

SUNFLOWER INSECTS.

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I am much indebted to Mr. R. L. Thompson for the following information regarding sunflower insects observed at Salisbury, Rhodesia:

"As yet we have no record of any serious pest attacking sunflowers in Southern Rhodesia, and the nearest approach to injury that has come under my notice was a partial defoliation of a few plants at the Experimental Station, Salisbury, by the larva of *Plusia orichalcea*. In this case the plants rapidly recovered, and no injury to the flower heads was apparent. The only other injury I have seen was the work of a species of finch, which stripped the heads of some garden varieties of *Helianthus*. I regret that it is rather too late to collect insects which visit the flowers. Such are very numerous, and, from memory, I should say that our wild and domesticated races of *Apis mellifica* (var. *caffra* and var. *unicolor adansoni*) rank first, while other insects attracted include large numbers of Diptera, mainly Muscids or Syrphids, and smaller numbers of Aculeate Hymenoptera, especially Scoliids and Sphegids. *Chloridea obsoleta* occurred in some numbers at the flowers this season, but otherwise I should say that diurnal Lepidoptera are only casual visitors. Among the Syrphids the most conspicuous visitor is an undetermined species rather similar in appearance to the European *Eristalis tenax*, and of similar habits." (April 6, 1915.)

This account is interesting because, although from a region so remote from the original home of *Helianthus*, it describes a situation singularly like that in other parts of the world where sunflowers are grown. Here in Colorado finches attack the heads, so that we have to bag them in order to save seed. Here at Boulder, *Chloridea* (or *Heliothis*) *obsoleta* Fabr.—the very moth observed in Rhodesia—visits the flowers of annual *Helianthus*, as well as those of the perennial *H. coloradensis* Ckll. In Rhodesia, as in America and Europe, there is the same general absence of butterflies as sunflower visitors. The particular *Plusia* feeding on sunflower in Rhodesia does not occur with us, but J. R. Parker (Journ. Econ. Ent., 1915, p. 288) records that *Plusia* (or *Autographa*) *gamma californica* Speyer feeds on sunflower

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