

Chloropidae (Diptera) from the Akasaka Imperial Gardens, Tokyo

By

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上宮健吉¹⁾: 赤坂御用地のキモグリバエ科 (双翅目)

Introduction

Flies of the family Chloropidae are very common in grasslands, marshes, and the low vegetation in forests, and they may be collected in large numbers from fields of gramineous plants. They are readily recognizable by a large plate-like ocellar triangle, as indicated by their common name of “frit flies”. They are characterized by a peculiar flexure near the middle of the discal cell in wing vein M_{1+2} and by having only a subcostal break in the costa. The larvae are mainly phytophagous and saprophagous, sometimes carnivorous, and rarely exoparasitic predators of root aphids, eggs of spiders and mantids.

At present, a total of 19 chloropid species have been enumerated in Tokyo, excluding the islands included in the administrative district of Tokyo, by Kanmiya (1971, 1977, 1978, 1983, 1989) and Hayashi and Shinonaga (2000). The Imperial Palace is located in the central part of Tokyo Metropolis. A well-preserved area of natural vegetation occupies the greater part of the 115-ha Imperial Palace complex. Investigations of the Imperial Palace fauna conducted by the National Science Museum, Tokyo from 1996 to 2000 identified four chloropid species (Hayashi & Shinonaga, 2000). The present taxonomic study uses samples collected at the Akasaka Imperial Gardens by a Malaise trap (MT) or by net sweeping during a survey in 2002–2003.

Enumeration of species collected from the Akasaka Imperial Gardens in 2002–2003

1. *Rhodesiella yamagishii* Kanmiya, 1983 [Yamagishi-morino-kimoguribae] (Fig. 1–L, M, Fig. 2–A)
Rhodesiella yamagishii: Hayashi & Shinonaga, 2000: 455 (Tokyo).
Specimens examined. Akasaka Imperial Gardens: 1 ♀, 5.ii.2003, S. Shinonaga; 1 ♂, 18. iii.2003, S. Shinonaga; 1 ♂, 1.vi.2003, MT; 4 ♀, 10.vi.2003, MT; 1 ♂, 24.vi.2003, MT; 1 ♂, 29.vii.2003, S. Shinonaga; 1 ♂ 1 ♀, 16.ix.2003, MT; 1 ♂ 1 ♀, 18.xi.2003, S. Shinonaga. Tokiwamatsu, Shibuya-ku, Tokyo: 1 ♂, 1.vii.2003, MT.
Distribution. Japan (Honshu, Kyushu, Tsushima Is., Nansei Is.); Taiwan.
Remarks. Characterized by large body size (nearly 3 mm in total length), polished violet-blue to indigo-blue ocellar triangle with a broad anterior margin, and subconical scutellum with a pair of black

