

# Check List of Midge Galls of Japan, with Descriptions of Newly Recorded Galls

## II. Plants other than Choripetalae

Junichi YUKAWA

(*Entomological Laboratory*)

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### Introduction

In the first part of the check list, the author<sup>120)</sup> listed over 100 sorts of midge gall on 102 plant species belonging to Choripetalae. The present paper is published as the second part of the check list, containing about 100 sorts of midge gall on 91 plant species included in Sympetalae, Monocotyledoneae, Gymnospermae and Filices. As a result, more than 200 sorts of midge gall are known to occur in Japan at present.

In listing gall bearing plants and arranging entries for each gall, the author adopts a method same as the one described in the previous paper<sup>120)</sup>. To avoid duplication, the author abbreviates the references which were already listed in the first part, and lists the only literatures which are newly cited in the second part. Therefore, readers are required to consult with the references arranged in consecutive numbers extending over the first and second parts.

### SYMPETALAE

#### Clethraceae

*Clethra barbinervis* Sieb. et Zucc. "Ryôbu"

Leaf, "Tama-fushi" Mon. Adult unknown. (20)

#### Ericaceae

*Rhododendron kaempferi* Planch. "Yama-tsutsuji"

Fruit, "Mi-kefushi" Mon. Adult unknown. (18)

*Rhododendron pentaphyllum* Maxim. "Akebono-tsutsuji"

Fruit, "Mi-marufushi" Mon. Adult unknown. (18)

#### Symplocaceae

*Symplocos chinensis* Druce var. *leucocarpa* (Nakai) Ohwi "Sawa-futagi"

Leaf, "Ha-fukure" Sh. ? *Rhopalomyia ilexifoliae* Sh. (63, 76)

Leaf, "Ha-tsuzuri" Sh. Adult unknown. (63)

**Styracaceae**

*Styrax japonica* Sieb. et Zucc. "Egonoki"

Leaf, petiole, "Tsubo-fushi" Sh. ? *Asphondylia styraci* Sh. (63, 76)

Leaf, "Kefushi" Sh. Adult unknown. (63)

Leaf, "Ha-chijimi" Sh. Adult unknown. (63)

Leaf, "Ibo-fushi" Mon. (= "Hirata-marufushi" Sh.) ? *Rhopalomyia styracophila* Sh. (18, 63, 76)

Terminal bud, "Me-fushi" Sh. Adult unknown. (63)

*Styrax obassia* Sieb. et Zucc. "Haku-unboku"

Leaf, "Kefushi" Sh. ? *Clinodiplosis styracifoliae* Sh. (63, 76)

**Oleaceae**

*Ligustrum japonicum* Thunb. "Nezumi-mochi"

Fruit, "Mi-okure" Sh. *Asphondylia sphaera* Mon. new host rec. Infested fruit less developed than normal one, green and partly blackish purple, with a major axis about 9.5 mm and a minor axis about 4.3 mm in average. Usually 1, rarely 2 or 3 larvae per gall. Shiroyama, Kagoshima-shi, 24.IV.1969, J. Yukawa & A. Mori leg.; Engyôji, Kôchi-shi, 9.V.1969, J. Yukawa leg.; Wakayama-shi, 13-14. IV.1975, K. Yamagishi leg.

*Ligustrum obtusifolium* Sieb. et Zucc. "Ibota-no-ki"

Fruit, "Mi-okure" Sh. (= "Mi-fushi" Mon.). *Asphondylia sphaera* Mon. (24, 63, 76)

**Apocynaceae**

*Trachelospermum asiaticum* Nakai "Teika-kazura"

Fruit, "Mi-fushi" **new gall rec.** Adult unknown. A pair of fruits fused, causing an obovoid swelling, about 27 mm in length, 12 mm in width; many larvae inhabiting each gall (Fig. 6). Takakuma-yama, Kagoshima-ken, 20.X.1969, S. Hatsushima leg.

**Asclepiadaceae**

*Cynanchum macranthum* (Maxim.) Nakai "Shirobana-kamome-zuru"

Flower bud, "Tsubomi-fushi" **new gall rec.** Midge not identified (Oligotrophidi). This gall is the same as that on *Tylophora japonica*, probably caused by the same species (Fig. 1). Maru-yama, Ojiya-shi, Niigata-ken, 12.VIII.1972, K. Yamagishi leg.

