## The Position of Entomology in the Swedish Public Service.

contribue à l'exploration de la lege suédoise. Leurs ocuvres sont

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Entomology is represented in the civil State administration of Sweden in mainly the same way as in other countries. Thus there are national Institutions for scientific research as well as for practical experimental work.

There are institutions for purely scientific research in Stockholm, Lund and Uppsala. Of these, mention must first be made of the Department of Entomology of the Museum of Natural History at Freskati in Stockholm, which is the oldest and most exclusive. This institution, as is natural in consideration of its museum character, carries on chiefly systematic research. Partly for historical reasons and partly in the absence of any other, more appropriate forum, the arachnids as well as the myriapods are comprised in the field of action of this Department of Entomology. As head of the Department there is a Keeper with the rank and title of Professor. To assist him he has a permanent staff of helpers comprising an Assistant Keeper and an amanuensis, a demonstrator and a woman assistant. In addition to this permanent staff, research specialists are permanently or temporarily employed to work up those of the Museum's collections of insect groups of which they have expert knowledge. They are remunerated partly from a so-called honorarium grant, partly from other funds. They constitute an indispensable, but by no means adequate reinforcement of the permanent staff of scientists, which is too small to find time to work up more than an insignificant part of the Museum's rich and, as the result of new aquisitions, continually increasing collections of insects from all the countries of the world.

Entomological research in Lund and Uppsala is linked to the Zoological Institutions of the Universities and is therefore more comprehensive. Thus in Lund the Department of Entomology has a laboratory as well as a museum. It is presided over by a Keeper, assisted by, on the one hand, a woman laboratory assistant and, on the other, a scientific staff recruited from among the students, which consists of a well-salaried assistant and a varying number of permanent and temporary

amanuenses, whose duties and emoluments differ. The assistant and amanuenses mainly help with the treatment and arrangement of the collections, the assistant also with teaching, when necessary.

In Uppsala, where entomological research is less well provided for than in Lund, there is a University lecturer (»Docent») under the ob-

ligation to teach in entomology.

Economic entomology with its research and experimental work exclusively concentrated on the control of insect pests is entirely at the service of agriculture and forestry. For investigation of the insect pests that are detrimental to the health of man and his domestic animals and for various technical products — timber, textiles, etc. there are as yet, unfortunately, no national institutions. Occasional Government grants have, however, been made in certain special cases for studies relating to such insects.

For research on forest pests there has existed since 1915 a Department of Entomology at the Forest Research Institute (formerly the Institute of Experimental Forestry) in Stockholm, at whose head there is a Keeper with the rank and title of professor. He is supported by a research superintendent and two laboratory assistants. The task of the Department of Forest Entomology is to make a scientific study of the forest pests and to carry out practical experiments for the purpose of combating them. It provides no general advice and information service in the strict sense, but private forest owners can obtain help with prognoses, tests and control measures.

Research on agricultural pests and their control is now carried out by the Department of Zoology of the Institute of Plant Protection (1897—1907 the Swedish Entomological Institute, 1907—1932 the Central Institute of Agricultural Experiment, Department of Entomology) situated at Bergshamra outside Stockholm. Although the sphere of activity of this Department comprises all field and garden pests as well as pests affecting cereals, seed goods and certain products of vegetable origin, it is naturally insects that almost entirely predominate in the programme of work. Study of bee diseases is, at present, another of the tasks of the Department. The work of the Department is conducted by a Keeper, supported by a chief assistant, a first assistant two assistants and, as occasion requires, a varying number of extra assistents, and two women laboratory assistants. The advisory work in connection with plant protection, which is available to the public free of cost, is now attended to mainly by the Institute's Information and Control Department, which is at present under the direct superintendence of the Head (Director) of the Institute.

The Institute of Plant Protection has branch stations at Akarp, Linköping and Skara. The Åkarp Station, which is the oldest and largest, is the only one with trained and specialized entomologists at present the Director and one assistant — so that this Station is the

only one at which entomological research in the strict sense is carried

on in conjunction with practical experimentation.

A feature characteristic for both the Forest Research Institute and the Institute of Plant Protection is the close collaboration existing between the various departments of these institutions, which greatly advances the work. Another feature common to both is, unfortunately, the less propitious circumstance that the staff, owing to the meagre estimates allotted, are compelled to divide their time and energies among all too many widely different tasks and are thus prevented from devoting themselves entirely to one or a few tasks of greater importance.

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