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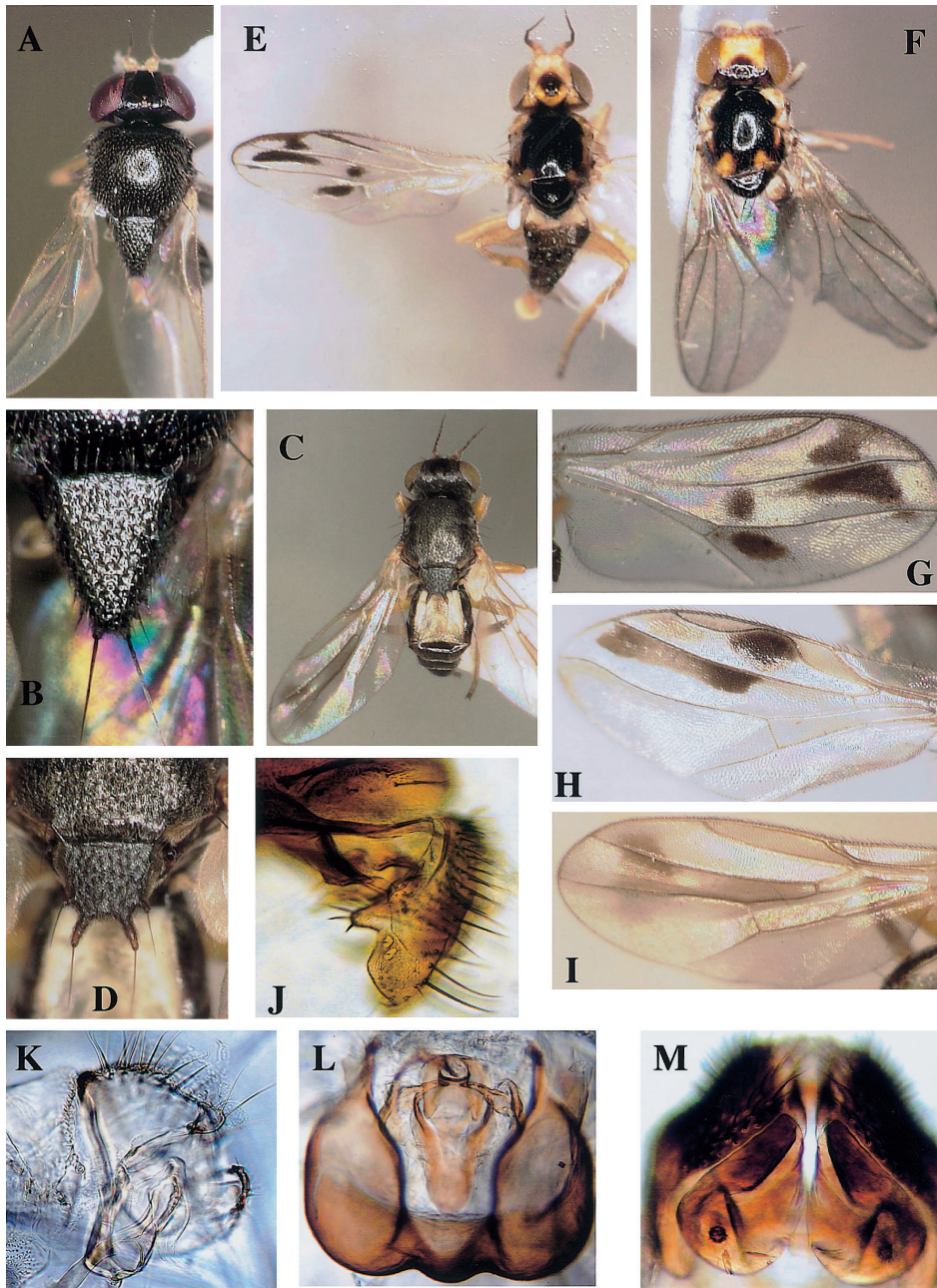


Fig. 1. A: *Rhodsiella* sp. 1, male; B: ditto, close-up of scutellum; C: *Disciphus subelongatus* Kanmiya, male; D: ditto, close-up of scutellum; E: *Gampsocera numerata* (Heeger), male; F: ditto, female; G: ditto, male wing; H: *Gampsocera magnisinuosa* Kanmiya, male wing; I: *Disciphus (Discadrema) subelongatus* Kanmiya, male wing; J: *Rhodsiella nitidifrons* (Becker) male genitalia, lateral view; K: *Gampsocera numerata* (Heeger) male genitalia, lateral view; L: *Rhodsiella yamagishii* Kanmiya, male genitalia, ventral view; M: ditto, dorsal view.

