The work of the Biochemistry Department embraces: the lignin derivatives, carbohydrates and amino-acids in soils and peats; the metabolism of soil micro-organisms in relation to the biological synthesis of 6-O-acetyl-D-glucopyranose and acetyl-glucose, and the β -oxidation of aliphatic hydrocarbons and herbicidal fatty acids; and the determination of the organic acids, amino-acids and water-soluble carbohydrates in plants. A short note on special methods is also included.

The Plant Physiology Department reports work on mineral balance principally (including major element interaction and the $\text{NO}_3^-:\text{NH}_4^+$ effect). Respiration studies include the sensitivity of dwarf shoots of larch and cedar to potassium cyanide and the metabolism of disks of storage tissue. Measurements of the cation exchange capacity of roots under toxic levels of various metals are described. The influence of fission products fall-out on the extraneous radio-

activity in samples of vegetation has also been examined.

The Department of Soil Fertility has been mainly concerned with interrelated field, pot and laboratory work on crop responses (to the major nutrients, the trace elements and magnesium) of different crops grown on the major soil types, and the distribution, composition and stability of nucleic acids in the soil organic phosphorus. In addition to collaborative work on soil micro-organisms described earlier, the Microbiology Department has investigated the growth of thermophilic actinomycetes from composts and the demethoxylation of simple aromatic compounds by soil fungi and wood-rotting basidiomycetes. A preliminary report on the role of micro-organisms of the root region in the phosphate nutrition of plants is given.

Brief accounts from the Forestry, Radioactivity and Statistics Sections are also included.

AGRICULTURAL HISTORY IN HOLLAND

IN England the study of agricultural history is in the main a discipline that forms part of the departments of economic history in our various universities. For the past five years it has also been stimulated by the founding of the Agricultural History Society. This Society was established by private enterprise, but as it numbers among its members many university personnel from all over the country, and indeed foreign countries, it has intimate relations with the academic institutions where the subject is being studied.

It is of the greatest importance in Holland, where the progress of farming has been an example and a lesson to other European countries, England in particular. In 1939 a *Studiekring voor de Geschiedenis van de Landbouw* was privately organized as a Department of the Koninklijk Genootschap voor Landbouwwetenschap, with headquarters at Wageningen. This *Studiekring* includes Belgian members as well as Dutch. It has published four volumes at intervals since its formation.

Enthusiasm for the subject waxed after the War, and led to the establishment of the *Nederlands Agronomisch-Historisch Instituut*: *Instituut voor Landbouwgeschiedenis* at Groningen. This Institute is financed jointly by the Dutch Ministry of Agriculture, the Farmers' Society, the Workers' Unions and the State University of Groningen. It is part of the academic world, and is now directed by Dr. L. S. Meihuizen. Its main work is the preparation of an annual international bibliography of current books, articles and original documents, under the title "*Historia Agriculturae*". The fourth volume of this publication was issued early in the current year. In addition to the bibliography, records and other important sources for Dutch agricultural history are printed in each volume. Besides this the Institute undertakes the supply of information regarding sources to students and scholars both in the Netherlands and in other countries. To facilitate this work the Institute has collected a considerable and growing library of international works and prepared an extensive documentation. When agricultural archives come to its notice the Institute arranges, when possible, for them to be deposited in the State

Archive Library, where they are cared for by the Keeper of State Archives.

In addition to the "*Historia Agriculturae*" other work currently being undertaken at the Institute is: (a) the collection of sixteenth- and seventeenth-century notices of orders issued by the local authorities for the regulation of farming and the marketing of produce; (b) a bibliography covering the life and conditions of employment of the Dutch farm worker; (c) a study of the economic history of the trade in farm produce in a polder in Zeeland in the nineteenth century. A hand-list of sources for Dutch students of agricultural history is in preparation.

Last year the organization of agricultural history was strengthened by the establishment of a Department of Agricultural History at the *Landbouwhogeschool* at Wageningen under the direction of Prof. B. H. Slicher van Bath, formerly professor in the State University at Groningen. He will be responsible for a course in agricultural history for undergraduates, and is directing research in the social and economic history of farming in Holland. In this connexion he is editing a series of studies "*Historische Sociografieën van het Platteland*", the first volume of which, "*Een Samenleving onder Spanning: Geschiedenis van het Platteland in Overijssel*", appeared last year over his own signature. He continues to act as secretary to the directing board of the Groningen Institute.

A further activity of this Department will be the reorganization of the Agricultural Museum at Wageningen on modern museum lines and its expansion to make it the repository of a collection of early agricultural equipment, implements and tools, and form an adequate instrument for the preservation and study of such things. This work is being done by Dr. J. M. G. van der Poel, formerly director of the Groningen Institute, whose reputation is already known beyond the frontiers of Holland, and who has formulated an imposing plan for the future.

Clearly the Dutch have recognized the importance of the study of agricultural history—both the academic world, the government, and the industry itself.

G. E. FUSSELL