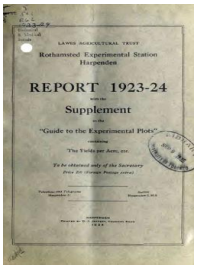
Report for 1923-1924 With the Supplement to the Guide to the Experimental Plots Containing the Yields per Acre Etc.



Full Table of Content

Introduction - General Account of Rothamsted

Rothamsted Research

Rothamsted Research (1925) *Introduction - General Account of Rothamsted ;* Report For 1923-1924 With The Supplement To The Guide To The Experimental Plots Containing The Yields Per Acre Etc., pp 12 - 13 **- DOI: https://doi.org/10.23637/ERADOC-1-116**

INTRODUCTION

The Rothamsted Experimental Station was founded in 1843 by the late Sir J. B. Lawes, with whom was associated Sir J. H. Gilbert for a period of nearly 60 years. Lawes died in 1900 and Gilbert in 1901; they were succeeded by Sir A. D. Hall from 1902 to 1912, when the present Director, Sir E. J. Russell, was appointed.

For many years the work was maintained entirely at the expense of Sir J. B. Lawes, at first by direct payment, and from 1889 onwards out of an income of £2,400, arising from the endowment fund of £100,000 given by him to the Lawes Agricultural Trust. In 1904 the Society for extending the Rothamsted Experiments was instituted for the purpose of providing funds for expansion. In 1906 Mr. J. F. Mason built the Bacteriological Laboratory; in 1907 the Goldsmiths' Company generously provided a further endowment of £10,000, the income of which is to be devoted to the investigation of the soil, thus raising the total income of the Station to £2,800. In 1911 the Development Commissioners made their first grant to the Station. Since then Government grants have been made annually, and for the year 1924-25 the Ministry of Agriculture has made a grant of £26,480 for the work of the Station. Viscount Elveden, M.P., has generously borne the cost of a chemist for studying farmyard manure since 1913 and has recently provided funds for the fitting up of a laboratory workshop, while Lady Ludlow, Sir Otto Beit, Mr. Robert Mond, Mr. T. H. Riches, Mr. and Mrs. D. MacAlister, and other donors have from time to time generously provided funds for special apparatus and equipment. The Sulphate of Ammonia Federation and the Fertiliser Manufacturers' Association jointly defray the cost of a Guide Demonstrator for the field plots and the Potash Syndicate, Messrs. Brunner Mond & Co. and other firms have given substantial assistance.

The laboratories have been entirely rebuilt. The main block was opened in 1919, and is devoted to the study of soil and plant nutrition problems; a new block has been erected for plant pathology at a cost of £21,135 provided by the Ministry of Agriculture out of the Development Fund. The library has been much expanded and now contains some 20,000 volumes dealing with agriculture and cognate subjects. The catalogue of agricultural books is now being printed.

The most important development of recent years has been the reorganisation of the work of the Station so as to bring it into touch with modern conditions of agriculture on the one side and of science on the other. So far as the laboratories are concerned this was completed in 1922; the reorganisation of the farm under

https://doi.org/10.23637/ERADOC-1-116

the new Farm Director, Mr. C. Heigham, is now well in hand and the new arrangements for the improvement of field observations and records are already in operation.

The general method of investigation at Rothamsted is to start from the farm and work to the laboratory or vice versa.

There are four great divisions in the laboratory—biological, chemical, physical and statistical—which may be regarded as the pillars on which the whole structure rests. But the method of investigation differs from that of an ordinary scientific laboratory where the problem is usually narrowed down so closely that only one factor is concerned. On the farm such narrowing is impossible; many factors may operate and elimination results in conditions so artificial as to render the enquiry meaningless. In place, therefore, of the ordinary single factor method of the scientific laboratory, liberal use is made of statistical methods which allow the investigation of cases where several factors vary simultaneously. In the crop investigations a large number of field observations are made; these are then treated statistically to ascertain the varying degrees to which they are related to other factors—such as rainfall, temperature, etc.—and to indicate the probable nature of the relationships. Thus the complex problem becomes reduced to a number of simpler ones susceptible of laboratory investigation.

It has been found desirable to widen the scope of the work by repeating some of the more important experiments elsewhere, and various centres in different parts of the country have been selected for this purpose.

In October, 1921, the Station undertook, so long as its funds should allow, to carry on the continuous wheat and barley experiments at the Woburn Experimental Farm, till then conducted by the Royal Agricultural Society, and Dr. Voelcker gives his services as Honorary Local Director. In December, 1922, E. D. Simon, Esq., generously placed his Leadon Court farm at the disposal of the Station for experimental purposes. This is being used as a large scale test of the soiling system for keeping dairy cows (see p. 41).

The acceptance by Lord Bledisloe in November, 1924, of the office of Parliamentary Secretary to the Ministry of Agriculture and Deputy Minister of Fisheries necessitated his vacation of the chairmanship of the Lawes Agricultural Trust Committee, which he had held since October, 1920. Lord Bledisloe consistently favoured the policy of extending the activities of Rothamsted outside the Station and bringing the scientific workers more closely into touch with the actual farmers themselves. This policy has proved stimulating and beneficial to the Station and the results have abundantly justified its wisdom.

Lord Clinton has now been elected Chairman in place of Lord Bledisloe.

https://doi.org/10.23637/ERADOC-1-116