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ceedingly faint bands of red and green light perpendicular to the direction of the motion.

When the eye has not been fatigued by light, the luminous ground on which these phenomena are seen has a minutely granular appearance; and by the continued action of the light an apparent effervescence appears over the whole, as if each grain of light, or the minute spaces between the grains, were becoming more or less luminous in succession.

Belleville, Dec. 18, 1833.

XXVI. Descriptions of some nondescript British Species of May-flies of Anglers. By JOHN CURTIS, Esq., F.L.S., &c.*

AS few insects are more remarkable in their œconomy or more employed for the amusement of men than the *Ephemera* and *Phryganidæ*, I hope the characters of some new genera and species may induce others to pay attention to these curious and interesting tribes of insects.

The following descriptions are scarcely more than the essential characters: the numbers refer to Mr. Curtis's Guide to an Arrangement of British Insects, in which a list of the species has been given.

Order NEUROPTERA. Fam. EPHEMERIDÆ.

Gen. 734. EPHEMERA Linn.

7. fusca Curt.

2½ lines long: dull piceous, the space between the eyes and the base of the posterior legs ferruginous, the others ochreous; filaments longer than the insect. pale lurid, dotted; the articulations long: wings transparent, superior with few transverse nervures and the longitudinal ones most distinct; inferior very small.

Gen. 735. BAETIS Lea.

A. The wings very much reticulated.

8. dispar Curt. Brit. Ent. pl. 484.

The Pseudimagot of this insect may be the *E. venosa* DeGeer.

7. costalis Curt.

2 lines long: slender, pale castaneous, sides of thorax, apex of abdomen and legs ochreous, the joints of tarsi fuscous at the articulations; filaments very long, pale yellow, each joint with the apex black: superior wings and the costa brownish yellow.

6. elegans Curt.

4½ lines long: bright ochre, abdomen inclining to pale chestnut; filaments whitish dotted with fuscous, tarsi with all the joints tipped with black: wings beautifully iridescent, stained very pale yellowish brown, the costa darker, especially towards the apex.

* Communicated by the Author.

† By Pseudimagot I designate the fourth state of the *Ephemeridæ*.

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5. *mellea* Curt., a beautiful Pseudimago.
 5 lines: bright ochreous, eyes black, segments of abdomen edged with brown, with a trigonate brown mark on the back of each; and the spiracles forming a double row of black dots down each side; filaments longer than the insect, dotted with brown: wings pale yellow, costa a little darker, nervures yellow and brown.

5. *straminea* Curt., a Pseudimago.
 4 lines: deep straw-colour, eyes black, segments of abdomen edged with brown, wings fuscous-ochre, tarsi fuscous at the apex, filaments whitish dotted with brown.

8. *flavescens* Curt., a Pseudimago.
 Like the last, but only 2½ lines long.

8. *lateralis* Curt.
 3½ lines: piceous, shining, an orange spot before the wings; abdomen dull ferruginous, the sides paler, with the spiracles piceous; filaments very long: wings with the 3 costal nervures rosy or ferruginous; legs lurid, excepting the anterior, which are ochreous at the base.

9. *semicolorata* Curt.
 3 lines: ochreous, thorax variegated with brown, abdomen banded with the same colour, filaments very long and slender, knees and tarsi brown, superior wings with the basal half and inferior entirely pale yellowish brown.

9. *carnea* Curt.
 3½ lines: ochreous, with a pink tinge, abdomen darker, filaments twice as long as the insect, pale unspotted; wings elongated, with the costa slightly tinged, the nervures reddish brown.

B. Wings very little reticulated. Pseudimago with the wings ciliated.

11. *vernus* Curt.
 3 lines: pale ferruginous; head and thorax piceous above, with an ochreous dot on each side the collar and several beneath the wings, filaments twice as long as the insect, pale and dotted; legs dirty ochre; wings with the costa tinged.

11. *autumnalis* Curt.
 2 lines: pale castaneous brown; margin of eyes and sides of thorax ochreous; filaments thrice as long as the insect, whitish; legs pale lurid; wings with the anterior margin slightly tinged. Pseudimago more ochreous.

Gen. 736. *CLOËON* Lea.

1. *dipterum* Linn., *marmoratum* Curt.

8. *obscurum* Curt.
 The Pseudimago, I believe, of *C. dipterum*: the wings are fuscous and ciliated.

4. *unicolore* Curt.
 4 lines: reddish ochre; filaments lost; legs ochreous; costa pale brown towards the tip; nervures reddish ochre.

6. *dimidiatum* Curt.
 3 lines: castaneous brown; collar with an ochreous dot on each side; abdomen, especially at the base, banded with ochre; filaments very long and white, remotely dotted with black; legs straw-colour; nervures of wings very faint.

Gen. 736^a. BRACHYCERCUS Curt.

Head short; eyes small and remote, at least in one sex; thorax large and ovate; abdomen not longer than the thorax, terminated by 3 very short setae, thick at the base: wings 2, rather short but ample, the form of a *Musca*, with many longitudinal nervures and 3 transverse ones between the costa and disc; legs short, at least in one sex.—*Obs.* These characters, although imperfect for want of specimens, are sufficient to distinguish this group for the present.

1. *Harrisella* Curt.—*Harris's Exposition*, tab. 6. f. 3 & 1.
5 lines long.

2. *Chironomiformis* Curt.

2½ lines: ochreous shining; eyes black; wings milk white, costa fuscous; legs whitish. This insect somewhat resembles a large female *Chironomus*.

3. *minima* Curt.

1½ line. My specimen, taken in Norfolk twenty years since, is much injured; the head and collar are blackish, the body white, legs and filaments pale ochre; wings similar to the last.

Order TRICHOPTERA. Fam. PHRYGANIDÆ.

Gen. 748. LIMNEPHILUS Leach.—*Curt. Brit. Ent. v. 11. fol.*
488.

A. Posterior margin of superior wings emarginate.

1. *basalis* Curt.

Expansion of wings 16 lines: pale dirty ochre; superior wings freckled with brown, leaving an oblique plain spot on the disc, with a larger one connecting it with the apex; stigma and a sinuated oblique line at the base piceous; 3 pale spots on the posterior margin; tips of inferior wings ochreous variegated with brown; body green.

2. *emarginatus* Curt.

17 lines: dull ochre; superior wings mottled with a deeper colour, a pale oblique spot on the disc unconnected with one beyond it, and a short narrow one approaching the posterior margin, which has three spots, and the edge of the angle as well as the stigma piceous; apex of inferior wings brownish ochre; body green.

B. Superior wings truncated obliquely at the apex.

3. *Strigosa* Gmel.

20 lines: dull ochre; superior wings more or less freckled with brown, having a dark longitudinal line at the apex of each wing, sometimes obliterated in the superior.

5. *binotatus* Curt.

16 lines: superior wings ochreous yellow, deepest towards the base, with three pale spots on the disc and a large one covering the transverse nervures, a large brown spot at the posterior angle; stigma large ovate and piceous.

6^a. *discoidalis* Curt.

15 lines: superior wings pale brown, with the costa (as far as the stigma), a large spot below the disc connected with a large one covering the transverse nervures, and numerous dots semitransparent; apical margin of inferior wings fuscous.