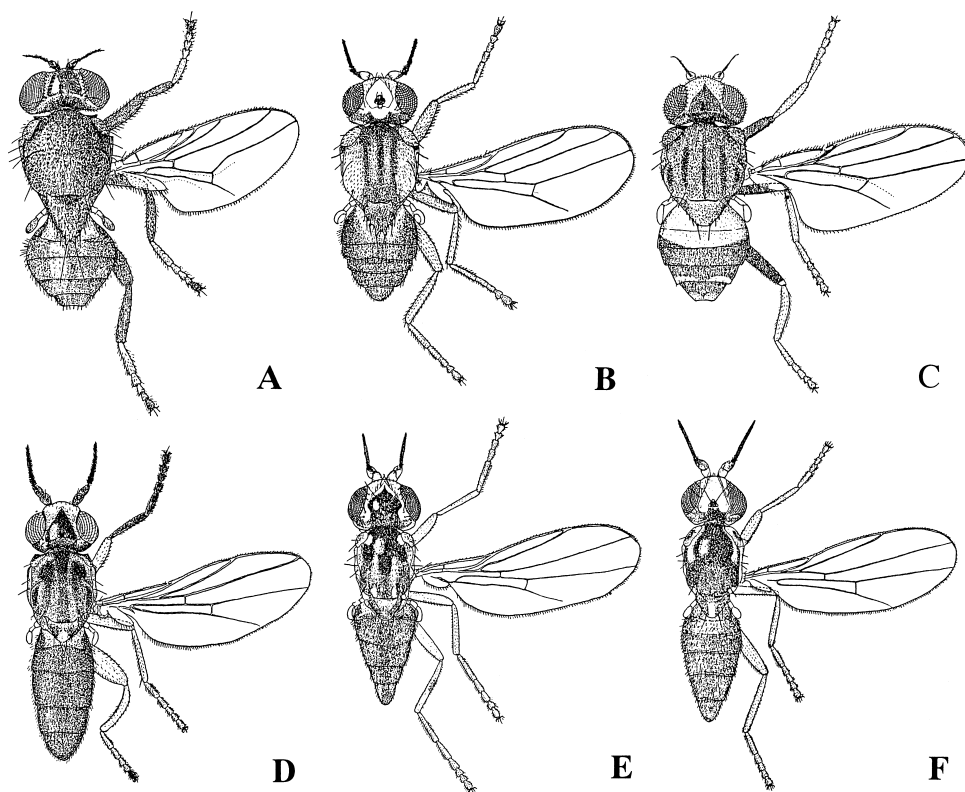


Fig. 2. A: *Rhodesiella yamagishii* Kanmiya; B: *Elachiptera sibirica* (Loew); C: *Meijerella inaequalis* (Becker); D: *Pachyrophus rufescens* (de Meijere); E: *Steleocerellus cornifer* (Becker); F: *Steleocerellus ensifer* (Thomson).

apical scutellar setae on small black tubercles. The male hind tibia is not strongly thickened and has two basoventral black spurs. The fore tarsus is darkened on the last two segments, and mid- and hind tarsi are darkened on the last (mistyped as "Ist" in Kanmiya 1983) segment. Cherian (2002) synonymized *R. yamagishii* with *R. hirtimana* (Malloch) of Java, and redescribed the species based on the Indian materials. In his description and figures, I found several differences between *R. hirtimana* of India and *R. yamagishii* of Japan and Taiwan. The 2nd costal section is distinctly shorter in *R. yamagishii*, making the 3rd costal section about 2.4–2.8 times as long as the 2nd compared to a ratio of 1.7–1.8 in *R. hirtimana* of India. The ultimate section of M_{1+2} is strongly concave in *R. yamagishii*, with the deepest point at the basal 1/5, whereas the figure of wing venation in *R. hirtimana* of Cherian shows it not so concave. In addition to these morphological differences, I do not accept the proposal of synonymous species by Cherian (2002) based on the absence of *R. yamagishii* specimens in searches of rather rich collections from Nepal, Pakistan, India, Sri Lanka, Thailand, Indonesia, Hong Kong and the Philippines.

2. *Rhodesiella nitidifrons* (Becker, 1911) [Himetsuya-morino-kimoguribae] (Fig. 1–J)

Specimens examined. Akasaka Imperial Gardens: 2 ♀, 10.vi.2002, MT; 1 ♀, 2.ix.2003, MT; 2 ♂, 15.x.2003, S. Shinonaga; 1 ♂ 1 ♀, 18.xi.2003, S. Shinonaga.

Distribution. Japan (Honshu, Kyushu, Tsushima Is., Nansei Is.); Taiwan, Java, India.

Remarks. The genus *Rhodesiella* is a forest insect, rich in species in the broad-leaved forests of the Afrotropical, Oriental, and Southern parts of the Far East. The larvae are saprophagous, feeding on various decaying botanical matters and fungi. As shown in Fig.1-J, the present species is characterized by a male surstylus having two transparent slits on the antero-basal corner in lateral view.

This is the first record of this species from Honshu.

3. *Rhodesiella simulans* Kanmiya, 1983 [Nisekuro-morino-kimoguribae]

Rhodesiella simulans: Hayashi & Shinonaga, 2000: 455 (Tokyo).

