

BOOK REVIEW.

THE ACRIDIIDÆ OF MINNESOTA. By M. P. Somes, University of Minnesota, Agricultural Experiment Station. Bulletin 141. University Farm, July 1914. 100 pp., 4 pls. (3 coloured).

Although a descriptive account of the Orthoptera of Minnesota has already been published* the present bulletin on the family Acridiidae or short-horned grasshoppers will be found to contain much additional information on the distribution, habitats and life-histories of the species described in the earlier work, as well as descriptive notes on 16 species not included in the latter. It also contains keys for the identification of the subfamilies, genera and species.

No fewer than 78 species are listed, a number which exceeds the Ontario list by 30 species; but this is not surprising in view of the geographical position of the state and its relations to the Mississippi Valley and to Lake Superior. Minnesota lies on the borderland between the prairies and the eastern forest region, so that the rich prairie fauna, which is an almost negligible quantity in Ontario, is abundantly represented here, while Carolinian species enter by the Mississippi Valley and Canadian species find their way into the northern counties, the proximity of Lake Superior probably favouring the boreal element in the fauna of this section.

On account of these relations it is to be regretted that the author has not given us some account of the topography of Minnesota from the standpoint of locust distribution, particularly as this phase of the subject was also ignored in Lugger's report.

Many interesting notes are given on the manner of flight, habits of oviposition, etc., of the various species, one of the most noteworthy being the observation of a female of *Melanoplus blatchleyi* in the act of drilling a hole in a piece of dead wood after the manner of *Chloealtis conspersa*, a habit unusual among the *Melanopli*.

The figures on the plates are all from original drawings, mostly in colour and, with a few exceptions, are fairly accurate and very attractive in appearance. The figure of *Arphia sulphurea*, however,

*Lugger, Otto. The Orthoptera of Minnesota. Third Am. Rept. of the Entomologist of the State Experiment Station of the University of Minnesota, 1897.