

Edwards (Butt. Vol. 1), writes: "As to *sara*, I first met with it two years ago in Santa Clara County, and was at once struck by its larger size, the yellow colour of most of the females, and the absence of the irrorated line along the anterior margin, as well as by the much fainter green markings on the under side of lower wings. Unlike *Reakirtii*, the species seems to prefer the open fields, flies much more slowly, and alights often upon flowers of *Brassica*, *Nasturtium*, etc. I am so accustomed to the two forms, that I can now distinguish them by the flight alone."

*Preparatory Stages*.—Scarcely anything is known of these. Edwards<sup>3</sup> refers to the relationship of *sara* and *Reakirtii*, as shown by records of the pupæ. Again, in his supplement to the Butterflies of the United States (v., 3, p. 2, 1897), he refers to this. G. R. Minot, in a note in Entom. News (p. 158, 1902), briefly describes the egg, and records the oviposition on the "common mustard."

*Food-plants*.—Lennibert<sup>4</sup> reports the oviposition of *sara* and *Reakirtii* in the Yosemite National Park on the stalk of *Thysanocarpus pusillus*. In this locality *sara* has the same food-plants as *ausonides*, viz., *Brassica campestris*, L., and *nigra*, L. But there must be others also, as *sara* is found abundantly in the higher hills, where *Brassica* is very rarely met with.

*Oviposition*.—For the past several years we have observed numerous instances of oviposition. As a rule the eggs are tucked between the young sepals, but there is a great irregularity in this. Sometimes the eggs are placed on the peduncles, and quite often on the under side of the leaves, upon which the larvæ readily feed. On June 27, '07, a ♀ was observed ovipositing. Eight eggs were seen to be laid, one on a leaf, two on peduncles, and the others on the buds. She was then captured, and by the next afternoon she had deposited forty-five more eggs in the pill box in which she was confined.

*Egg*.—Length almost 1 mm.; fusiform, laterally marked with raised vertical ridges not quite so prominent as in *ausonides*, between which are finer cross-veinlets; base flattened. Colour light lemon-yellow when first laid, changing to orange in from twenty to thirty hours, and this colour is quite uniform until just before hatching, when the colour is duller.

*First Instar*.—Length, 1.5 at rest; in motion nearly 2 mm. Colour dirty yellow, sparsely covered with black hairs. Head rather large, black. The duration of the egg stage to the emergence of the young larvæ varies

3. CAN. ENT., XXIV, p. 52, 1892.

4. Entom. News, 6, 137, 1895.