

Small mixed farms engaged in milk production predominate and the soil is an important factor in the economy, so that a soil survey was undertaken to assist the Nuffield Farm Project sponsored by the Nuffield Foundation and the Ministry of Agriculture, Fisheries and Food. The Bulletin gives a detailed account of the physical features, climate, geology and soil parent materials. Although the district as a whole is characterized by high precipitation and mild winters, local conditions give rise to wide variability from the average rainfall and temperatures. The methods of mapping and soil classification are described and coupled with numerous analytical data from representative profiles on Culm shales and granite, from brown earths and from gley soils. There are practically no calcareous soils, and soils of high base status are confined to those developed on the diabase, on red loamy head and on base-rich alluvium. The non-calcareous Culm rocks give markedly acid soils. A chapter on the history of agriculture in the area leads on to present-day farm practices, with statistics of farm sizes and enterprises and some discussion of the relationships between productivity and soil properties. There is a bibliography of scientific papers and an index.

### Spring-tails of the World

EVER since Sir John Lubbock, in his Ray Society Monograph of 1873, recognized that the Collembola (for which he proposed this name) should be regarded as a separate order of apterygote insects, the group has attracted enthusiastic devotees. They form a compact yet diverse group of insects, comprising three sub-orders, some sixteen families, and about 1,500 described species. Comparatively little is known about their ecology; but the vast numbers present in the soil suggest that they must be of the utmost importance in soil microbiology. Even less is known of their physiology. Dr. J. T. Salmon of the Victoria University of Wellington, New Zealand, a recognized authority on the group, has published a two-volume *Index to the Collembola* (Royal Society of New Zealand. Bulletin No. 7: Salmon. Vol. 1: Pp. 1-144; Vol. 2: Pp. 145-644. Wellington: Royal Society of New Zealand, 1964). This impressive work records the known genera and species of the Collembola of the world, their synonyms, type repositories, geographical distribution, taxonomic descriptions, morphology, embryology and ecology up to the end of 1962, and includes a key to genera throughout the world. The second volume consists of classified references to each species. There are something like 36,000 such references, each with an indication of the nature of the information it contains. This should prove to be the standard reference work to the 'spring-tails' for many years to come.

### Enteric Infections in Children

EVERYONE concerned with child welfare will be interested in the report recently issued by the World Health Organization Expert Committee, entitled *Enteric Infections* (World Health Organization Technical Report Series, No. 288, obtainable in the United Kingdom from H.M.S.O., 5s.). It is also published in French and Spanish. In many developing countries enteric infections are the most important causes of illness and death among children, and the report gives statistics of the illness and mortality due to them. In countries in which they are endemic they cause an infant mortality of more than 100 per 1,000 live births. A cardinal symptom of these diseases is diarrhoea, and the term enteric infections includes a variety of clinical syndromes of various aetiology. The most important causes are *Escherichia coli* and species of *Salmonella* and *Shigella*. Valuable sections of the report discuss the factors which contribute to the occurrence of these infections and their control. Many deaths due to them could be avoided by the application of knowledge already available, but the report discusses the diagnosis of the infections, the

further research needed and the requirements for control, including health education, environmental sanitation, control of flies, water supplies, child care—especially of ill-nourished children—and the expansion of health centres.

### Postgraduate Agricultural Studentships and Awards

A LIMITED number of postgraduate studentships are to be awarded by the Ministry of Agriculture, Fisheries and Food, and the Department of Agriculture and Fisheries for Scotland, for the academic year beginning October 1. These will cover the various branches of husbandry (including horticulture), farm management, agricultural or horticultural economics, agricultural or horticultural statistics, marketing, agricultural and dairy engineering (including farm mechanization), rural estate management and agricultural science. Applicants normally resident in England, Wales and Northern Ireland can obtain further information and forms of application from the Ministry of Agriculture, Fisheries and Food, Room 231A, Great Westminster House, Horseferry Road, London, S.W.1. Applicants normally resident in Scotland should apply to the Department of Agriculture and Fisheries for Scotland, Room 53, St. Andrew's House, Edinburgh, 1. The closing date for receipt of completed application forms is February 28.

Postgraduate awards are also offered by the Agricultural Research Council, Cunard Building, 15 Regent Street, London, S.W.1, for training in research. These are open to honours graduates in science or those holding a veterinary qualification, and to honours graduates in agriculture or horticulture who have shown a special interest in one of the basic sciences. Applications for awards in veterinary science should also be made to the Agricultural Research Council.

Awards are also available to postgraduate and post-doctoral students of agricultural science under the NATO Science Studentship and Fellowship Programme, which is intended to encourage the exchange of students between member countries in NATO. The scheme is administered for United Kingdom students by the Department of Scientific and Industrial Research, State House, High Holborn, London, W.C.1, to whom application should be made by March 1.

### Lady Tata International Grants, Scholarships and Fellowships for Research on Leukaemia and Allied Conditions

THE Trustees of the Lady Tata Memorial Trust invite applications for fellowships, scholarships and grants for research on leukaemia, in the academic year beginning October 1. In view of the affinity between leukaemia and other forms of neoplastic disease, candidates with programmes of research on any aspect of malignant disease which may throw light on problems of leukaemia will be eligible for consideration, and especially those studying leukaemogenic viruses in mammals, the epidemiology and natural history of leukaemia, and the immunogenetic aspects. The awards offered by the Trust are open to suitably qualified investigators of any nationality, working either in their own institutions or in other centres abroad. Applications must be submitted before March 31, and awards will be announced by the Trustees in June. Further information and forms of application can be obtained by writing to the secretary of the (European) Scientific Advisory Committee, Lady Tata Memorial Trust, Chester Beatty Research Institute, Fulham Road, London, S.W.3.

### The Leopoldina German Academy of Sciences: Elections

THE Deutsche Akademie der Naturforscher Leopoldina, Halle, recently elected the following new members in the sections indicated: *Mathematics*, Prof. H. Heinrich