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## New Records of Three Boreal Leafhoppers (Homoptera, Cicadellidae) from Japan

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Key words: Homoptera; Cicadellidae; Japan; new record.

The depositories of material examined are abbreviated as follows: [NSMT] National Science Museum, Tokyo; [NIAES] National Institute of Agro-Environmental Sciences, Tsukuba; [SUU] Saitama University, Urawa. I am much indebted to Dr. M. TOMOKUNI (NSMT), Mr. K. KONISHI (NIAES) and Prof. M. SATÔ (Nagoya Women's University, Nagoya) for loan or donation of valuable material.

### Aphrodinae

*Anoscopus flavostriatus* (DONOVAN, 1799)

The striped leafhopper, widely known to the Holarctic Region southward to the Russian Maritime Territory, is collected from eastern Hokkaido, Japan, for the first time. The female dorsum is densely dark mottled.

*Specimens examined.* 28 ♀ (SUU), Mitsumata, Kami-shihoro, Hokkaido, 24. VIII. 1995, M. HAYASHI *et al.*; 2♂ 5 ♀ (SUU), Iwabokki, Kushiro Marsh, Hokkaido, 26. VIII. 1990, M. SATÔ; 1 ♀ (SUU), Kirakotan, Kushiro Marsh, 25. VIII. 1990, M. SATÔ; 1 ♀ (SUU), Poroto, Hamanaka, Hokkaido, 31. VIII. 1995, M. HAYASHI & H. YAMADA; 1 ♀ (NSMT), Wakasakanai, Sarobetsu-kenya, Tesho-gun, Hokkaido, 24. VIII. 1977, M. TOMOKUNI.

Body length: ♂, 3.4–3.6 mm; ♀, 4.2–4.6 mm.

*Aphrodes bicinctus* (SCHRANK, 1776)

This insect has hitherto been known from the Palearctic Region (eastward to the Russian Maritime Territory, Sakhalin and the S. Kuriles) and N. America, and it is here recorded from Hokkaido for the first time.

*Specimens examined.* 12♂ 32 ♀ (SUU), Mitsumata, Kami-shihoro, Hokkaido, 24. VIII. 1995, M. HAYASHI *et al.*; 1♂ 1 ♀ (NSMT), Kawayu Spa, Teshikaga, Hokkaido, 1. X. 1993, M. TOMOKUNI; 3♂ 3 ♀ (SUU), Kitoushi, Kushiro-cho, Hokkaido, 31. VIII. 1995, M. HAYASHI & H. YAMADA; 1♂ (SUU), Poroto, Hamanaka, Hokkaido, 31. VIII. 1995, M. HAYASHI & H. YAMADA; 1 ♀ (SUU), Habomai, Nemuro, Hokkaido, 1. IX. 1995, M. HAYASHI *et al.*; 3♂ (SUU), Onnemoto, Nemuro, 1. IX. 1995, M. HAYASHI *et al.*; 5 ♀ (SUU), Onnebetsu, Shari, Hokkaido, 2. IX. 1995, M. HAYASHI *et al.*; 2 ♀ (NSMT), Megumagenseikaen, nr. Wakkanai, Hokkaido, 25. VIII. 1977, M. SATÔ.

Body length: ♂, 4.7–5.7 mm; ♀, 6.5–7.8 mm.

Typhlocybinae

*Notus insularis* ANUFRIEV, 1979

This yellow-colored leafhopper, belonging to the tribe Dikraneurini, was described from the S. Kuriles (Kunashir, Shikotan and Iturup), and it is recorded from eastern Hokkaido and northern Honshu for the first time. This leafhopper inhabits cyperaceous grasslands growing on high-moor.

*Specimens examined.* [Hokkaido] 11♂ 24 ♀ (SUU), Onnenai, Kushiro Marsh, 12–13. VII. 1992, M. HAYASHI *et al.*; 23♂ 21 ♀ (SUU), same data except 29. VIII. 1995; 2 ♀ (SUU), Akanuma, Kushiro Marsh, 13. VII. 1994, M. HAYASHI *et al.*; 3♂ 2 ♀ (SUU), same data except 29. VIII. 1995; 4♂ 18 ♀ (SUU), Iwabokki, Kushiro Marsh, 29. VIII. 1995, M. HAYASHI *et al.*; 81♂ 52 ♀ (SUU), Bettoga, Nemuro, 14. VII. 1994, M. HAYASHI *et al.*; 24♂ 10 ♀ (SUU), Cape Ochiishi-misaki, Nemuro, 15. VII. 1992, M. HAYASHI *et al.*; 2 ♀ (SUU), Rausu-ko, Shiretoko, Rausu, Hokkaido, 2. IX. 1995, M. HAYASHI *et al.* — [Honshu] 1♂ (NIAES), Kami-Tashiro, Oze, Gumma Pref., 17. VII. 1950, I. HATTORI.

Body length (to tip of folded forewing): ♂ ♀, 3.8–4.1 mm.

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