

EMESIS.

Emesis, Illiger, Mag. vi. p. 287 (1807); Westwood, Gen. Diurn. Lep. p. 446 (1851).

About thirty species are contained in this genus, ranging from Mexico to South Brazil; fourteen are found within our area, two of which cross the frontier northwards into the State of Arizona. Their numbers are pretty evenly distributed from South Mexico to Panama.

The subcostal nervure of the primaries of the male in *E. lucinda* emits two branches before the end of the cell and one after; both discocellulars are atrophied, the middle meets the subcostal at the same point as the upper radial, the lower the median a little beyond the second branch; the costal and median sides of the cell are subequal. The secondaries have a strong basal nervure; both discocellulars are atrophied, the upper meets the subcostal beyond the first branch, the lower the median beyond the second branch; the costal side of the cell is shorter than the median side.

The front legs of the male have the trochanter inserted beyond the middle of the costa; femur = $\frac{1}{2}$ coxa; tibia = $\frac{3}{4}$ coxa; tarsus (four-jointed) > tibia, first joint longer than the other three together; there is a spine near the end of the tibia, and a long and a short one at the end of the terminal tarsal joint. The terminal tarsal joint in the front leg of the female is as long as the two preceding, and has a setose pad beneath; the first four joints terminate in a pair of strong spines, and there are shorter spines beneath on the first and second joints. The palpi have a short slender terminal joint = $\frac{1}{4}$ middle joint, which is stout and of uniform width throughout. The antennæ have thirty-six joints, whereof the terminal thirteen form a moderate club.

The harpagones in the male secondary sexual organs have two short rounded lobes, setose at their extremity; these are connected by a piece forming an arch over the penis. The penis itself is long, and near its middle consists of a number of trachia-like rings, inside of which is a strong spine directed outwards; beyond this structure the usual strap proceeds forwards, and bends round to the base of the harpagones. The bursa copulatrix of the female has two very short blunt prominences, of smooth texture, and without granulations.

In *E. æthalia* the neuration of the wings is similar to that of *E. lucinda*, and in this respect the secondaries of *E. tenedia*, *E. fatimella*, and *E. zela* all agree. The front legs of the males of all these species agree in being four-jointed; but in the front leg of the female of *E. æthalia* the third joint of the tarsus is longer than the terminal joint, is much dilated, and has a large setose pad on its under surface. The general structure of the secondary sexual organs of the male in the four species above named is very similar, small differences in the development of the lobes of the harpagones being alone traceable. In the penis of *E. fatimella* we can discern the trachea-like rings present in *E. lucinda*; in the other species the penis is simple, but