*Metaplexis japonica* (Thunb.) Makino "Gagaimo"

Leaf, "Ha-chijimi" Mon. ? *Psectrosema gagaimo* Mon. (24, 76)

*Tylophora japonica* Miq. "Tokiwa-kamome-zuru"

Flower bud, "Tsubomi-fushi" **new gall rec.** Adult unknown. Flower bud transformed into a sub-ellipsoidal swelling; oligothalamous; more than 1 larva inhabiting each chamber. Ishiki, Kagoshima-shi, 6.XI.1971, J. Yukawa & A. Mori leg. (cf. *Cynanchum macranthum*; Fig. 1)

### Verbenaceae

*Callicarpa japonica* Thunb. "Murasaki-shikibu"

Fruit, "Mi-fushi" Sh. Adult unknown. Shinji<sup>109)</sup> reported that a species of Chalcidoidea is responsible for this gall, but the present author has confirmed that it is caused by a gall midge. Shiroyama, Kagoshima-shi, 27.VII.1970, J. Yukawa leg. (63, 109)

Petiole, "Haguki-fushi" Sh. ? *Rhopalomyia callicarpae* Sh. (60, 63, 76)

Stem, "Eda-fushi" Sh. *Lasioptera callicarpae* (Sh.) or ? *Rhopalomyia callicarpae* Sh. (60, 63, 76, 109)

*Callicarpa mollis* Sieb. et Zucc. "Yabu-murasaki"

Petiole, "Haguki-fushi" Sh. Adult unknown. new host rec. Subglobular or spindle-shaped swelling on the petiole or on the stem; similar to the petiole gall on *C. japonica*, probably caused by the same species. Sanage-yama, Aichi-ken, 9.X.1972, K. Yamagishi leg.; Tachibana-yama, Fukuoka-ken, 30.X.1973, K. Yamagishi leg.

Leaf, petiole, stem, "Ke-tamafushi" **new gall rec.** Adult unknown. Napiform swelling, covered by short whitish hairs densely; maximum diameter 2.3 to 2.6 mm; monothalamous (Fig. 7). Shiroyama, Kagoshima-shi, 9.VIII.1976, E. Tokuhisa leg.

### Labiatae

*Elsholtzia ciliata* (Thunb.) Hylander "Naginata-kôju"

Stem, "Zui-fushi" Sh. Adult unknown. (63)

*Isodon inflexus* (Thunb.) Kudo "Yama-hakka"

Axillary bud, "Me-fukure" Mon. Adult unknown. (20)

Leaf, "Haber-maki" Mon. Adult unknown. (20)

*Salvia glabrescens* Makino "Akigiri"

Leaf, "Haber-maki" Mon. Adult unknown. (20)

*Teucrium japonicum* Houtt. "Nigakusa"

Leaf, "Haber-maki" Mon. Adult unknown. (20)

### Phrymaceae

*Phryma leptostachya* L. subsp. *asiatica* (Hara) Kitam. "Hae-dokusô"

Terminal & axillary bud, "Me-fushi" Sh. Adult unknown. (63)

Terminal & axillary bud, "Shintome-fushi" Adult unknown. (63)

Stem, "Tsuto-fushi" Sh. Adult unknown. (63)

### Rubiaceae

*Paederia scandens* (Lour.) Merrill var. *mairi* (Lév.) Hara "Hekuso-kazura"

Leaf, "Ha-tamafushi" Sh. *Dasineura paederiae* Sh. (63, 76)

Terminal & axillary bud, petiole, peduncle, "Me-fushi" Sh. *Dasineura paederiae* Sh. (63, 76)

Stem, "Tsuto-fushi" new name. *Lasioptera paederiae* Möhn (In the present paper, the author temporarily considers this species to be different from *Dasineura paederiae* Sh.). (76, 98)

### Caprifoliaceae

*Viburnum dilatatum* Thunb. "Gamazumi"

Fruit, "Ke-fushi" Mon. (= "Ke-fushi" Sh., "Mi-fushi" Mon.) *Pseudasphondylia rokuharaensis* Mon. (5, 18, 24, 63, 76)

Leaf, "Hirata-fushi" Sh. Adult unknown. (63)

*Viburnum erosum* Thunb. "Kobano-gamazumi"

Petiole, mid-rib, "E-fukure" Mon. Adult unknown. (20)

*Viburnum japonicum* (Thunb.) Spreng "Hakusan-boku"

Fruit, "Mi-fushi" **new gall rec.** adult unknown. Galled fruit somewhat irregularly swollen, smooth on surface; usually 1, sometimes more larvae inhabiting each gall (Fig. 8). Shiroyama, Kagoshima-shi, 25.V.1976, E. Tokuhisa leg.

