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A NEW AUTOGRAPHA FROM COLORADO (LEPIDOPTERA: NOCTUIDAE: PLUSIINAE)

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ABSTRACT.- Autographa flavida new sp. (Noctuidae: Plusiinae), related to Autographa speciosa Ottolengui, is described from Colorado. Adults and male genital structures of both species are illustrated.

KEY WORDS: Autographa flavida n. sp., badlands fauna, loopers, Nearctic, North America, riparian.

The noctuid subfamily Plusiinae is one of the best known groups of moths in North America. A recent revision of the subfamily in North America stated that the "plusiine fauna of America north of Mexico is relatively well known, and we do not expect that there will be many more new species added to our fauna" (Lafontaine and Poole, 1991: 9). It is against this backdrop that we report the discovery of a remarkably distinct new species of

Autographa from Colorado. In addition to its distinctive appearance, the new species is also peculiar in its unusual habitat; the type locality is a riparian grove of cottonwoods in Pool Creek Canyon in the Colorado badlands. Most species of Autographa are associated with relatively mesic habitats, especially open conifer forests. The new species is described below.

Autographa flavida Lafontaine & Dickel, new sp. (Fig. 1, 3, 5)

DIAGNOSIS.— This species can be distinguished from other species of *Autographa* by the pale yellowish color of the wings, which gives specimens a distinctive bleached appearance. The vesica shape and forewing maculation associate the species with *Autographa speciosa* but the two species are unlikely to be confused.

DESCRIPTION .- Vestiture of head and thorax pale yellow; abdomen pale yellow. Forewing length: 17-18mm; forewing ground color pale washed-out yellow with darker yellow-brown shading in subterminal area adjacent to subterminal line, in median area posterior to cubital vein, and forming a thin outline to reniform spot; transverse lines white, obscure, mainly evident due to darker shading adjacent to lines in median area and outer portion of subterminal area; antemedial line evident between posterior margin of wing and cubital vein and forming evenly concave excavation of median area; postmedial line straight, prominent below cubital vein but represented by an indistinct thin brown line between cubital vein and costa; subterminal line irregular and somewhat zigzagged, defined mainly by contrast between pale-yellow shading in terminal area and darker yellow-brown shading in subterminal area adjacent to line; stigma spot white, elbowed mesially, apex pointed, projecting towards outer margin of wing, base dividing into two white lines forming Y at cubital vein; orbicular spot absent; reniform spot rectangular, defined in brown on inner and outer sides but boarder diffuse on top and bottom; fringe yellowish white with small brown spots at apices of wing veins. Hindwing yellowing brown, slightly darker along median line; fringe yellowish white. Male genitalia (Fig. 3, 5): Valve broader than that of Autographa speciosa and clasper shorter so length of clasper 0.5 X median width of valve in A. flavida but 0.7-1.0 X median width in A. speciosa. Vesica projecting ventrad in A. flavida with diverticulum on left side 1.5 X as long as basal width of diverticulum. In A. speciosa vesica projects dorsad with ventral diverticulum 4 X as long as basal width. Female genitalia:

TYPES.- Holotype: \$\delta\$. COLORADO, Moffat Co., Dinosaur Nat'l Monument, Pool Creek Canyon near Echo Park, T7N R103W S32, 5200', 1 June 1994, Terhune S. Dickel, Collected at MV light. Deposited in National Museum of Natural History, Smithsonian Institution (USNM). Paratypes: \$\frac{2}{\delta}\$ 19. Same data as for holotype (1\$\delta\$), in Canadian National Collection (CNC); CO[lorado], Moffat Co., Dino[saur National Monument], 22 June 1993, J.F. Fowler, malaise trap (1\$\gamma\$), in CNC [\$\gamma\$ recovered from Malaise trap sample; missing antennae and abdomen]; Co[lorado], Mesa Co., 10 July 1995, Big Wash, MVL, Rt. 65, B. Kondratieff, D. Leatherman, P. Opler, E. Buchner (1\$\delta\$) in collection of Department of Entomology, Colorado State University, Fort Collins.

NOTE.— The vesica of Autographa speciosa (Fig. 6) from Oregon lacks the distinctive bubble on the right side at the base of the

and forewings of this species.

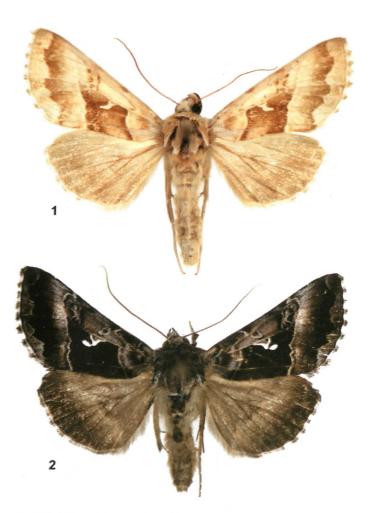


Fig. 1–2. Adults of *Autographa* species. 1, *A. flavida* new species, holotype δ , Moffat County, Colorado; 2, *A. speciosa* Ottolengui, δ , Frissel Point, Lane County, Oregon.

diverticulum that is in the specimen from British Columbia illustrated by Lafontaine and Poole (1991, Pl. D, Fig. 8). Dissection of additional material from both areas shows that this character is variable; although the bubble is more pronounced in material from British Columbia.

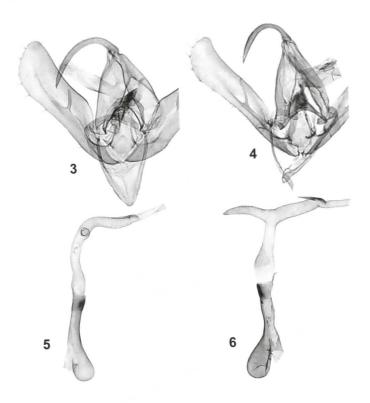


Fig. 3-6. Male genitalia of Autographa species. 3, A. flavida new species, paratype e, left valve, Moffat County, Colorado, CNC 11360; 4, A. speciosa Ottolengui, paratype &, left valve, Frissel Point, Lane County, Oregon, CNC 11927; 5, A. flavida new species, paratype &, aedeagus with vesica everted, Moffat County, Colorado, CNC 11360; 6, A. speciosa Ottolengui, 6, aedeagus with vesica everted, Frissel Point, Lane County, Oregon, CNC 11927.

ACKNOWLEDGMENTS

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