species have come to my knowledge. The Icerya rose from Key West and limited in its range; Icerya Ægyptiacum, from Alexandria, Egypt; Icerya Montserratensis occurs on the island of Montserrat, W.I., and Icerya Palmeri, found by Dr. Edward Palmer, in 1887, upon a grape vine in the province of Sonora, New Mexico, but only on the Muscat of Alexandria variety. The practical lesson to be learned is, that our fruit growers of Florida, Texas and California should take every care to quarantine all plants from infected foreign points until examination shows them free from such pests.—Dr. C. V. Riley; ibid.

## USEFULNESS OF TOADS.

At Greeley, Colorado, two species of leaf-roller moths were very abundant and destructive in their attacks upon fruit and other trees. Mr. Gillette in closing his observations upon them says: "While speaking of the remedies for leaf-rollers, I should do wrong not to mention the valuable services of the toads. One of the most interesting sights that came under my observation in Greeley last summer was the large number of well-fed toads that hopped lazily about on the walks under the trees from morning to night, looking for leaf-roller caterpillars that were dropping on every side. The rollers were usually snapped in by the toads even before they could reach the ground. As many as fifty of these toads were counted under a single tree, and it was not uncommon for people to take the middle of the street to avoid the toads along the walk. Toads seldom do harm and feed almost entirely upon insects, and should be carefully protected as they are decidedly beneficial."—Colorado Bulletin No. 19.

## BOOK NOTICES.

A Text Book of Agricultural Entomology: Being a guide to the Methods of Insect Life and means of prevention of Insect Ravage. Agricultural Students. By Eleanor A. Ormerod. Second Edition—London: Simpkin, Marshall & Co., 1892. One vol., pp. 238; 164 figures; Orown 8vo.

About nine years ago Miss Ormerod delivered a series of ten Lectures for the Institute of Agriculture in England, and afterwards published them in book-form as "A Guide to Methods of Insect Life." This proved to be an excellent and highly useful work, but was not in much demand until recently, when it was found to contain the information that was required in this department of agricultural instruction, and accordingly the necessity of a second edition speedily arose. The result is the work before us, in which the authoress has expanded her original lectures and produced an admirable text-book for the use of students and others interested in Economic Entomology.

The first two chapters of the book give an account of the structure and transformations of insects, describing their varied conditions of life in the larval, pupal and perfect states, and a brief explanation of the various orders and their characteristics. Any intelligent reader will get a very fair elementary idea of Entomology by studying these two chapters, and they are written so clearly and in such simple language, as free as possible from technicalities, the few employed being always explained—that they can be fully grasped by any one of the most ordinary attainments.

The next two chapters deal with Flies (Diptera) and Fleas (Aphaniptera). The principal species that cause injury to the farmers by their attacks upon his crops and livestock are treated in detail, and the best modes of opposing their ravages are clearly and succinctly given. In describing the Wheat Midge (Cecidomyia tritici) the authoress says: "In Canada, or where the weather can be reckoned on and the date of appearance of the Wheat Midge can be reckoned on also, injury from attack is avoided by sowing so that the wheat shall flower before or after this special time. In one case the young grain is too firm for the Red Maggot to hurt it; in the other, the flower and germ is not far enough advanced for there to be anything to attack until the Wheat Midge has passed

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