seeds sown 8,000 trees resulted, the crop being a sturdy one.

P. radiata.—A very fine crop of 30,000 young trees was raised from 4 lb. of seed, young plants showing an average vertical growth of 6 in.

P. Torreyana.—A small experimental sowing of 1 lb. of seed produced 200 very sturdy plants.

Pseudo-tsuga taxifolia.—The germination was exceptionally good, and the plants are sturdy, about 80,000 young trees being raised from 10 lb. of seed.

Alnus glutinosa.—This seed was collected from trees growing on the plantation adjoining the nursery, about 2 lb. of seed being sown, and resulting in a very fine crop of 60,000 plants.

Sequoia sempervirens.—About 1,000 sturdy plants were raised from $\frac{1}{2}$ lb. of seed.

Sequoia gigantea.—From $\frac{1}{4}$ lb. of seed a total of 4,500 strong trees was raised.

Cotoneaster Simmondsii.—This seed was collected from a hedge recently planted on the nursery, a crop of 3,400 well-grown plants being raised from about 5 lb. of seed.

Two-year-old Seedlings.

Pinus Laricio.—Owing to wet weather greatly retarding lining-out operations, it was quite impossible to deal with all the seedlings, so it was necessary to leave three of the seed-beds for a further season. The plants have made excellent growth, and are very sturdy.

Two-year-old Lined-out Trees.

The work of lining-out was carried out under very adverse conditions, both as regards weather and soil. Though the whole of the ground was subsoiled during early winter, the heavy snowfall had a very detrimental effect, as it lay on the ground for about six weeks, consolidating the soil to such an extent that considerable extra labour was entailed in bringing it to a proper condition for successful tree-planting. The very moist conditions prevailing throughout the spring also greatly retarded operations, thus considerably reducing the output of trees to the nursery lines. Dry weather followed in the late spring, and continued throughout the summer months. Stock did not suffer to any great extent, however, the hoe being kept going continually between the trees, thus tending to the formation of a "soil mulch," which greatly reduced surface evaporation. The percentage of deaths throughout could be put down at from 8 to 10 per cent.

Larix europaea.—This crop has not attained the vertical growth of previous years, but the plants are sturdy and well rooted. The percentage of loss from transplanting was small, and the grass-grub has not made its appearance as in previous years. A form of needle-cast made its appearance during late spring, caused probably by the previous moist conditions, the lower branches of the trees suffering partial defoliation. The crop soon recovered, however, after drier conditions set in.

Pinus Laricio.—This crop has suffered a fair percentage of loss from transplanting, owing to dry weather immediately following. The trees throughout have not made great vertical growth, but are sturdy and healthy looking.

Pinus ponderosa.—This variety also suffered a fair percentage of loss from the dry weather immediately following the planting season. The young plants have, however, made fine growth, and should make excellent stock by the following season.

Pinus Benthamiana.—Though sturdy plants, this variety has not made the vertical growth of the preceding species; the percentage of deaths is about the same.