Specimen examined. Akasaka Imperial Gardens: 1♂, 11.x.2002, MT.

Distribution. Japan (Honshu, Nansei Isls.).

Remarks. Characterized by a polished metallic blue ocellar triangle, infuscated scape and pedicel of the antenna, and blackened femora and tibiae. Similar in these characteristics to *R. scutellata* (de Meijere), and distinguished by less strongly thickened male hind femur and a highly shortened 2nd costal section, to about 1/3 of the 3rd. This species had been exclusively known from the Nansei Islands until Hayashi and Shinonaga (2000) recorded this species at the Imperial Palace, Tokyo. The present record indicates constant distribution of the species in Honshu, despite its absence on the main islands of Kyushu, Chugoku, and Shikoku.

4. *Rhodesiella* sp.1 [Musashino-morino-kimoguribae] (Fig. 1-A, B)

Specimens examined. Akasaka Imperial Garden: 1♂, 18.xi.2003, S. Shinonaga.

Distribution. Japan (Tokyo).

Remarks. This species may be new to Japan. A combination of the following characters gives identification as *R. fedtshenkoi* Nartshuk in the key to species of the genus from Japan (Kanmiya 1983): yellow scape and pedicel of antenna, darkened legs and all femora except for yellow knees, entirely yellow tibiae and tarsi, and halter yellow on knob. The present species is, however, well separated from *R. fedtshenkoi* by much elongate-conical scutellum and narrower apex. Additional material is necessary to make more detailed examination and description.

Genus *Disciphus* Becker

Disciphus Becker, 1911: 98. Type-species: *Disciphus peregrinus* Becker, by designation of Sabrosky, 1941.

Discadrema Yang et Yang, 1989: 50. Type-species: *Discadrema sinica* Yang et Yang. **New subgenus of *Disciphus* Becker.**

Yang & Yang (1989) proposed a genus *Discadrema* for a Chinese species by emphasizing the apical elongate scutellar projections and the hind femur with an apical spur, and treated *Disciphus subelongatus* Kanmiya of Japan as a new combination for the genus. I have examined types or type-series of the genus *Disciphus* Becker from the Oriental Region (*alatus* Becker from Java, *peregrinus* Becker from Taiwan, *flavitaris* Duda from Taiwan), and compared with *subelongatus* Kanmiya and *Discadrema sinica*. Consequently, I recognize *Disciphus* Becker as a monophyletic genus having the following character combination: ocellar triangle extending to anterior margin of frons with slightly convex lateral margins; interfrontal setae just inside the ocellar triangle; many reclinate orbital setae; blackened, shagreened and pruinose mesonotal dorsum; trapezoid scutellum flattened, bearing a pair of elongate apical projections that are more prominent than those of *Elachiptera*; one or two opaque fuscous long maculae along the first posterior cell and discal cell of the wing; legs with largely infuscated fore tibia and tarsus; abdomen with much elongated 1+2 syntergite and membraneous on dorsum.

5. *Disciphus (Discadrema) subelongatus* Kanmiya, 1983 [Oh-tsunomune-kimoguribae] (Fig. 1-C, D, I)

Specimen examined. Akasaka Imperial Gardens: 1♂, 25.xi.2002, MT.

Distribution. Japan (Kyushu, Honshu).

Remarks. This species has very seldom been captured, and this is the first record of this species from Honshu.

6. *Elachiptera sibirica* (Loew, 1858) [Higebuto-kimoguribae] (Fig. 2–B)

Elachiptera sibirica: Hayashi & Shinonaga, 2000: 455(Tokyo).

Specimens examined. Akasaka Imperial Gardens: 1♂, 6.xii.2002, MT; 1♀, 21.i.2003, MT; 1♀, 13.xi.2003, S. Shinonaga.

Distribution. Japan (Hokkaido, Honshu, Shikoku, Kyushu, Tsushima Is.); Taiwan, S. China, Amur, Ussuri, Siberia, Sakhalin, Kuril Isls., Europe.

