THE GENETICS AND GROWTH AND FORM OF THE FLEECE

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Studies were continued, and an experiment during the year makes it almost certain that a dominigene causes a single dose of the recessive-N gene, which ordinarily leaves to coat non-N, to come to expression. Anomalous breeding results of long standing thus seem to be explained.

The detailed studies have an even wider purpose in seeking understanding of the forces building the fleece. One aim is to learn how differences in domesticated fleeces are produced, and (from the phenomenon of the pre-natal check) a helpful hint as to how the fleece of the domesticated sheep grows without ceasing has been gained from the hair details of ordinary and N-type lambs, the fleece of the latter being intermediate between those of the former and short-coated wild sheep.

The facts given show that an impressive number of Mendelian phenomena have been found in this large farm mammal. The interactions of the several genetic factors are especially worth study. It is not surprising that these same phenomena and problems have been discovered in laboratory animals, but our knowledge of fibre type detail of a mammalian coat that is most exceptional, in growing indefinitely, makes the sheep unique material for genetical studies.

SEVENTH PACIFIC SCIENTIFIC CONGRESS

After a lapse of years occasioned by the war, the Royal Society of New Zealand, with the assistance of the Government, convened the Seventh Pacific Science Congress, which was held at Auckland and Christchurch in February, 1949.

Officers of the Department served as members of the Main Organizing Committee and of the various divisional committees.

The registrations for the Congress numbered 600; of these, 180 were delegates from overseas representing 17 countries bordering on or having special interests in the Pacific area and its problems. Representatives of UNESCO, FAO, and the South Pacific Commission also attended.

The programme of the Congress was divided into divisions—viz.: Anthropology; Botany; Geology, Volcanology and Geophysics; Meteorology; Oceanography; Public Health and Nutrition; Social Sciences; Soil Resources, Forestry and Agriculture; and Zoology.

The recommendations of the Congress on research proposals and projects were co-ordinated in the final report of a special division on Organization of Research. Although the Congress was concerned with the problems of the Pacific, its recommendations are of interest to the whole world as it is becoming increasingly apparent that the problems of the Pacific are of world-wide significance. The reports and resolutions adopted by the Congress will be forwarded to the Governments and co-operating bodies for their favourable consideration and action where appropriate. Important as these recommendations are, the outstanding value of the Congress to New Zealand was the stimulus given to our young scientists by the opportunity given them of meeting and discussions with scientists who have achieved international fame in their own fields.

SCIENTIFIC LIAISON SERVICE

The policy of strengthening the Department's scientific liaison services, reported last year, has continued, and there is now an establishment adequate to meet present needs.

The overseas liaison officers provide a vital link between research workers and scientific organizations in New Zealand and scientific establishments in other countries. These officers, in addition to other duties, obtain up-to-date technical information on