*Viburnum sargentii* Koehne "Kanboku"

Petiole, leaf vein, "Hirata-fushi" Sh. Adult unknown. (63)

Petiole, "E-fukure" Sh. ? *Silvestrina* sp. Sh. (63)

Leaf, "Maru-fushi" Sh. Adult unknown. (63)

*Viburnum wrightii* Miq. "Miyama-gamazumi"

Terminal bud, "Me-fushi" new name. *Dasineura viburni* Sh. (61, 76)

*Weigela coraeensis* Thunb. "Hakone-utsugi"

Axillary bud, "Me-fukure" Mon. *Asphondylia diervillae* Felt. new host rec. Axillary bud transformed into a subglobular sappy swelling which is provided with several scale-like leaves; usually 1, sometimes more larvae inhabiting each gall. Senganbira, Kagoshima-ken, 27.IV.1969, S. Hatsushima leg.

*Weigela hortensis* (Sieb. et Zucc.) K.Koch "Tani-utsugi"

Axillary bud, "Me-fukure" Mon. (= "Me-fukure" Sh., "Me-fushi" Mon.) *Asphondylia diervillae* Felt. (Monzen<sup>23</sup>) reared a different gall midge species, *Oligotrophus japonicus* from the above mentioned gall, but this species is not responsible for the gall.) (18, 23, 53, 63, 76)

*Weigela japonica* Thunb. "Tsukushi-yabu-utsugi"

Axillary bud, "Me-fukure" Mon. *Asphondylia diervillae* Felt. (76)

### Valerianaceae

*Patrinia scabiosaefolia* Fisch. "Omina-eshi"

Stem, "Tsuto-fushi" Sh. Adult unknown. (63)

*Patrinia villosa* (Thunb.) Juss. "Otoko-eshi"

Stem, "Zui-fushi" Sh. *Lasioptera euphobiae* Sh. (63, 76)

Axillary bud, "Me-fushi" Sh. Adult unknown. (63)

Fruit, "Mi-fushi" Mon. (= "Mi-fushi" Sh.). *Asphondylia patriniae* (Sh.). (16, 18, 63, 76, 109)

### Cucurbitaceae

*Trichosanthes cucumeroides* (Ser.) Maxim. "Karasu-uri"

Stem, "Zui-fushi" Sh. Midge not identified (*Lasioptera*). (5, 63)

## Campanulaceae

*Adenophora nikoensis* Fr. et Sav. "Hime-shajin"

Flower bud, "Tsubomi-fushi" Mon. Adult unknown. (19)

*Adenophora triphylla* (Thunb.) A.Dc. subsp. *aperticampanulata* Kitam. "Tsurigane-ninjin"

Flower bud, "Tsubomi-fushi" Mon. Adult unknown. (18)

Stem, "Kobu-fushi" Mon. Adult unknown. (18)

## Compositae

*Artemisia feddei* Lév. et Van. "Hime-yomogi"

Terminal flower bud, "Hana-fushi" Sh. *Boucheella artemisiae* (Bouche). (76, 107)

Bud, leaf, "Hime-tsubo-fushi" Mon. *Rhopalomyia caterva* Mon. (= *Rhopalomyia tubiartemisiae* Sh.). (76, 107)

Stem, "Wata-fushi" Mon. *Misopatha giraldii* (Kieffer & Trotter). (97)

*Artemisia japonica* Thunb. "Otoko-yomogi"

Terminal flower bud, "Hana-fushi" Sh. (= "Hana-tamabae-fushi" Sh.). *Boucheella artemisiae* (Bouche). (48, 61, 63, 76, 110)

Bud, leaf, "Hime-tsubo-fushi" Mon. (= "Tsubo-tamabae-fushi" Sh.). *Rhopalomyia caterva* Mon. (= *Rhopalomyia tubiartemisiae* Sh.). (22, 23, 48, 61, 63, 76, 110)