Remarks. The present species is widely distributed in the Palaearctic Region with wide color variation in the ocellar triangle and mesonotal dorsum. Kanmiya (1983) revised *E. nigroscutellata* Becker (Taiwan) and *E. insignis* nec Thomson (China, Mongolia, and Japan) as being synonymous with the present species by color variation.

7. *Elachiptera insignis* (Thomson, 1869) [Nise-higebuto-kimoguribae]

Specimens examined. Akasaka Imperial Gardens: 1♀, 1.vi.2003, MT; 1♀, 10.vi.2003, S. Shinonaga; 3♂2♀, 30.vi.2003, S. Shinonaga.

Distribution. Japan (from Hokkaido to Nansei Isls.); Taiwan, China, Primorski Krai.

Remarks. The larvae of the present species and *Elachiptera sibirica* are secondary invaders of decaying shoots and stems of gramineous plants damaged by orthopteran or lepidopteran insects.

8. *Gampsocera numerata* (Heeger, 1858) [Kita-monhigebuto-kimoguribae] (Fig. 1–E, F, G, K)

Specimens examined. Akasaka Imperial Gardens: 1♀, 11.x.2002, MT; 1♀, 25.xi.2002, MT; 1♀, 6.xii.2002, MT; 1♂1♀, 1.iv.2003, MT; 1♂, 15.iv.2003, MT; 2♀, 29.vii.2003, MT).

Distribution. Japan (Honshu); Palaearctic Region.

Remarks. The genus *Gampsocera* Schiner consists of 31 species with worldwide distribution (Sabrosky 1977 and his unpublished data 1985, Kanmiya 1989). Most (26 species) have been recorded from the Oriental Region, including 3 Japanese species. Only two species (the present species from Europe) and *G. hedini* Enderlein (from China) had been known from the Palaearctic Region until description of *G. magnisinuosa* Kanmiya and *G. tenuisinuosa* Kanmiya from Japan (Kanmiya 1983). Tamaki (1997) added the present species from Saitama Pref. as the third species from Japan. The larvae of this genus may be saprophagous, feeding on decaying plant tissues. Kanmiya (1989) recorded a Hawaiian species reared from rotting stems of banana, papaya and *Wikstroemia* sp. Not a few number of *numerata*-specimens were collected in this occasion, in spite of very rare past record in individual number. The natural environment of the Akasaka Imperial Gardens is considered to be a rich soil biotope with sufficient moisture and nutrients.

9. *Gampsocera magnisinuosa* Kanmiya, 1983 [Yumi-monhigebuto-kimoguribae] (Fig. 1–H)

Specimens examined. Akasaka Imperial Garden: 1♀, 6.xii.2002, MT; 1♂, 16.ix.2003, MT). Akasaka Imperial Ground: 2♂, 18.iii.2003, S. Shinonaga.

Distribution. Japan (Honshu, Kyushu, Tsushima Is., Nansei Isls.).

Remarks. The present genus often displays prominent sexual dimorphism in the shape and color of arista, as well as the venation and maculation of the wing. As shown in Fig. 1–E, G, H, the male is characterized by having several dark maculae. The present species is most characteristic in having a strong curvature in vein R₂₊₃.

This is the first record of this species from Honshu.

