

THE SPECIES OF EUERYTHRA Harv.

By JOHN B. SMITH.

(With one plate.)

In Can. Ent. VIII, p. 5, Harvey describes "*Euerythra phasma* n. g. et sp." as follows: "♂ The insect is allied to *Spilosoma*, but the head is more prominent, the wings narrower, and the antennæ more continuously pectinate. The venuration has not been studied of this form, which is so distinctly marked as to be at once recognized, and which I do not find in authors. White; fore wings white, crossed by a broad irregular blackish band from base to extremity of veins 3 and 4, where it retains [stains] the otherwise white fringes. From apices to middle of external margin a second band diagonally crosses the wing. A discal black spot and traces of an extra basal band. Everywhere where the blackish color obtains the veins are bright yellow, as is the submedian fold. Body above crimson, whitish at base. Thorax and head above white. Squamation about the eyes crimson. Anterior legs fuscous outwardly; palpi fuscous. Beneath, the white secondaries show a dot. Expanse 38^{mm} (May 5, Belfrage, No. 471)." It will be seen that really no distinctive characters are given, although the genus seems a very distinct one, and has been universally recognized. The species is not uncommon in Texas, and in arranging the Museum material quite a number of specimens were found in the various collections that were incorporated.

It at once struck me that there were two distinct forms, and further study convinced me that there were two good species; the genus, too, proved to be rather peculiar, so that a complete description and study seems not out of place.

GENERIC DESCRIPTION.

Head moderate in size, scarcely retracted, tongue weak, but distinct, semi-corneous. Palpi small, in the ♂ scarcely exceeding the front, in the ♀ longer. Antennæ of the ♂ rather lengthily bipectinate to the tip, the branches ciliate; of the ♀ simple. The eyes are naked, globose; the ocelli present. The thorax and abdomen are untufted, the vestiture hairy. The legs are subequal in length, the median tibiæ with one pair, posterior tibiæ with two pairs of short spurs. Tarsi sparsely spinulose. As a whole the insect is moderately stout, the thoracic vestiture rather shaggy; abdomen short, not exceeding the secondaries. Primaries moderate, trigonate, outer margin obliquely rounded; broader in the female than in the male. With twelve veins. Dorsal or internal vein not forked at base, median vein giving rise to 2 at outer third, and to 3, 4, and 5 at equal intervals from the tip, 6 and 7

from the tip of subcostal, 7 giving off first 10 then 8, from which 9 branches close to the tip—that is to say veins 7 to 10 are on a single stalk; 11 from subcostal rather close to the end of the cell, thence to costa. Costal as usual. Cell closed by a fine cross vein. Secondaries frenate, *the costal vein wanting*. Two internal veins, the outer very faint. Median vein giving rise to 2 at the outer third, 3 and 4 at the end of cell; 5 is from the cross vein, close to 4. The subcostal branches into 6 or 7 some distance beyond the cell and these veins are therefore unusually short. The absence of the costal vein recalls the so-called *Zygenid* families, but is not so usual in the *Arctiidae* where it is usually from the subcostal at a variable distance from base.

The genitalia of the male are somewhat distinctive, the supra anal hook is inflated at the angle of the bend, and viewed laterally has some resemblance to a bird's head. The side pieces are broad, semi-cylindrical corneous toward tip where the upper angle is produced into a rather long pointed somewhat twisted projection—there is some difference in the species which will be pointed hereinafter out.

E. phasma Harv. Can. Ent. VIII, 5.

The brief description at the beginning of the article is sufficiently characteristic to obviate the necessity of a detailed enumeration of peculiarities. It remains only to add that the palpi are crimson as are the front coxæ. Inner side of front femora and tibiæ dark. On the underside the primaries generally show a faint reproduction of the markings of upper side. The tip of the side pieces of the ♂ is in this species considerably drawn out, corneous and acute, somewhat curved. A reference to the figure will show the structure at a glance. The rounded projection at the lower angle is membraneous in texture.

