

HILL-COUNTRY OVERSOWING TRIALS

A fairly complete seed mixture has been oversown on hill-country pastures in the following districts: Poverty Bay, Hawkes Bay, Wairarapa, King-country, and Taranaki. In all instances the March and April sowings have been superior to those done at other seasons, but, in general, establishment has not been up to expectation. Counts of establishment of sown species have been recorded, and the difficulty in establishing them in hill-country pastures makes this an important feature in the Division's investigations.

GREENKEEPING RESEARCH

(In conjunction with the New Zealand Golf Association and the New Zealand Bowling Council.)

Routine research has been continued, and there has been some expansion in newer phases, especially weed control and rate of growth due to manurial treatments. Hormone weed-killers have been tested against the regular chemical weedicides with a diversity of results, which indicates that considerably more work must be undertaken.

An experimental bowling-green has been sown and planted with grasses and specific plants suitable for playing surfaces, but to date the establishment has been somewhat unsatisfactory.

Two conferences of greenkeepers were held during the year under review, and five diplomas in greenkeeping were awarded.

AERODROME ADVISORY SERVICE

In conjunction with the Ministry of Works, grass aerodromes are maintained to a high standard by officers of the Grasslands Division. During the year considerable aerodrome extensions have been undertaken as well as the restoration of the Gisborne aerodrome following the flood catastrophe last May.

Aerodrome surfaces are suffering owing to insufficient sulphate of ammonia fertilizer being available, and as a result of the shortage it has been impossible to grass some of the extensions to major aerodromes.

GENERAL

Pollen for Medical Institutions.—The service of supplying grass pollens to medical institutions for work on hay-fever has been continued. This season 852 grams were supplied.

Pasture in Relation to Phormium-fibre Production.—The experimental sowings on the Moutoa Estate are achieving the objects of controlling weeds and providing palatable grazing for stock.

Publicity.—A large number of written inquiries concerning pasture and turf problems, from overseas as well as from within New Zealand, have been dealt with, and several hundred visitors have been shown over the research areas. There has been an exchange of sample lots of seed with other countries, and this has resulted in a keen interest being shown in New Zealand's small seeds.

Officers of the Division are periodically called on to co-operate with other Government Departments, local bodies, and Education Boards in matters of grass establishment.

Members of the staff have given numerous lectures, and have prepared papers for various conferences and for publication in the *Journal of Science and Technology*.

Climatology.—Daily records at the climatological station have been made for and on behalf of the Meteorological Services, and both automatic and manual rain-gauges are installed at Te Awa in connection with hill-country pasture research projects.