

# Dainty Sulphur (*Nathalis iole*) Host in the Delta National Forest

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Most references indicate that Dainty Sulphurs (*Nathalis iole*) utilize plants in the Aster family as their larval host choice. In mid-September, while visiting the Delta National Forest (north of Vicksburg, Mississippi), Sara Bright and I observed Dainty Sulphurs ovipositing on Green Carpetweed (*Mollugo verticillata*), a mat-forming member of the Carpetweed family (Molluginaceae). Scott indicates that oviposition on non-Asteraceae may indicate "oviposition error," and lists *M. verticillata* in this category. It was clearly not an error in the two sites we observed Dainty Sulphurs in Mississippi.

We initially spotted eight Dainty Sulphurs flying along the sides of Forest Route 709. The butterflies were clustered in two areas that we later discovered corresponded to the location of the carpetweed. We saw two females ovipositing on these plants, some of which had been so severely sheared by roadside mowing that they were almost

unrecognizable. Distribution was limited to dry, sandy road edges where competition with grasses and other weedy plants was less intense. In addition to eggs, we discovered caterpillars representing three different instars, including one fully mature larva.

The second site was the boat launch on the Little Sunflower River. Because of extremely dry conditions, the banks of the river had receded, leaving an expanse of parched, cracked earth that supported early succession plant growth. Here the carpetweed grew vigorously and was much more abundant: we observed approximately two-dozen Dainty Sulphurs in its vicinity. Several were ovipositing, and virtually every clump of carpetweed was dotted with eggs. One basal rosette contained sixteen ova.

Green Carpetweed was formerly included in the Fig-Marigold or Ice Plant family (Aizoaceae). It is native to the tropics and considered an

adventive or nearly-naturalized plant throughout its range in the United States. Its prostrate growth habit, whorled leaves, and miniscule red seeds are diagnostic. In addition, Green Carpetweed bears small greenish-white flowers that served as a nectar source for some of the Dainty Sulphurs we observed.

## References

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1) Egg on Green Carpetweed (*Mollugo verticillata*) flower bud; 2) Final instar caterpillar eating carpetweed flower; 3) Green Carpetweed (*M. verticillata*) growing near the Little Sunflower River boat launch. Photos: Sara Bright.