HOST PLANTS OF *STRYMON MELINUS ATROFASCIATA*

In the *Lepidopterists' News* (vol.8: p.101) I described my rearing the spring brood of *Strymon melinus* on certain wild clover species. At that time I supposed that the summer generation would most likely use a similar host. I noticed that the clovers, *Trifolium oliganthum* Steud. and *T. tridentatum* Lindl., flowered only in early spring, but there are other plants of the same genus which remain in flower throughout the summer.

I reared these first *S. melinus* larvæ during a period of extreme abundance of the species. Later it became scarce, and I discontinued my experiments for a few years. But it was during this time that an interesting clue came to light. While collecting Diptera from the flowers of *Anaphalis margaritacea* Benth., I twice found a whitish lycænid caterpillar in my net. For some reason, I failed to rear either of these larvæ. However, the time of year, late August, the plant concerned, and the general appearance of the caterpillars, eliminated every possibility but *S. melinus* and *S. sylvinus* Bdv.

Strymon melinus being quite plentiful once more in the spring of 1958, I was ready to try them again, with the aid of my new clues. But I now found the plants I used before had disappeared from the area inhabited by the butterflies. So I tried such legumes as I could find, a yellow-flowered clover, probably introduced, and *Hosackia parviflora* Benth. To this I added, mostly on a hunch, a wild strawberry, *Fragaria bracteata* Heller. The butterflies oviposited on all these plants, but when given the opportunity the larvæ nearly all moved to the flowers and green fruit of the strawberry.

I had the usual bother with cannibalism. This occurs usually when some of the larvæ have gone into the prepupal instar; they are then eaten by their more backward companions. Most of the larvæ that were not so destroyed finished their metamorphosis, and all of the imagines were perfect.

The summer brood, as I expected, oviposited readily on *Anaphalis*. I was able to get five pupæ from this lot, and the adults emerged after the winter.

Looking back on my experiments of 1953, I realize now that, had I offered the *S. melinus* flowers of raspberry, instead of fruit, I might have raised some larvæ then. But this can apply to the spring brood only; there is no *Rubus* species native to Vancouver Island which flowers at the time the summer butterflies emerge. Another Rosaceous plant suggested by J. R. J. L. JONES in his B.C. check list, *Cratægus,* is also probably introduced. At any rate is it seldom seen far from cultivated land and is not found in areas most frequented by *S. melinus*. It may seem from the above that *S. melinus* is not very particular what it eats. I think rather that the larvæ must feed on pollen or other flower parts, during the early instars at least, and this fact forces the butterflies to choose plants which flower at the correct season. Thus the two broods have come to use very different hosts. In Europe, *Celastrina argiolus* (L.) has long been known to behave in this manner, and I believe it does so in North America also, where there is more than one brood per year.

RICHARD GUPPY, Marine Drive, R.R. 1, Wellington, B. C., CANADA