

### Short Reviews.

*Air Ministry: Meteorological Office. British Rainfall, 1930: the Seventieth Annual Volume of the British Rainfall Organization. Report on the Distribution of Rain in Space and Time over the British Isles during the Year 1930 as recorded by over 5000 Observers in Great Britain and Ireland.* (M.O. 335.) Issued by the Authority of the Meteorological Committee. Pp. xix + 292. (London: H.M. Stationery Office, 1931.) 15s. net.

THIS volume contains maps, tables, and descriptive matter in the usual form, together with special articles on the exposure and shielding of rain-gauges at Penrith and Hythe, on measurements of wind velocity at the level of a rain-gauge, on the Jardi rate-of-rainfall recorder, and on cloudbursts on Stainmore in Westmorland.

For the British Isles as a whole, the rainfall of 1930 was 115 per cent of the average, the year being the eighth wet one in succession, though over a small part, including the Thames Valley, it was drier than usual. There are two outstanding events to note. One was the sustained torrential rainstorm on July 20-23, when 11.97 inches was recorded at Castleton, near Whitby, in Yorkshire, resulting in great damage to bridges in the valleys of the Esk and Leven. In regard to this storm, the geographical reader will not be pleased to see the country behind Whitby repeatedly referred to as the Wolds instead of the Moors. The Wolds, terminating in Flamborough Head, are the most northerly extension of the English Chalk system, and are separated by the Vale of Pickering from the very different country formed of the Jurassic rocks to which the North Yorkshire Moors belong.

The other event was the cloudburst in Westmorland on June 18. On this day, when violent thunderstorms were fairly widespread, there broke over Stainmore Forest, at the southern extremity of the Cross Fell range, one of those formidable storms of the 'cloudburst' type which, as records show, are relatively common on the high fells of northern England. Peat was removed from several acres of moorland, leaving deep scars on the hillside, the debris causing quantities of fish to be suffocated lower down in the River Eden. Mr. F. Hudleston, who describes the occurrence, says that the moors appeared to lie under a sheet of water and that something in the nature of a water-spout, from the sudden collapse of a heavily charged cloud, must have developed over Knipe Moor, where the holes were dug out.

L. C. W. B.

*Die tierischen Schädlinge des Ackerbaues.* Von Sofie Rostrup und Prof. Dr. Mathias Thomsen. Nach der vierten dänischen Auflage ins Deutsche übertragen und für die deutschen Verhältnisse bearbeitet von Dr. H. Bremer und Dr. R. Langenbuch. Pp. xi + 367. (Berlin: Paul Parey, 1931.) 18 gold marks.

THIS well-produced book, dealing with the animal pests of agricultural crops, forms a thoroughly reliable and up-to-date manual on the subject. It is

a German translation of the fourth Danish edition of the same authors' "Vort Landbrugs Skadedyr" (1928), with certain additions and amplifications in order to adapt it to German needs. The number of illustrations has also been increased. Although specially written for continental readers, this book will be found to include very few pests that are not concerned with some form of crop injury in Britain. It is, therefore, a volume which can be consulted with profit by workers and students in Great Britain. The bulk of the letterpress is, naturally, devoted to destructive insects, and other arthropods, but there are also chapters dealing with Nematoda, Chaetopoda, and Mollusca.

The method adopted is to treat of the individual pests by the orders or groups to which they belong. Each species is briefly but concisely described, its biology is discussed, and standard control measures explained. These accounts are clearly written in a terse style and most of the species dealt with are very well illustrated, with figures portraying the characteristic injuries they inflict. At the end of the book there is a tabular summary of the different pests arranged upon a crop basis. As a kind of appendix there is a short, but useful catalogue of modern literature classified under the names of the pests concerned. All concerned in the production of this volume are to be congratulated upon its general excellence.

A. D. I.

*The Official Year-Book of the Scientific and Learned Societies of Great Britain and Ireland: a Record of the Work done in Science, Literature and Art during the Session 1930-1931 by numerous Societies and Government Institutions.* Compiled from Official Sources. Forty-eighth Annual Issue. Pp. vii + 171. (London: Charles Griffin and Co., Ltd., 1931.) 10s. net.

THIS valuable annual consists of a classified collection of the names and addresses of learned societies, with information as to officers, conditions of membership, meetings, publications, etc., and particulars of scientific institutions controlled by Government in the British Isles. Where publications are of the nature of reports on specific subjects or special lectures, the titles are in many cases given. Brief accounts of the history and work of certain institutions are also included. The information printed is provided by officials of the bodies concerned.

In the course of the forty-seven years of its existence, the "Year-Book" has grown, and last year the publishers announced that they proposed to economise by omitting lists of papers read before societies. This has been done in the present issue, and in consequence the subtitle should have been revised. That the change has made a substantial difference is evidenced by the fact that the volume is less than half the size of last year's issue and that the price is also substantially less. We believe that the volume in its new and abbreviated form will be welcomed, with few regrets for the omissions, and we are grateful to the publishers for retaining the characteristic and substantial binding.