A NEW GENUS AND SPECIES OF THE FAMILY GELECHIDAE (LEPIDOPTERA).

By August Busck,
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CREMONA, new genus.

(Plate 10, Figs. 1-5.)

Labial palpi long, recurved; second joint somewhat thickened with rough scaling, slightly furrowed in front; terminal joint shorter than the second, also somewhat thickened with scales and rough on frontal edge; apex pointed. Maxillary palpi minute. Tongue short, spiralled. Antennae simple, shorter than fore wing, slightly serrate towards the tip in the males. Face, head, and thorax smooth.

Fore wing smooth, costal and dorsal edges nearly straight and parallel; termen evenly rounded; apex bluntly pointed; 12 veins, 7 and 8 stalked to costa; 6 out of stalk of 7 and 8 to termen; 2, 3, 4, and 5 nearly equidistant; 2 and 3 from before end of cell; 9, 10, and 11 nearly equidistant; 11 from middle of cell; 9 somewhat variable, more or less approximate to stalk of 7 and 8; 1b furcate at base; 1c faint at base, outer half obsolete.

Hind wings as wide as fore wings; costa nearly straight, slightly bulging before middle; dorsum nearly straight; termen rounded, sinuate before apex; apex produced, pointed; 8 veins, 8 straight to apical third of costa; 6 and 7 long-stalked, enclosing apex; 5 much nearer to 4 than to 6, but distant from both and nearly parallel to 4; 3 and 4 variable, separate or approximate or sometimes connate; 2 parallel to 3. Posterior tibia heavily clothed with long hairs.

Male genitalia (pl. 10, fig. 5) with uncus weakly developed, short, blunt, thumb-like, with a few stiff hairs; socii undeveloped; gnathos very long, abruptly curved, with pointed apex. Harpes divided; upper arms long, slender, pointed, heavily haired on outer half; lower arms short, stout, pointed; anellus two small, triangular plates. Aedoeagus short, stout, curved, with pointed apex and with rounded base; no cornuti. Vinculum large, rounded.

Female genitalia (pl. 10, fig. 4) with short, protruding, chitinized lips to the ostium; ductus bursa rather short, chitinized in posterior end and twisted once upon itself; bursa globular, with a small, inverted, pointed signum.

Type: C. cotoneastri.

The genus is allied to *Gelechia* of authors, but differs in the venation, having vein 6 of fore wing out of stalk of 7 plus 8 and veins 3 and 4 of hind wing normally separate as in *Telphusa*, from which genus it differs in the smooth fore wings. The genitalia are typical of the family, but easily differentiated generically.

The genus Gelechia, as at present used, comprises a heterogeneous aggregation and the name must eventually be restricted to the forms agreeing with the genotype, the European Gelechia rhombella Schiffermüller, which has veins 3 and 4 of fore wings stalked (a character which may not prove dependable) but

which has very characteristic genitalia, differing essentially from those of the bulk of the species at present included in the genus, which represent several good generic groups.

Cremona cotoneastri, new species.

Labial palpi dark fuscous, flecked with ochreous, especially on inner surfaces and on terminal joint. Antennae blackish fuscous with narrow light ochreous annulations. Face light fuscous mixed with ochreous. Head and thorax dark fuscous with each scale narrowly tipped with ochreous. Fore wings uniformly dark fuscous, mixed with silvery white; each scale dark with base and extreme tip silvery; no other markings; cilia concolorous. Hind wings dark fuscous, a shade lighter than the fore wings; cilia gray. Abdomen blackish fuscous with the tips of the long protruding harpes light gray. Legs dark fuscous, tarsi with narrow ochreous annulations.

Alar expanse 12–14 mm. Habitat, Portland, Oregon.

U. S. National Museum Type No. 50252.

Foodplant, Cotoneaster horizontalis.

Reared in good series by Mr. J. R. Roaf and submitted for identification by Dr. Don C. Mote, Entomologist, Oregon State Agricultural College.