10. *Dicraeus rossicus* Stackelberg, 1955 [Roshia-sasanomi-moguribae]
Dicraeus rossicus: Kanmiya, 1971: 177 (Tokyo).
 Specimens examined. Akasaka Imperial Gardens: 6♂, 13.v. 2002, S. Shinonaga.
 Distribution. Japan (Honshu, Kyushu, Tsushima Is.); European part of Russia, Siberia, Primorski Krai, Mongolia.
 Remarks. The larvae are known to feed on young seeds of *Agropyron caninum* (Linn.) Beauv. [Ibuki-kamojigusa].
11. *Dicraeus phyllostachyus* Kanmiya, 1971 [Oh-sasanomi-moguribae]
Dicraeus phyllostachyus: Kanmiya, 1971: 166 (Tokyo), Hayashi & Shinonaga, 2002: 455 (Tokyo).
 Specimens examined. Akasaka Imperial Gardens: 1♂1♀, 15.iv.2003, MT.
 Distribution. Japan (Honshu, Shikoku, Kyushu, Tsushima Is., Nansei Isls.).
 Remarks. Known host plants are *Phyllostachys*, *Sasa* and *Pleioblastus* spp. during flowering periods (Kanmiya 1971, 1995). The newly hatched larvae feed on anthers and pollen tubes of host plants, and remain on these organs up to the 2nd nymph stage when they enter the plant ovary and attain the final instar larvae. Adults are characterized by weakly shagreened mesonotum thinly covered with brownish pruinosity, and are well distinguished from similar species, *D. nartshukae* Kanmiya, which bears subshining and smoother mesonotum.
12. *Caviceps orientalis* (Becker, 1924) [Minami-hirokuchi-kimoguribae]
Caviceps orientalis: Kanmiya, 1983: 157 (Tokyo)
 Specimens examined. Akasaka Imperial Gardens: 1♀, 10.vi.2003, 1♀, 8.vii.2003, 2♀, 16.ix.2003, 1♀, 30.ix.2003, MT. Tokiwamatsu, Shinjyuku-ku, Tokyo: 1♀, 4.vi.2003, 1♀, 11.x.2003, MT.
 Distribution. Japan (Honshu, Kyushu, Tsushima Is., Nansei Isls.); Taiwan.
 Remarks. This species is characterized by an undefined ocellar triangle restricted only to the small black ocellar tubercle, an entirely yellow antennae with the first flagellomere being deeper than long, a weak dorsodistal corner, a yellow mesonotum with four thin pruinose black stripes and yellow hairs universally.
13. *Meijerella inaequalis* (Becker, 1911) [Ajia-kobukata-kimoguribae] (Fig. 2-C)
 Specimens examined. Akasaka Imperial Gardens, Tokyo: 4♂, 11.x.2002, MT; 1♂, 6.xii.2002, MT; 1♂, 18.iii.2003, S. Shinonaga; 1♂, 1.iv.2003, MT.
 Distribution. Japan (Honshu, Shikoku, Kyushu, Tsushima Is., Nansei Isls.); widely distributed in the Oriental Region.
 Remarks. This species is characterized by small body size, an entirely dusty black ocellar triangle with poor marginal demarcation, 2 rows of interfrontal setae, thickly pruinose gray mesonotum with 3 narrow chocolate-brown stripes. The present species has often been obtained by sweeping in paddy fields.
14. *Pachyrophus rufescens* (de Meijere, 1904) [Minami-ohhige-asibuto-kimoguribae] (Fig. 2-D)
Pachyrophus rufescens: Kanmiya, 1983: 351 (Tokyo).
 Specimens examined. Akasaka Imperial Gardens: 2♂3♀, 30.iv.2002, S. Shinonaga; 1♂, 2♀, 13.v. 2002, S. Shinonaga; 2♂, 3♀, 8.ix.2003, S. Shinonaga; 2♂, 15.x.2003, S. Shinonaga.
 Distribution. Japan (Honshu, Kyushu); Taiwan, Philippines, Indonesia, Viet Nam, Cambodia, Burma, Thailand, Sri Lanka, India, Pakistan, Nepal, Australia.
 Remarks. This species is characterized by the pedicel of the antenna being longer than deep, a first flagellomere reniform with a terminal arista thickened by dense pubescence, and a greatly enlarged hind femur. The larvae of this species may be saprophagous, as many adults are often obtained from

fields of gramineous plants.

15. *Steleocerellus cornifer* (Becker, 1911) [Minami-tachiduno-kimoguribae] (Fig. 2-E)
 Specimens examined. Akasaka Imperial Gardens: 1 ♀, 8.x.2002; 2 ♀, 15.x.2003, S. Shinonaga.
 Distribution. Japan (Honshu, Kyushu, Tsushima Is., Goto Is., Nansei Is.); Taiwan, S.W. China, Africa.
 Remarks. Larvae are saprophagous, feeding on decayed plants tissues of *Setaria*, *Sasa*, *Arundinaria*, *Phragmites*, and rice (Kanmiya 1983).
16. *Steleocerellus ensifer* (Thomson, 1869) [Ajia-tachiduno-kimoguribae] (Fig. 2-F)
Mepachymerus ensifer: Kanmiya, 1977: 61 (Tokyo).
 Specimen examined. Akasaka Imperial Gardens: 1 ♀, 30.vi.2003, S. Shinonaga.
 Distribution. Japan (Honshu, Kyushu, Tsushima Is., Nansei Is.); Ussuri, Taiwan, Philippines, S. China, Viet Nam, Indonesia, Thailand, Sri Lanka, India, Nepal.
 Remarks. The larvae are saprophagous, reared from decayed stems of reed, *Phragmites communis* Trin. (Kanmiya, 1977). This species is distinguished from *Steleocerellus cornifer* by the lack of any small yellow spots on the mesoscutum posterior to the humeral callus and the anterolateral corners of the scutellum.

