

IULUS IMPRESSUS (?) IN THE CORN-FIELD.

Iulidæ are not insects, and my only hope of getting this note on record is in that their work in the corn-fields of the Middle West may be easily confused with that of several very different species of insects.

In the autumn of 1882, when the larvæ of *Heliothis armiger* were very abundant in the corn-fields of Northern Illinois, I noticed that some ears, instead of having been attacked at the tip, had been entered from without indiscriminately along the length of the ear and directly through the husks. In such cases the depredator had penetrated the husks, leaving a neat circular hole about the size of a No. 4 shot. After reaching the ear it continued to work inward, penetrating a kernel, and on reaching the germ changed its course and tunnelled parallel with the cob, eating out the germs of kernel after kernel in the row, or sometimes changing over to an adjoining row of kernels. I soon found that depredations of this sort were not due to *Heliothis*, but to a Myriopod thought to belong to this species. Here, except to the most careful observer, was an injury caused by a single organism, whereas, in truth, there were two depredators, and but one of them an insect at all.

In early September, 1904, in a field of corn near Rochester, Minnesota, I was one morning astonished to find what seemed to be the same species of *Iulus*, infesting the ears of unripe corn in a different manner; in this case feeding on the green silk and leaving the ears with much the appearance of having been ravaged by beetles of the genus *Epicauræa*, or *Diabrotica* perhaps, or even grasshoppers. There was hardly a hill of corn to be found that did not show evidences of having been ravaged, in many cases the ears being entirely denuded of silk. At this time, about 9 a.m., as many as four of the *Iulus* were to be found in the silk of belated ears, sometimes eating off the silk to the kernels, but in no case were they observed to attack the latter. From the fact that many of the creatures had seemingly finished their breakfast, and were to be found on the leaves or among the husks, and, later in the day, none were to be found feeding, it is possible that they depredated only in the cool of the day. Mr. Chas. N. Ainslie, of Rochester, who was with me at the time, made some later observations for me, and wrote me afterwards that they were even more plentiful than when I was there, he having found as many as ten individuals within a radius of fifteen inches about one hill of corn, their numbers being greatest near the margin of the field. In the case of Mr. Ainslie, the observations were made toward evening, thus indicating crepuscular habits.

It is quite possible this may prove to be some other species than *Iulus impressus*, but it is the very common species of the Middle West, and its work may be easily mistaken for that of insects.

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