

Walker, 1853

WAYNE N. MATHIS

INSECTA BRITANNICA.

DIPTERA.

VOL. II.

BY

FRANCIS WALKER, F.L.S.

LONDON:

LOVELL REEVE, HENRIETTA STREET, COVENT GARDEN.

1853.

tertius subrotundus; arista trisetosa. Thorax ellipticus. *Ala longa, vena discalis transversa nulla.* Abdomen thorace paullo longius et angustius. Pedes graciles.

Body slender, shining, almost bare. Head and thorax convex. Head transverse, a little broader than the thorax. Front broad. Face vertical. Eyes nearly round. Antennæ very short; first and second joints very small; third nearly round; arista setiform, very slender, with three hairs on the upper side. Thorax elliptical. *Wings* long, moderately broad; costal vein ending at very little behind the tip of the wing; subcostal ending at about one-fourth of the length; radial ending at hardly one-fourth of the length; cubital ending at the tip; præbrachial very slightly curved upward, ending at the tip of the costal; præbrachial transverse very near the base of the wing; *no discal transverse vein.* Abdomen nearly linear, a little longer and narrower than the thorax. Legs slender.

These insects dwell among herbage; they are very small, and of feeble structure and flight.

1. *amœna*, Meig. Zw. vi. 89. 1 (1830); Mcq.; Zett. Nigra, capite antico, thoracis lateribus scutello pectoreque pallide flavis, antennis, halteribus pedibusque flavis, alis limpidis, abdomine fulvo nigro-vario. Long. $\frac{3}{4}$ -1; alar. $2\frac{1}{2}$ - $2\frac{3}{4}$ lin.

Black. Head in front and beneath, sides of the thorax, scutellum, and pectus pale-yellow. Antennæ, halteres, and legs yellow. Wings limpid; veins pale testaceous. Abdomen tawny, more or less black above.

Common; may be frequently found on windows and in haystacks. (E.S.I.)

Asteia concinna, Meig., and the following additional genera and species have been recorded as British:—

LEUCOPIS, Meig.	LEPTOMYZA, Mcq.	TETHNIA, Hal.
1. puncticornis, Meig.	1. gracilis, Fal.	1. illota, Hal.
2. obscura, Hal.		

SUBFAMILY 9. PHYTOMYZIDES.

Alarum venæ subcostalis et mediastinalis conjunctæ; radialis apicem fere attingens; discalis transversa ab margine remota; areolæ pabrachialis et analis distinctæ, longæ. Metatarsi postici graciles.

Subcostal and mediastinal veins united; radial ending at much beyond three-fourths of the length of the wing; discal transverse parted by full twice its length from the border; pabrachial and anal areolæ distinct, long. Hind metatarsi slender.

The species of this subfamily are very numerous, and are all of very small size; their larvæ undermine and feed on the leaves

of many kinds of trees and herbs, which are discoloured by their ravages. Mr. Hardy and M. Goureaux have investigated the habits of several species, which are here mentioned, with the plants which they infest:—

Agromyza Macquarti, Goureaux,	feeds on	<i>Verbascum Thapsus.</i>
" Iræos, Desv.	"	<i>Iris Pseudacorus.</i>
" Medicaginis, Desv.	"	<i>Medicago sativa.</i>
" maura, Meig.	"	<i>Crepis biennis.</i>
" pusilla, Meig.	"	<i>Euphorbia Cyparissias.</i>
Phytomyza Aquifolii, Goureaux,	"	<i>Ilex Aquifolium.</i>
" Lonicerae, Desv.	"	<i>Lonicera.</i>
" Primulae, Desv.	"	<i>Primula grandiflora.</i>
" Aquilegiae, Desv.	"	<i>Aquilegia vulgaris.</i>
" Thapsi, Desv.	"	<i>Verbascum Thapsus.</i>
" Xylostei, Desv.	"	<i>Lonicera Xylosteum.</i>
" Lappæ, Goureaux,	"	<i>Arctium Lappa.</i>
" Sonchi, Desv.	"	<i>Sonchus oleraceus.</i>
" Sphondylii, Desv.	"	<i>Heracleum Sphondylium.</i>
" Ranunculi, Desv.	"	<i>Ranunculus acris.</i>
" Scolopendri, Desv.	"	<i>Scolopendrium.</i>
" geniculata, Mcq.	"	<i>Tropæolum capucinum, Pisum sativum, Crambe maritima, Papaver orientale, Matricaria officinalis, Cheiranthus Cheiri, etc.</i>
" lateralis, Fal.	"	<i>Sonchus oleraceus and Leucanthemum Chrysanthemum.</i>
" Plantaginis, Desv.	"	<i>Plantago lanceolata.</i>

Discal transverse vein	}	beyond the præbrachial transverse . . .	1. AGROMYZA.
		in a line with the præbrachial transverse,	
		or none	2. PHYTOMYZA.

Genus I. AGROMYZA.

AGROMYZA, Fal. Agromyz. (1823); Meig.; Mcq.; Westw.; Zett.

Corpus parvum aut minimum, convexum, breve, subsetosum. Antennæ breves; articulus tertius rotundus; arista setiformis, gracilis, nuda. Thorax subellipticus. *Alæ* mediocres; *vena discalis transversa præbrachiali transversa disjuncta.* Abdomen plerumque breve. Pedes graciles; unguis et onychia minima.

