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critical botanist are the voluminous (thirty-two volumes) unpublished manuscripts of Gay, and the contents of his own herbarium, to many of the specimens of which are attached interesting and valuable critical notes. In searching among the manuscripts for any details about British plants, I discovered an account of Gay's visit to the Channel Islands in 1832, with a list of the plants which he observed. With the exception of Lagasca's string of absurdities and errors (about sixty species), it is the earliest and first list of Channel Island plants since the eleven species supplied by Sherard for Ray's *Synopsis*. I am extracting from Gay's MSS. what may be of interest from the point of view of Lester's *Fl. of Jersey* and Marquand's *Fl. of Guernsey*.—F. N. WILLIAMS.

MIMULUS MOSCHATUS L.—On September 19th, 1911, I found this in the Wood of Houghton, Alford, Aberdeenshire. It was then in full flower, with slight smell. It is growing in various places: in an old dyke on the wayside; in a ditch for conducting water; and among the herbage in a wet or damp hollow.—WM. WILSON.

SALICORNIA LIGNOSA Woods (see p. 179).—In September of this year I found *Salicornia lignosa* at the Bouche d'Erquy, north Brittany. This is a new record for France. Mr. H. W. Pugsley recently sent me a specimen of it from South Devonshire. *S. lignosa* is now known to occur in England (from Norfolk to South Devonshire), Brittany, and Algeria.—C. E. MOSS.

CIRSIUM ACAULE × ARVENSE IN NORTH HANTS.—A plant of this interesting hybrid is in Miss Palmer's herbarium. She gathered it on Sutton Common, North Hants, v.-c. 12, September 7th, 1897. It is the *Carduus Gibsoni* H. C. Wats.—G. C. DRUCE.

ERICA CILIARIS IN DEVON.—On the 30th of July I found this plant in the parish of North Bovey, v.-c. 3. This is a new county record for Devon.—K. M. TOMS.

REVIEWS.

British Fungi, with a Chapter on Lichens. By GEORGE MASSEE, with forty coloured plates by IVY MASSEE. 8vo, cl., 551 pp. London: George Routledge & Sons, Limited. 7s. 6d. net.

IN a short preface Mr. Masee tells us that "the primary object of this book is to enable the reader to determine the names of our indigenous mushrooms, toadstools, &c." No more competent author could have undertaken such a task, and on every page we have evidence of intimate knowledge of the plants discussed.

The introductory chapter gives a general survey of mycology—the distribution, fruiting forms, and life-histories, &c., of the different groups of fungi. A second chapter is devoted to the explana-

tion of the special terminology used. An account of classification—mainly of the larger fungi—follows, with a detailed key of the families in the order Basidiomycetes. Mr. Massee then returns to more general information, and in several chapters discusses the collecting and preserving of specimens, the diseases of the higher plants caused by fungi, and other matters of interest. In Part ii. he takes up again the classification already outlined in an earlier chapter. In a second edition of the book the chapter on Classification should be placed next to Part ii., so that the student may not be suddenly confronted with an apparently unrelated and unexplained "*Agaricaceæ*." Still another improvement might be made by using differences of type in the headings to emphasize the various divisions. It is very bewildering to find Basidiomycetes, Hymenomycetes, *Agaricaceæ*, *Polyporaceæ*, &c., all figuring in type of equal importance.

A key to the genera is given under each family or subfamily. In addition, Mr. Massee writes a connected account of the distinctive features of each genus, pointing out in a graphic and interesting way not only the affinities but the differences between closely allied genera. Such descriptive summaries should delight the student; they cannot be too highly praised. Any artificial arrangement of genera is sure to separate nearly related groups; for instance, *Russula* follows *Tricholoma*, and is divided from *Lactarius*, its close ally, by *Mycena*, *Collybia*, and *Marasmius*. Such non-natural sequences should have been avoided.

When we come to the descriptions of species, we find them shortly but quite clearly expressed, only there are no guiding headlines, and no indication on many pages as to the genus under discussion except the initial letter. This is a serious drawback to the usefulness of the book.

Many of the notes and descriptions seem to have suffered from too hasty compilation, as if there had been no time for exact statements, and no opportunity for revision. We are instructed, for instance, how to make spore-prints (p. 34), and advised to keep them as records, but the essential part, *viz.* floating the prints on diluted gum in order to fasten down and preserve the spores, is left out. Under *Helvellaceæ* (p. 25) we read of species of *Helvella*, "commonly known as Morels," and on the following page we are wrongly told that all the species of *Hypoxylon* are black in colour. Again, we find it stated under *Clavariaceæ* (p. 29) that "*Sparassis* is considered as a delicacy, and several other species are edible"—a sufficiently confusing statement.

Mr. Massee strongly advises solitary collecting as being preferable to joining a fungus foray (p. 35), and then a little later (p. 67) he informs us that "the assistance of a more experienced person is invaluable to the student." This is undoubtedly true, but few students can have the privilege of a private tutor, and they must rely on the joint fungus foray, where much help is given and received.

Throughout the book there are helpful explanatory notes full of insight and understanding, as, for instance, under *Tremelli-*

naceæ, where we read that, "owing to the absence of sugar in the tissues, members of the *Tremellineæ* are not attacked by the larvæ of insects in the field, consequently, when collected for preservation, they should simply be allowed to shrink until they are perfectly dry and rigid." Such an illuminating remark makes us almost forgive the confusion of nomenclature—*Tremellaceæ* (p. 29), *Tremellinaceæ* (p. 442), and then *Tremellineæ* as above (p. 443). These changes of termination are puzzling to the student.

We could wish that Mr. Masee had entirely left out the Lichens, but as the page-heading is still "British Fungi," some notice of the group was evidently felt to be necessary. The bright and vivid sketch which he gives of these peculiar plants is too short to be of much real value, and is marred by several palpable errors. He states that "some lichens are injurious parasites on living leaves and branches," while all the evidence goes to prove that none of our British lichens are parasitic, and only one tropical species is a parasite on leaves. The Reindeer Moss (*Cladonia rangiferina*)—called *Cetraria rangiferina* on a preceding page—is rather a rare lichen in the southern counties of England; it is easily confused with *Cladonia sylvatica*, a plant which reindeer refuse to eat. *Coniocarpon gregarium* is figured at its brightest; Mr. Masee says it is not British, but any of our text-books would have furnished him with many home records.

The coloured illustrations should prove of great assistance to the beginner: a good plate is worth many pages of description; but there is a regrettable tendency to post-impressionism in the two plates of lichen drawings. The book is undated on title-page and preface, an omission that should be rectified in the next edition. In spite of the very obvious defects it should prove a serviceable handbook, and it will give a great impulse to the study of fungi in this country.

A. L. S.

PLANT GALLS.

Die Pflanzengallen (Cecidien) Mittel und Nordeuropas ihre Erreger und Biologie und Bestimmungstabellen. Von Dr. H. Ross, Konservator am Kgl. Botanischen Museum in München. 8vo, wrapper, pp. viii. 350, 10 plates and 233 figures in text. Jena: Fischer. Price 9 marks.

THE publication of this work emphasizes the steady growth of interest in cecidology on the Continent and its comparative neglect in this country. Dr. Straton's well-known translation of Adler's classic account of the alternating generations of the oak *Cynipidæ*, and three books of lesser importance by the late Edward Connold (Oak galls, Vegetable galls, and Plant galls) comprise the published English literature; a classified text-book of British cecidology is a desideratum.

In the first part of his book Dr. Ross gives a series of essays on the various causers of galls and their biology, also methods of