

REARING RARE FORMS OF *CATOCALA* AND *APANTESIS*, AND A PLEA FOR MORE REARING OF LEPIDOPTERA

by JOSEPH MULLER

Among several rare species of Lepidoptera I raised this season (1959) to the adult stage, I am especially proud of the following two.

One I raised from last year's eggs of a female *Catocala parta* Guenée form "perplexa." Fifty-three specimens raised from eggs of "perplexa" turned out to be 35 (23 ♂♂, 12 ♀♀) form "perplexa" (66%), 2 (1 ♂, 1 ♀) typical *C. parta* (4%), and 16 (10 ♂♂, 6 ♀♀) melanic form "forbesi" (30%). One ♂ specimen of the latter had dark yellow secondaries and may go for ab. "petulans."

The others were the offspring of a female *Apantesis figurata* Drury form "preciosa". The number of specimens raised was twenty-four, and the most interesting part is that all are females! Most of these look different from each other, only two looking alike. There are eight specimens of form "preciosa". Five of those eight specimens have normal markings on the primaries, and yellow secondaries with black band and black dot. One specimen differs, as the yellow in the secondaries is blackish. Two specimens have black primaries with two yellow dots each.

Five specimens are form "excelsa". Four are typical "excelsa" with a reddish dot in black secondaries; the other has all-black primaries with two yellow dots in the secondaries.

Five specimens are typical *figurata*. Three of them have the regular striped markings on the primaries and red secondaries with black band and black dot. Two specimens had black primaries with yellow dots.

The remaining six specimens are form "preciosa" also, but instead of black band and dot they all have black secondaries with yellow dots. Three of them have the primaries black too, with two yellow dots each. All the regular markings differ from each other also, be it the size, amount, or length of line in the primaries, or the size of dots in the primaries and secondaries, so that none but two look alike.

I am sure that most collectors must agree that it would take many years, maybe a lifetime, to collect series of the above-mentioned forms. How many times must one travel to different parts of the country to sugar for *Catocala* and how many times does one pick off single specimens of *Apantesis* on black-lights to make up a series of the mentioned forms?

I hope that this little article will spur other collectors to do more rearing of Lepidoptera. Not only great surprises await one, especially with many melanic forms showing up lately, — it also is a challenge to the collector, not to speak of the proud feeling one has after a successful breeding job well done. Many species are difficult to raise. Some of the most important pointers are: use fresh healthy food only; replace it in time; keep containers clean; do not crowd too many in one container; close holes in bottom of jar tightly when

food-plant is in water; watch temperature and especially condensation of moisture when larva is in the first instars; do not handle when molting; and keep using bigger containers as the larva grows larger. In most cases the breeder must use his own judgment and have some inventive ideas.

The biggest challenge to the collector is getting hibernating larvæ through the winter and keeping them going in spring, or feeding larvæ of which the foodplant is not known and rearing them to the adult stage.

R. F. D. 1, Lebanon, N. J., U. S. A.

MITOURA JOHNSONI IN OREGON AND CALIFORNIA

The rare hair-streak *Mitoura johnsoni* was described by SKINNER (1904) from specimens taken in British Columbia and the Seattle area. To the writer's knowledge there are no published records of its occurrence south of this region. LEIGHTON's checklist of the butterflies of Washington (1946) quotes only the original Seattle locus. DON B. FRECHIN, reporting for the 1951 and 1952 season summaries in the *Lepid. News*, states (1951) that this form was in evidence, but scarce, in the Olympic Mountains, and (1952) that it made a showing in the Puget Sound area.

It is therefore of interest to report the capture of *M. johnsoni* in the Cascades of Oregon and northern California. The writer collected two freshly emerged females on May 23, 1959, at Lost Prairie, Linn Co., Oregon, a mountain meadow (alt. 3400 ft.) along the South Santiam Highway, 14 miles west of the Cascade summit. On June 2 another female and a male were taken at the same location. On July 4, 1959, a male and female were collected at Tombstone Prairie (alt. 4200 ft.), just three miles west of Lost Prairie, by R. E. WOODLEY. A California record was provided by Dr. M. DOUDOROFF, who sent the writer a female of *M. johnsoni* taken at Silver Lake in Lassen County (18 miles east of Mt. Lassen), July 2, 1955.

In the interest of recognizing this butterfly when found, it should be pointed out that HOLLAND (*Butterfly Book*, 2nd ed.) erroneously describes it as "bluish black on the upper side." It is, of course, reddish brown above (*vide* SKINNER's original description, *Ent. News* 15: 298). HOLLAND's black-and-white figures are of little help, since the markings closely resemble those of *M. spinetorum*. COMSTOCK's colored figure (*Butterflies of California*) shows only the under side, which could pass for *spinetorum*. The crucial difference lies in the color of the upper surface.

ERNST J. DORNFELD, 3415 Crest Drive, Corvallis, Ore., U. S. A.