Discussion

Prior to this study, only 19 species of the Chloropidae family had been recorded from Tokyo. As shown in the updated species list, 8 species comprising 6 genera (Nos. 20–27) were newly recognized in the present study. Consequently, the Chloropidae species in Tokyo now number 27 and are distributed among 9 genera of the subfamily Oscinellinae and 6 genera of the subfamily Chloropinae. A total of 16 of these species are known to be distributed in the Imperial Palace and Akasaka Imperial Gardens, Tokyo, and it is notable that 13 of these 16 species belong to genera of the subfamily Oscinellinae. This differs from the findings of Kanmiya (1983), as specimens from 26 genera (85 species) of Oscinellinae and 26 genera (65 species) of Chloropinae were enumerated in that monographic study of the Japanese Chloropidae. The very high distribution of Oscinellinae may be related to the surrounding habitat. Namely, the four species of *Rhodesiella* (Nos. 18–21) and two species of *Gampsocera* (Nos. 24–25) are saprophagous Oscinellinae, which are typically found in the shady areas of deep broadleaf forests. In addition, two species of *Elachiptera* (Nos. 17 and 23) and *Meijerella inaequalis* (No. 26) of Oscinellinae, and *Steleocerellus cornifer* (No. 27) of Chloropinae are saprophagous and are secondary invaders of decayed plant tissues. Phytophagous species included *Dicraeus phyllostachyus* and *D. rossicus* whose larvae feed on the ovary tissue of bamboo and *Sasa*, and *Pachylophus rufescens*, whose larvae feed on gramineous plants.

In conclusion, the Imperial Palace and Akasaka Imperial Garden are inhabited by dwellers typical of broad-leaf forests rich in organic matter and small open fields gramineous plant species. These saprophagous species have a origin of Oriental genera, and are inhabitants of broad-leaf forests.

List of Chloropidae from Tokyo (excluding Islands)

- 1) *Dicraeus rossicus* Stackelberg: Kanmiya 1971 (Mt. Takaosan); present study.
- 2) *Dicraeus phyllostachyus* Kanmiya: Kanmiya 1971 (Mt. Takaosan); Hayashi & Shinonaga 2000 (Imperial Palace); present study.
- 3) *Dicraeus fuscipennis* Kanmiya: Kanmiya 1971 (Mt. Takaosan).
- 4) *Dicraeus nitidiventris* Kanmiya: Kanmiya 1971 (Mt. Takaosan).
- 5) *Steleocerellus ensifer* (Thomson): Kanmiya 1977 (Mt. Takaosan, Nishigahara, Yaho, Yugi,