E. trimaculata, sp. nov.

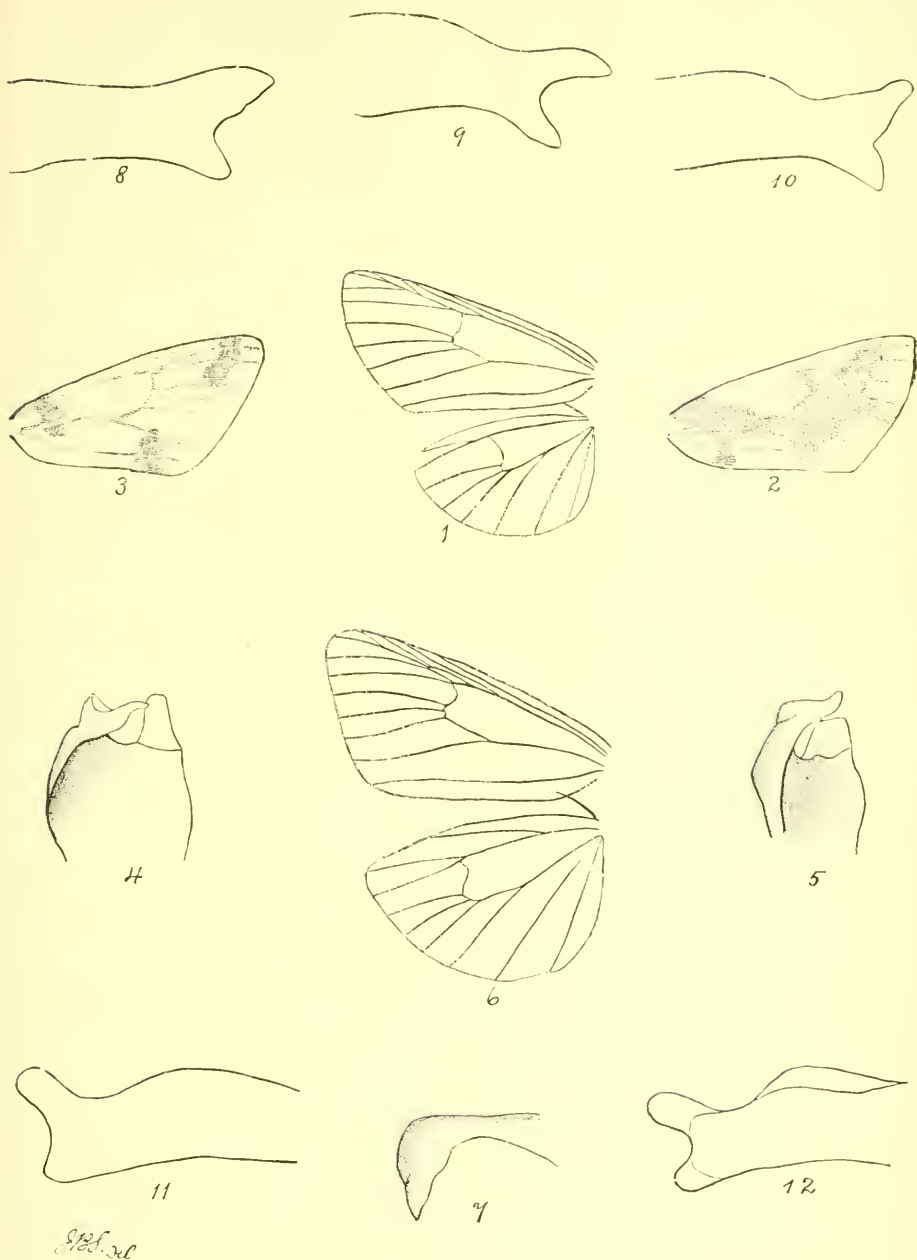
Head and thorax white, orbits of eyes and the vestiture of palpi bright red. Abdomen white, the segments ringed with bright red (crimson) of variable width. In the ♀ the red is sometimes very faint orange, covered with white scales. In the ♂, on the contrary, the predominating color is sometimes red or crimson and the abdomen appears white banded. The basal segments are always more narrowly red-ringed in both sexes, and rarely they are altogether absent at this point. A row of black dorsal spots, which are, however, often wanting. Primaries with an amber brown or blackish fascia of variable width near the base—broadest at costa, outwardly oblique to the submedian interspace, and there usually terminated; occasionally there is a narrower prolongation, inwardly oblique to the internal vein. Another short band of similar color from the costa near apex, inwardly oblique to vein 5. A short upright band from the inner margin near anal angle to vein 2. In some specimens there is a double spot at the end of the discal cell. The veins where they cross the brown bands are marked with yellow scales. Secondaries pure white, immaculate. Beneath, the

markings of primaries are faintly reproduced; secondaries occasionally with a discal spot. Anterior coxæ bright orange red, inside of anterior femora and tibiæ brown. Else, underside white.

Expands 1-1.25 inches = 26-33^{mm}.

Habitat.—Texas.

The side piece in this species has the tip much less drawn out and more obtuse at tip, hardly corneous, and not so much curved. A comparison of the figures of Plate xiii will show the differences at a glance. In maculation the principal points of difference are the want of the longitudinal band and the incompleteness of the oblique band, which in *phasma* extends from near the apex to the middle of the inner margin.



- 1.—Venation of *Euerythra*.
- 2.—Primary wing of *E. phasma*.
- 3.—Primary wing of *E. trimaculata*.
- 4.—Side piece of genitalia of ♂ *E. phasma*.
- 5.—Side piece of genitalia of ♂ *E. trimaculata*.
- 7.—Supra anal hook of *Euerythra*.

- 6.—Venation of *Callimorpha*.
- 8.—Side piece of genitalia of ♂ *C. clymene*.
- 9.—Side piece of genitalia of ♂ *C. contigua*.
- 10.—Side piece of genitalia of ♂ *C. vestalis*.
- 11.—Side piece of genitalia of ♂ *C. lecontei*.
- 12.—Side piece of genitalia of ♂ *C. militaris*.

(Description on pages 335-337, 346.)