

Germination Tests.—The unfavourable harvest season of 1947 resulted in much seed, especially rye-grass, having poor germinating capacity and made the germination-testing work during the year especially difficult. The installation of six new cabinet germinators during the year eased the congested conditions in this department.

Strain Tests.—During the year, 6,398 picric-acid tests were carried out. The number of lines entered for certification by this test was 5,706; 71 samples were submitted by merchants for preliminary testing with a view to determining suitability for entry into certification later, and 661 samples were tested for the information of departmental officers and farmers.

Rye-grass samples submitted to the ultra-violet test numbered 6,087. Official samples representing lines entered for certification numbered 3,511, and 355 samples were submitted by merchants for preliminary testing. The balance of 2,221 tests represented tests undertaken for departmental information or for the benefit of individual farmers.

Pre-harvest Examination of Rye-grass Seed.—Substations staffed by six officers of the Seed-testing Laboratory were established at Christchurch and Timaru for the examination of rye-grass seed crop samples from the 1947-48 harvest for incidence of blind-seed disease. A total of 724 samples was examined, compared with 4,057 samples in the previous harvest. The incidence of the disease was much less general and less severe than in the previous three seasons and good germinations are accordingly being recorded for the 1948 crop.

Moisture Tests.—Only 8 samples of wheat were received for the pre-harvest moisture tests. The favourable weather during the harvesting period enabled growers to proceed confidently with harvesting and little need was felt for the moisture-testing service. An increased number of samples of artificially dried Chewings fescue seed was received for moisture analysis during the year.

Instruction and Publicity.—The appointment of a liaison officer resulted in much good work being done in bringing before farmers the advantages of using tested seed. Show exhibits, radio talks, and lectures were the means employed. In addition, a motion picture with sound has been prepared for demonstration of the Station's activities.

Seed-purchasing.—During the calendar year 1947, 523 requisitions were received from other Government Departments and seed valued at about £65,000 was purchased.

Equipment.—Difficulty has been experienced in obtaining delivery of new equipment from overseas, but this is now coming to hand gradually, and as it arrives will afford further relief to the Station from the congestion brought about by shortages of essential apparatus.

Accommodation.—Additional accommodation, amounting to 4,700 square feet in a nearby building, has been taken over and the work of preparing this for occupation by a section of the staff has been started.

FIELD EXPERIMENTAL WORK

Field research activities have continued to expand both in the number of experiments undertaken and in the scope and complexity of the projects studied. The total of field trials has increased during the past year from 578 to 872, and there is every indication that this number will increase still further. The increasing complexity of the research work undertaken has necessitated the employment of increased numbers of scientific staff to cope with the problem of analysis, while on the field side a scheme has been designed to enable officers to specialize in field research and attain the high standard of skill that accurate field-work demands.