

methods of control, namely, this burning of the bunch grass to destroy the hibernating insects and the dust barriers to prevent migration or to destroy the nymphs when migrating from wheat to corn, are very clearly explained and the grounds on which they are advocated are set forth in a convincing manner. So far as one can judge, the Bulletin should be very valuable to the farmers of Kansas and to any who have to study and combat this very destructive pest.

L. CAESAR.

THE HESSIAN FLY. By T. J. Headlee and J. B. Parker, Agr. Expt. Sta. Manhattan, Kansas, Bul. 188, pp. 83-138, 1913.

This is a technical bulletin giving a comprehensive account of the Hessian Fly in Kansas. The authors, however, have not limited themselves solely to Kansas conditions, but have made several very important references to the results obtained by other investigators in different parts of the United States, whenever by so doing they could make more clear the point at issue. The history, distribution, habits, life history, nature of injury, natural and artificial means of control have been discussed at considerable length. The most valuable parts of the bulletin deal with the effects of temperature and moisture on the insect; the part played by parasites; the uselessness or inadvisability of several advocated measures of control, and the effectiveness of other methods.

None of the measures advocated are new, but new data are given to prove more fully their value and considerable attention has been paid to answering the objections that have been made to them. The control measures advocated are (a) destruction of the insects on infested stubble preferably by ploughing under, (b) destruction of volunteer wheat, and (c) late sowing. In addition to these, the importance of a fertile, well-prepared seed-bed and good seed are emphasized. It is shown that climatic conditions and parasites play a very important part in control, but that they can never be relied upon to take the place of the measures just mentioned. Though the bulletin describes Kansas conditions, almost everything that it contains has a direct bearing upon this pest in Canada or elsewhere and is also very valuable by way of comparison with our local conditions.

L. CAESAR.