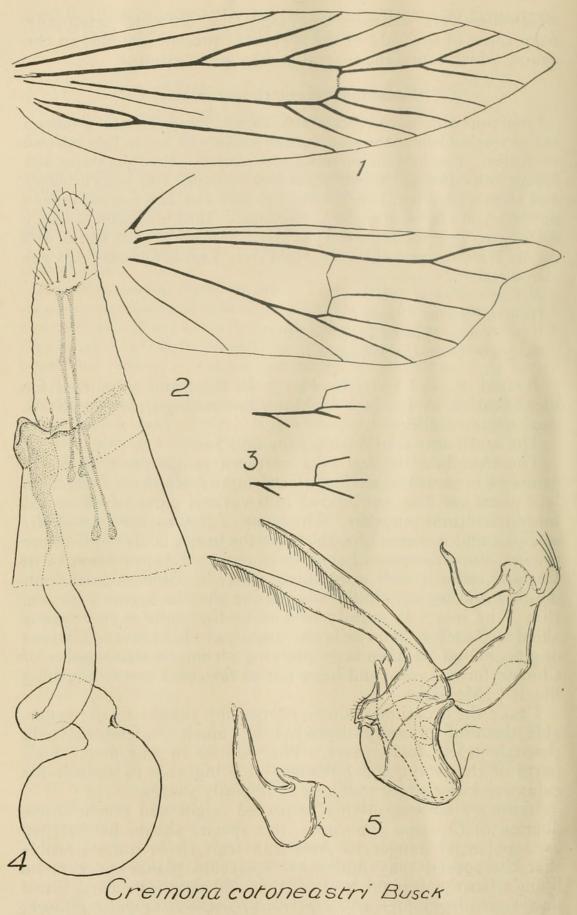
The moth appeared during June and July.

The foodplant belongs to a northern temperate Old World genus of ornamental shrubs of the family Rosaceae, which in late years has been introduced into various parts of the world for horticultural purposes. The home of *Cotoneaster horizontalis* is China and it seems probable that the insect is also of Chinese origin. For this reason I sent specimens to Edward Meyrick in England, who is well acquainted with the Chinese microlepidoptera and he has kindly advised me that he agrees with me, that "the insect is quite new and undoubtedly a new genus allied to *Gelechia*," and he is also disposed to believe it of Chinese origin, though "I have been studying a considerable number of Chinese forms lately and have not so far come across anything like it" (Meyrick).

I take the occasion again to express my thanks to the venerable dean of microlepidopterists for much professional help through nearly forty years. The workers in this field, in all parts of the world, are fortunate in being able to consult his

extensive knowledge, which he so liberally shares.

If we are correct in this suspected origin and recent introduction of *Cremona cotoneastri*, this species should be watched as a potential danger to American fruit; it is quite possible that the species may find other rosaceous plants more to its liking than the original hostplant, as did another Asiatic introduced microlepidopteron (*Laspeyresia*) *Grapholitha molesta* Busck, the well known oriental fruit moth.



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EXPLANATION OF PLATE.

Cremona cotoneastri Busck.

Fig. 1. Venation of fore wing.

Fig. 2. Venation of hind wing.

Fig. 3. Details showing variations of veins 4 of hind wing.

Fig. 4. Genitalia of female.

Fig. 5. Genitalia of male.

Figures drawn under author's supervision by Mrs. Eleanor A. Carlin of the Bureau of Entomology, U. S. Department of Agriculture.

A NEW NORTH AMERICAN MAGDALIS FROM BLUE SPRUCE (COLEOPTERA : CURCULIONIDAE)

By L. L. Buchanan, U. S. Bureau of Entomology.

The species described below was received from O. W. Collins, of the Gipsy Moth Laboratory of the Bureau of Entomology, U. S. Department of Agriculture, Melrose Highlands, Mass., who states that the specimens were reared in Massachusetts from Colorado blue spruce, *Picea pungens* Engelmann var. glauca. The figures were drawn by Mrs. E. A. Carlin. Measurements to determine length of rostrum and location of antennal socket were made along dotted lines "a" and "b" respectively, as shown in figure 3.

Magdalis piceae, new species.

Length, 3.8–4.3 mm. A rather slender species of the *gentilis* group. Moderately shining, glabrous above, black, antennal scape generally rufescent apically; pronotum with a narrow, polished, impunctate, median line which is abbreviated before and behind; femoral tooth unusually small, sometimes subobsolete on hind legs; tarsal claws simple.

Rostrum as long as, or slightly longer than, prothorax, more slender and rising more abruptly from head in female; surface shining except at base, finely and closely punctate; antennal socket slightly in front of middle (male) and at or slightly behind middle (female). Scape passing anterior eye margin in both sexes, first funicular segment a little longer and much stouter than second, which is not more, and generally less, than twice as long as wide and usually a little shorter than third and fourth together; club longer in male than in female. Head feebly alutaceous, with closely set punctures that are larger but apparently shallower than those on rostrum, interocular puncture small, eyes in male a little larger, more convex, and closer together above than in female. (In male, distance between eyes above is to width of rostrum at base as $3\frac{1}{2}$ is to 6, approximately.) Prothorax about as long as wide at middle, sides broadly and feebly rounded, divergent at hind angles, apical constriction not deep; pronotal punctures dense and scabrous at margins, becoming less dense on disk, where they are often separated by narrow but flat and shiny intervals, the



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