A New Species of the Genus Aldrichiomyza HENDEL (Diptera, Milichiidae) from Japan

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Reprinted from the
Japanese Journal of Entomology
Vol. 65, No. 4
Tokyo, December 25, 1997

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A New Species of the Genus Aldrichiomyza Hendel (Diptera, Milichiidae) from Japan¹⁾

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Abstract A new milichiid species, Aldrichiomyza flaviventris sp. nov., is described from Japan.

Key words: Diptera; Milichiidae; Aldrichiomyza; new species; Japan.

Introduction

The genus Aldrichiomyza Hendel, 1914, was first erected under the generic name Aldrichiella (a junior homonym) for Nearctic Aldrichiella agromyzina Hendel, 1911, and now contains three species; A. longirostris Hendel, 1931 from Egypt, A. elephas (Hendel, 1913) from Taiwan and North Korea and A. agromyzina (Hendel, 1911) from North America (Hennig, 1937; Papp, 1984; Sabrosky, 1965, 1977 and 1987). Up to the present, no species of Aldrichiomyza has been recorded from Japan. However, my recent survey on milichiid flies in Japan elucidated the occurrence of an Aldrichiomyza species which was collected at many localities from four main islands and Tsushima of Japan. This species differs from all the known species in some distinct characteristics in color patterns on the thorax and abdomen, so that I describe and illustrate it as new to scienc as follows.

Aldrichiomyza flaviventris sp. nov.

[Japanese name: Kiiro-kurokobae]

Figs. 1-6.

Fig. 1); face, facial orbit yelow; gena broad and yellow; occiput black; antennae dark yellow, 3rd segment broad and swollen distally; arista slender and pubescent (Fig. 2); palpi long, yellow, and sparsely with bristles; proboscis very long and slender (Fig. 2); labella very small; 1 oc, 2 fr (lower frontal), 2 or (1 proclinate and 1 reclinate), 2 vt, 1 pvt.

Thorax: Humeral calli yellow; prescutum black; scutum yellow in ground

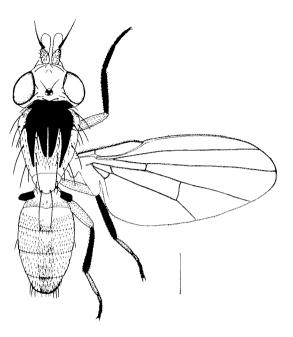


Fig. 1. Aldrichiomyza flaviventris sp. nov., male adult. Scale: 0.5 mm.

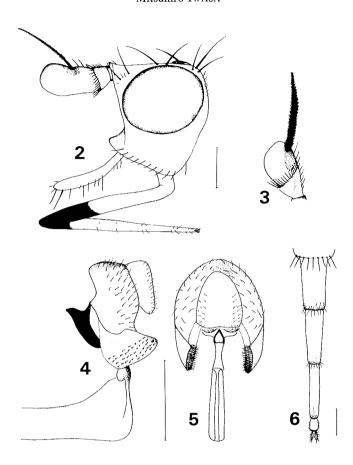
color with distinct blackish pattern which exends from prescutum to prescutellar area, and is divided into four longitudinal stripes posteriorly (Fig. 1); thoracic pleura bare and yellow, but anterior part of sternopleuron and hypopleuron dark brown; metanotum blackish brown to brown; scutellum yellow; 1 h, 2 n, 1 prest, 1 sa 1 pa, 1 ipal (intrapostalar), 4 dc, 1 b sc, 1 ap sc, 2 st; m absent. Wings: Hyaline, slightly tinged with brown; veins light brown; halteres with blackish brown knobs and yellow shafts. Legs: coxae, trochanters and femora yellow; tibiae black to dark brown; fore tarsi wholly black; middle and hind tarsi yellow, darkened distally (Fig. 1).