Body small or very minute, convex, short, thinly beset with bristles. Head generally narrower than the thorax. Eyes rather small, or of moderate size. Antennæ short; first and second joints very small;

third round; fourth and fifth obsolete; sixth setiform, slender, bare, seated on the third. Thorax nearly elliptical. Wings moderately long; costal vein ending near or at the tip of the wing; subcostal ending at about one-third of the length; radial ending at five-sixths of the length or beyond; cubital ending at the tip of the costal; præbrachial ending at the tip, or on the hind border near the tip; pabrachial complete; discal transverse straight, slightly oblique, beyond the præbrachial transverse. Abdomen with six distinct segments. Legs of moderate length, generally slender. Ungues and onychia very small.

a. Discal transverse vein parted by very little more than its length from the præbrachial transverse, and by nearly twice its length from the border.

b. Head wholly black. Species 1.

b b. Head ferruginous in front. Species 2.

b b b. Head yellow. Species 3.

a a. Discal transverse vein parted by a little more than its length from the præbrachial transverse, and by about four times its length from the border.

b. Legs black.

c. Scutellum yellow. Species 4.

c c. Scutellum black. Species 6.

b b. Legs yellow. Species 5.

a a a. Discal transverse vein parted by more than its length from the præbrachial transverse, and by more than twice its length from the border. Species 7.

1. **nigripes**, Meig. Zw. vi. 170. 7 (1830); Mcq.; Zett.—var. *reptans* var. *d. ambigua*, Fal.—*ambigua*, Zett. I. L. *Nigra*, oculis rufis, alis subcinereo-hyalinis, venis nigris, halteribus albis. Long. 1-1½; alar. 2½-3 lin.

Black, slightly shining. Eyes red. Wings slightly greyish-hyaline; veins black; costal vein ending at the tip of the wing; præbrachial ending on the hind border near the tip. Halteres white. Abdomen very little longer and narrower than the thorax. Legs rather slender.

Common. (E.)

2. **latipes**, Meig. Zw. vi. 177. 34 (1830); Zett. *Nigro-cinerea*, capite atro-bivittato antice ferrugineo, antennis piccis, thorace quadrisubcarinato, alis albis, tibiis tarsisque flavo-cinctis, maris tibiis posticis dilatatis. Long. ¾; alar. 1½ lin.

Greyish-black. Front with two deep black stripes, ferruginous towards the face. Antennæ piceous. Thorax with four slight ridges. Wings white; veins and halteres whitish. Abdomen elliptical, a little longer than the thorax. Legs black; a yellow band on each of the anterior tibiæ; first and second joints of the tarsi yellow at the base. Male. Hind tibiæ dilated. Fem. Hind tibiæ with a yellow band.

Local, or occasionally abundant. (E.)

3. **ornata**, Meig. Zw. vi. 176. 29 (1830). Læte flava, oculis rubris, capite pedibusque pallide flavis thoracis disco atro, alis limpidis, abdomine flavescente fulvo e maculis nigris trivittato. Long. 1½; alar. 2½ lin.

Bright-yellow. Head pale-yellow. Eyes bright-red. Thorax above, except the scutellum, and disc of the pectus deep-black. Wings limpid; veins black; costal vein ending at the tip of the wing; præbrachial ending on the hind border at some distance from the tip. Abdomen yellowish-tawny, with three rows of black spots. Legs pale-yellow.

Not rare. The larva occurs on the leaves of different species of *Cratægus*, where it preys on *Alcyrodes Phillyrea*, Hal.

4. **flaveola**, Fal. Agromyz. 6. 11 (1823); Meig.; Zett.—*variegata*, Meig. Nigra, capite luteo-flavo postice nigro, antennis flavis, thoracis lateribus scutelloque pallide flavis, alis sublimpidis, halteribus albidis, abdomine sordide flavo, fasciis abbreviatis apiceque nigris, tibiis basi genibusque flavis. Long. ¾-1; alar. 2-2½ lin.

Black. Head luteous-yellow, black behind. Antennæ yellow. Scutellum and sides of the thorax pale-yellow. Wings hyaline, nearly limpid, very iridescent; veins black; costal vein ending at a little in front of the tip of the wing; præbrachial ending at the tip. Halteres whitish. Abdomen dingy-yellow; a stripe of short bands and tip black. Legs black, slender; knees and tibiæ at the base yellow.

Common. (E. S. I.)

5. **pusilla**, Meig. Zw. vi. 185. 68 (1830). Nigra, capite thoracisque lateribus pallide flavis, antennis luteo-flavis, scutello albido, alis limpidis, abdominis suturis ventreque flavescens, pedibus flavis, tibiis posterioribus tarsisque piceis. Long. ½-¾; alar. 1-1½ lin.

Black. Head pale-yellow, black behind. Antennæ luteous-yellow; arista black. Sides of the thorax pale-yellow. Scutellum whitish. Wings limpid; veins black; costal vein ending at a little in front of the tip of the wing; præbrachial ending at the tip. Halteres whitish. Abdomen elongate-oval; hind borders of the segments and underside yellowish. Legs yellow; tarsi and posterior tibiæ piceous.

Common. (E. S. I.)

6. **exigua**, Meig. Zw. vi. 184. 68 (1830); Zett. Nigra, capite antico thoracisque lateribus pallide flavis, alis limpidis, halteribus albidis. Long. ¾; alar. 1 lin.

Black. Head in front and sides of the thorax pale-yellow. Antennæ black. Wings limpid; veins black; costal vein ending at a little in front of the tip of the wing; præbrachial ending at the tip. Halteres whitish. Legs black.

Common. (E. S. I.)

7. **denticornis**, Pz. Fn. 104. 22; Meig. (1830); Mcq.; Zett.—