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September, 1892, to July, 1893.

INSECT LIFE.

Vol. V.

DEVOTED TO THE ECONOMY AND LIFE-HABITS OF INSECTS,
ESPECIALLY IN THEIR RELATIONS TO AGRICULTURE.

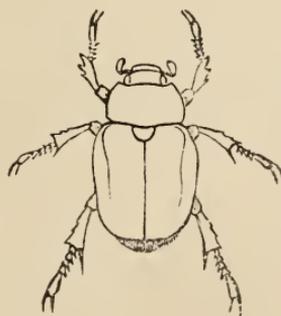
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WITH THE ASSISTANCE OF OTHER MEMBERS OF THE DIVISIONAL FORCE.



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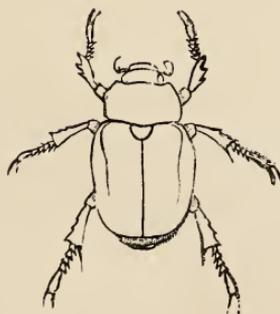
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"As the injury began before it was possible for the seed to have been fertilized, its effect to blast the flower was evident; and as the botanists tell us that the receptacle of the strawberry will not swell out to form the fruit unless the seed develops, the connection of the Thrips with the so-called 'buttoning' seems beyond dispute.

"This species attacked in a similar way flowers of raspberries and blackberries, and with a like effect.

"I may also say concerning the relation of Thrips to 'silver-top' in Grass, that as far back as 1883 I made some studies in northern Illinois of 'silver-top' in timothy, in which I reached a provisional conclusion that this injury was sometimes due to Thrips; but as I could not verify my supposition I dropped the matter at the time. I proceeded by collecting several hundred stems of timothy in which the whitening of the heads was just beginning to show, and examined them in comparison with others clearly uninjured. A large percentage of the former contained the Thrips in numbers ranging from one to half a dozen, behind the upper sheath of the stem, usually just above the upper node, while the sound stems were almost invariably without them. Comstock's later observations on the breeding habits of the Thrips finally confirmed what was with me only a supposition."

Mr. Webster stated that a species of Thrips had attacked young onions growing in the greenhouses of the Experiment Station at Columbus, feeding on the extremities of the young tops."

Mr. Howard said that Mr. Fletcher's experience with blister beetles the present season was a common one, species having been sent to the Department of Agriculture with reports of damage from all parts of the country. He suggested that their extraordinary abundance was probably due to the great abundance of grasshoppers last year.

Mr. Forbes said that some years ago in Illinois these beetles had been exceedingly and destructively abundant following a season of great abundance of grasshoppers.

Mr. Riley presented the following paper:

AN AUSTRALIAN SCYMNUS ESTABLISHED AND DESCRIBED IN CALIFORNIA.

By C. V. RILEY.

The rapidity with which the Australian *Vedalia cardinalis* has established itself in California is familiar to everyone. But the *Vedalia* was not the only scale-feeding Coccinellid which was sent or brought over by Mr. Koebele on his first trip to Australia in 1888-'89. Among others, he brought several species of the genus *Scymnus*, which in due time were set at liberty in the vicinity of Los Angeles. One of these, subsequently described by Dr. D. Sharp as *Scymnus restitutor* (INSECT LIFE, vol. 1, p. 364), was lost sight of, while another much smaller

species, originally collected by Mr. Koebele near Sydney, New South Wales (see Bull. No. 21, Division of Entomology, p. 24), turned up the present year in a rather amusing way. In the March number of *Entomological News* (vol. III, 1892, p. 51), Dr. F. E. Blaisdell describes a new Californian *Scymnus* under the name of *S. lophanthæ*. He found it preying on the San José Scale (*Aspidiotus perniciosus*), which infested the limbs of *Acacia lophanthæ* at the Coronado Parks, near San Diego in southern California. It is a very inconspicuous species of reddish color, the thorax often having an indefinite dark spot on the disk, and the elytra being of a blackish bronze color. The last-mentioned character is foreign to our native species of *Scymnus*, which never show any trace of metallic color, and, for this reason, I at once suspected, upon reading the description, that *S. lophanthæ* was one of the species introduced from Australia. Upon comparing Dr. Blaisdell's description with the sample specimens sent by Mr. Koebele from his first and second trips to Australia, I had no difficulty in identifying *S. lophanthæ* with the species from Sydney mentioned above. Subsequently Mr. D. W. Coquillett sent me a specimen, recently captured near Los Angeles, which fully confirmed this identification. Whether or not the species has been previously described from Australia I have no special means of knowing, but it does not appear to be among those described by Mr. Blackburn in 1889. (Trans., etc., Royal Soc. South Australia, vol. XI, pp. 191-198.) It is closely allied to *S. fagus* Brown, from New Zealand, and distinguished therefrom only by its finer and sparser elytral punctations and the greater extent of the pale thoracic color.

Dr. Blaisdell does not mention in his description the structural characters of the species, the more important of which are as follows: Prosternal lines long, straight, and slightly converging anteriorly; post-mesocoxal line slightly reascending externally; post-metacoxal line complete, almost reaching the first abdominal suture; elytral epipleuræ horizontal, reaching beyond third abdominal segment, slightly concave; inner marginal line not leaving the margin.

The beetle and its larva are quite abundant in the Coronado parks, according to Dr. Blaisdell; and since it also occurs near Los Angeles, there can be no doubt that this useful little Coccinellid has fully established itself in southern California.

This was followed by a short paper, being—

FURTHER NOTES ON THE FOOD OF LIMAX CAMPESTRIS BINNEY.

By F. M. WEBSTER, Wooster, Ohio.

In INSECT LIFE (vol. IV, p. 348) are given some observations of mine relative to the destruction of Aphides by this mollusk. While the conclusions there reached, viz, "that the instance observed was exceptional and probably does not promise any particular benefit," are perhaps correct, yet some further observations may place the matter in a