different soil-types and under different climatic conditions throughout the South Island. On these various selected cocksfoots are being grown in order to ascertain their adaptability to different environments. It is considered that by selection of cocksfoots suitable to any particular environment great improvement can be effected in the sheep-pastures of the Dominion.

Associated with cocksfoot is similar work dealing with rye-grass. Some five hundred strains have been under test at the College, and a similar number distributed throughout the best areas in the other provinces of the South Island. Very striking differences have been noticed in the resistance to drought and disease displayed by these strains of rye-grass.

One hundred and ten strains of red clover are now growing at the College, and are kept under special observation in regard to growth-form, proportion of leaf to stem, bulk of feed, depth of crown, date of flowering, and rapidity of recovery after feeding-off.

Pig-feeding trials have also been in progress during the year, particular attention being devoted to the value of whey-paste and meat-meals as pig-feeds.

The preparation of a sound system of farm accounts appropriate to Canterbury farming-conditions is also being dealt with.

Experiments are in progress concerning the yield of wool from sheep fed on definite diets. At the same time intensive grazing experiments have been carried out, and have shown that this system of utilization of farm pasture grass has great possibilities in the direction of increasing the carrying-capacity of grassland.

Special grants were made during the year to enable preliminary investigations to be commenced into pulpy-kidney disease of sheep in the Methven district. A good deal of valuable information as to its nature and incidence has been secured from the work done during the year.

In view of the hopeful preliminary results secured from intensive pasture-management trials on the experimental fields of the College, it was decided to enlarge the scope of this work consequent upon an offer being received from Canterbury stock and station agent firms of certain farms which would be placed entirely under the supervision of the College for a number of years in order that the results of these preliminary experiments might be tested out on a farm scale. A supervisor for this work has been appointed, whose duty it is to regularly visit these farms and give directions as to their management in accordance with the programme of intensive grazing, pasture-cultivation, and manuring.

RESEARCH SCHOLARSHIPS.

Four Research Scholarships, each of an annual value of £180, plus £25 additional for books and apparatus, are available each year for the purpose of providing training for University graduates whose achievements give promise of their being able to conduct useful research work in various industries. The awards made this year are as follows:—

Name.	Research to be undertaken.
L. H. Briggs, Hastings ..	"Constitution of Septospermol and Aromandrene, the Latter Compound also probably being a Constituent of Manuka-oil."
H. A. A. Aitken, Dunedin ..	"The Sulphur Content and Sulphur Compounds of New Zealand Pasture Grasses."
T. H. McCombs, Christchurch ..	"An Investigation into the Essential Oils of *Pinus insignis* and other Pines."
F. W. G. White, Wellington ..	"Preliminary Measurements of the Dispersion of Ultrasonic Waves in Air."

Mr. Briggs subsequently resigned his scholarship owing to his taking up another scholarship at Massey Agricultural College. The scholarship was accordingly transferred to Mr. G. A. Peddie for statistical investigations connected with the yield of dairy cows, yields of cheese, &c.

Mr. F. W. G. White, after carrying out a portion of his investigations, was awarded a University Travelling Scholarship. The scholarship accordingly has been transferred to Mr. J. W. Harding, who will continue the investigations commenced by Mr. White.

"JOURNAL OF SCIENCE AND TECHNOLOGY."

The *Journal* now acts as the official organ of the Department of Scientific and Industrial Research, and its pages are used for the publication of the results of various researches conducted throughout New Zealand. The *Journal* is also used to record scientific advances made overseas the results of which may be of importance to the Dominion.

PUBLICATIONS.

During the year the series of bulletins has been extended, six additional bulletins having been published, viz.:—

Bulletin No. 6: "Report of the Fischer Process," by Dr. H. O. Askew.
Bulletin No. 7: "New Zealand Wool-fibres," by E. F. Northcroft.
Bulletin No. 8: "Summary of Investigations of New Zealand Coal," by W. Donovan.
Bulletin No. 9: "The Relative Values of High and Low Testing Milk for Cheesemaking in New Zealand," by P. O. Veale.
Bulletin No. 10: "Low-temperature Carbonization of Blended New Zealand Coals," by W. G. Hughson.
Bulletin No. 11: "The Building-stones of New Zealand," by Dr. P. Marshall.
Bulletin No. 12: "Report on the Nutritive Values of Meat-meals," by Miss E. A. Pope.
Bulletin No. 13: "The Yield of Cheese per Pound of Butterfat," by P. O. Veale.

Further bulletins are now in the press and will be issued during the coming year.