Abdomen: Tergites yellow, clothed with black bristles, and with a dark and obscure longitudinal stripe posterior to the middle of 2nd tergite (Fig. 1); 3rd to 4th sternites small and longitudinally slender; 5th sternite large, trapezoid-shaped, more pigmented, and with bristles; genitalia as in Figs. 4–5; surstylus broad, rounded, and covered with hairs on the inside.

 $^{\circ}$. Similar to male, but 3rd antennal segment oval and short; hairs of arista thicker and longer than male (Fig. 3); knobs of halteres yellow to light brown; 3rd to 5th sternites elongate oval, and covered with bristles; ovipositor membranous and ordinary for the genus (Fig. 6).

Holotype: ♂, Futakuchi-onsen, Akiu, Miyagi Pref., Honshu, Japan, 14 June 1996, M. Iwasa (preserved in Obihiro University of Agriculture and

¹⁾ Contribution No. 170 from the Laboratory of Entomology, Obihiro University of Agriculture and Veterinary Medicine.



Figs. 2-6. Aldrichiomyza flaviventris sp. nov., 2, male head, lateral view; 3, female antenna, lateral view; 4, male genitalia, lateral view; 5, ditto, posterior view; 6, female ovipositor, dorsal view. Scales: 0.25 mm.

Veterinary Medicine). Paratypes: [Hokkaido]–5\$\sigma\$, 1\$\cop\$, Hakodate, 25–27 July 1949, Y. NISHIJIMA; 2\$\sigma\$, 1\$\cop\$, Yamabe, 28 June 1960, K. Kamijo; 1\$\cop\$, Sapporo, 3 July 1964, S. Takagi. [Honshu]–3\$\sigma\$, 10\$\cop\$, same data as holotype; 1\$\sigma\$, 2\$\cop\$, same locality, 13 June 1996, M. Iwasa; 1\$\sigma\$, Toyama Pref., 1 Sept. 1953, S. Takagi; 4\$\sigma\$, 8\$\cop\$, Kibune, Kyoto, 25 Apr. 1955, M. Sasakawa; 2\$\sigma\$, same locality, 15 May 1953, M. Sasakawa; 2\$\sigma\$, 6\$\cop\$, Kumogahara, Kyoto, 12 June 1955, M. Sasakawa; 1\$\sigma\$, Kusama, Okayama Pref., 14 June 1953, K. Koizumi. [Shikoku]−1\$\cop\$, Matsuyama, Ehime Pref., 25 May 1967, H. Shima. [Kyushu]−2\$\cop\$, Nii, Tsushima Is., Nagasaki Pref., 20 Sept. 1972, K. Kanmiya; 1\$\cop\$, Mt. Hikosan, Fukuoka Pref., 5 July 1966, S. Kimoto.

Distribution. Japan (Hokkaido, Honshu, Shikoku, Kyushu and Tsushima).

Bionomics. Unknown. The adult flies were collected on the leaves of shrub around decayed prawn used as a bait-trap attracting flies on 14 June of 1996 in the type-locality above mentioned.

Remarks. This new species resembles A. agromyzina (HENDEL), but it distinctly differs from the latter in having yellow abdominal tergites in both sexes and blackish halteres in male. This species is also easily distinguishable from A. longirostris HENDEL and A. elephas (HENDEL) in having the characteristic pattern of black and yellow in mesonotum.

Acknowledgements

I wish to express my sincere thanks to Drs. M. Suwa and S. Takagi of Hokkaido University, Y. Nishijima of the Laboratory of Insect Natural History In Hokkaido, A. Iwasaki of Kitami Agricultural Experiment Station, M. Sasakawa of Kyoto Prefectural University, K. Kanmiya and S. Kimoto of Kurume University, H. Shima of Kyushu University, for their kindness in offering the valuable materials. My hearty thanks are also due to Prof. K. Hori of Obihiro University of Agriculture and Veterinary Medicine for his continuous encouragements.

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(Received September 14, 1996; Accepted October 5, 1997)