- Tachikawa, Nerima); present study.
- 6) *Chlorops stigmatellus* Becker: Kanmiya 1978 (Tachikawa).
 - 7) *Chlorops brevipennis* Loew: Kanmiya 1978 (Takaido, Tama, Yaho).
 - 5) *Chlorops oryzae* Matsumura: Kanmiya 1978 (Mt. Takaosan); Kanmiya 1983 (Yugi)
 - 9) *Gaurax longipalpis* Kanmiya: Kanmiya 1983 (Mt. Takaosan).
 - 10) *Caviceps orientalis* (Becker): Kanmiya 1983 (Mt. Takaosan); present study.
 - 11) *Pachylophus rufescens* (de Meijere): Kanmiya 1983 (Mogusaen, Yugi, Asakawa, Nishigahara, Mt. Takaosan); present study.
 - 12) *Thaumatomyia notata* (Meigen): Kanmiya 1983 (Mt. Takaosan, Yaho).
 - 13) *Chloropsina kurilensis* (Nartshuk): Kanmiya 1983 (Mt. Takaosan).
 - 14) *Terusa frontata* (Becker): Kanmiya 1983 (Meguro).
 - 15) *Siphunculina simulata* Kanmiya: Kanmiya 1989 (Ohtaku).
 - 16) *Siphunculina saigusai* Kanmiya: Kanmiya 1989 (Hatsudai).
 - 17) *Elachiptera sibirica* (Loew): Hayashi & Shinonaga 2000 (Imperial Palace); present study.
 - 18) *Rhodesiella yamagishii* Kanmiya: Hayashi & Shinonaga 2000 (Imperial Palace); present study.
 - 19) *Rhodesiella simulata* Kanmiya: Hayashi & Shinonaga 2000 (Imperial Palace); present study.
 - 20) *Rhodesiella nitidifrons* (Becker): present study.
 - 21) *Rhodesiella* sp. 1: present study.
 - 22) *Disciphus* (*Discadrema*) *subelongatus* Kanmiya: present study.
 - 23) *Elachiptera insignis* (Thomson): present study.
 - 24) *Gampsocera numerata* (Heeger): present study.
 - 25) *Gampsocera magnisinuosa* Kanmiya: present study.
 - 26) *Meijerella inaequalis* (Becker): present study.
 - 27) *Steleocerellus cornifer* (Becker): present study.

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要 約

東京都の赤坂御用地で 2002–2003 年に国立科学博物館の調査で採集されたキモグリバエ科標本を分類学的に調査した。関東地方はキモグリバエ科の昆虫相が九州や南西諸島と比べて十分にこなされてこなかった。Kanmiya (1971, 1977, 1978, 1983, 1989) および林・篠永 (2000) によって記録された東京都 (島嶼を除く) のキモグリバエ科は 19 種に過ぎず、関東地方で比較的良く調査されている埼玉県のキモグリバエ科 (玉木, 2000) の 32 種よりも少ない。今回、赤坂御用地から 16 種のキモグリバエ科が記録され、その中の 8 種が東京都から初めて記録された。その結果、東京都から記録された種は合計 27 種に達した。今回の調査で得られた赤坂御用地のキモグリバエ科の特徴は、旧熱帯区や東洋区に繁栄して、九州以南に多くの種が分布する属の存在である。その中で、*Rhodesiella* 属では、*R. yamagishii*, *R. nitidifrons*, *R. simulata*、および日本未記録の *R. sp. 1* の 4 種が計上された。また、*Disciphus*, *Caviceps*, *Meijerella*, *Pachylophus* の各属に含まれる種も熱帯系で、記録された種は九州、南西諸島から東洋区に広く分布する種である。さらに、*Elachiptera cornifer* と *Steleocerellus cornifer* も東洋区に広く分布している種である。一方、旧北区系の種は *Gampsocera numerata* と *Dicraeus rossicus* の 2 種に過ぎない。*D. rossicus* はイネ科植物の若い種子に侵入する種である。*G. numerata* はヨーロッパと共通

種で、広葉樹林の林床に棲息し、幼虫の餌は植物由来の腐食有機質で、日本では非常に稀にしか採集されていないが、赤坂御用地では8個体が得られた。*Gampsocera magnisinuosa* は日本固有種で、これまで九州から南西諸島にかけてわずかながら記録されていたが、今回本州から初めて記録された。赤坂御用地で記録された16種（皇居から記録された4種も含まれる）のうち、13種が *Oscinellinae* 亜科、残りの3種が *Chloropinae* 亜科に属する。これは、Kanmiya (1983) が日本産キモグリバエ科の総説で記録した145種の構成 (*Oscinellinae* 亜科26属80種, *Chloropinae* 亜科26属65種) とは異なる。この理由として、皇居や赤坂御用地のキモグリバエ相は、棲息環境に広葉樹が多く、イネ科草原が少ないので、幼虫が腐食性の熱帯性の属が含まれる *Oscinellinae* 亜科が優占し、食植性でイネ科植物の茎や種子に侵入する旧北区系の属の *Chloropinae* 亜科が少ないからということがあげられる。棲息場所の環境がキモグリバエ科の種属の構成に関係していることが考えられる。

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