Terminal bud, "Shintome-fushi" Sh.? *Rhopalomyia struma* Mon. (63, 76)

Leaf, "Ibo-fushi" Mon. *Rhopalomyia japonica* Mon. (20, 22, 23, 76)

Leaf, "Eboushi-fushi" Sh. *Diathronomyia yomogicola* (Matsumura). (63, 76)

Leaf, "Ha-fukure" Sh. ? *Dasineura fulvicola* Sh. (63, 76)

Leaf (not gall, but mine), unnamed. *Lasioptera artemisifoliae* Sh. (61, 63, 76, 110)

*Artemisia montana* (Nakai) Pamp. "Yama-yomogi"

Stem, "Kobu-fushi" Mon. *Rhopalomyia struma* Mon. (18, 22, 23, 76)

*Artemisia princeps* Pamp. "Yomogi"

Stem, "Kobu-fushi" Mon. (= "Ibo-fushi" Sh.). *Rhopalomyia struma* Mon. (= *Rhopalomyia yomogi* Sh.). (5, 22, 23, 48, 54, 61, 63, 76, 96, 97, 107, 110)

Stem, "Wata-fushi" Mon. (= "Wata-fushi" Sh.). *Misopatha giraldii* (Kieffer & Trotter). (= *Rhopalomyia neoartemisiae* Sh., = *Rhopalomyia gossypii* Mon.). (5, 18, 23, 61, 63, 76, 96, 97, 100, 103, 107, 110, 116)

Leaf, "Ke-tamafushi" Mon. (= "Shiro-kefushi" Sh.). *Rhopalomyia cinerarius* Mon. (Shinji<sup>49</sup>) identified this species as *Rhopalomyia baccarum* (Wachtl). (5, 18, 22, 23, 49, 61, 63, 76, 82, 96, 97, 100, 110)

Leaf, "Eboushi-fushi" Sh. (= "Ha-tsubo-fushi" Mon.). *Diathronomyia yomogicola* (Matsumura). (5, 14, 18, 49, 61, 63, 76, 81, 96, 97)

Axillary bud, "Tsubo-fushi" Sh. (= "Kuki-tsubo-fushi" Mon.). *Misopatha artemisiae* Sh. (= *Misopatha yomogi* Sh., = *Panteliola ampuila* Mon.) (18, 23, 57, 61, 63, 76, 96, 97, 110)

Axillary bud, "Naga-tsubo-fushi" Sh. *Misopatha longitubifix* Sh. (61, 63, 76, 110)

Axillary bud, "Maru-tsubo-fushi" Sh. *Dasineura* sp. Sh. (63)

Terminal bud, "Shintome-fushi" Mon. Adult unknown. (18)

*Aster ageratoides* Turcz. subsp. *amplexifolius* (Sieb. et Zucc.) Kitam. "Yamashiro-giku"

Stem, "Tsuto-fushi" Sh. Adult unknown. (63)

- Aster ageratoides* Turcz. subsp. *ovatus* (Fr. et Sav.) Kitam. "Nokon-giku"  
Terminal bud, "Shintome-fushi" Mon. Adult unknown. (20)
- Aster glehni* Fr. Schm. var. *hondoensis* Kitam. "Gomana"  
Stem, "Kuki-fukure" Sh. Adult unknown. (63)
- Aster scaber* Thunb. "Shirayama-giku"  
Stem, "Kuki-fukure-fushi" Sh. *Lasioptera asteriocl* Sh. (58, 63, 76)  
Folwer, "Hossu-fushi" Sh. *Lasioptera gibaushi* Sh. (60, 63, 76)  
Flower, "Hana-tamabae-fushi" Sh. Adult unknown. (48)  
Leaf, "Eboshi-fushi" Sh. *Lasioptera* sp. Sh. (63)  
Leaf, "Haberi-tamabae-fushi" Sh. Adult unknown. (48)  
Axillary bud, "Kawari-me-fushi" Sh. (? = "Me-fushi" Sh.). ? *Rhabdophaga asteriae* (Sh.). (63, 76)
- Aster tataricus* L. "Shion"  
Stem, "Zui-fushi" Sh. *Lasioptera eupobiae* Sh. (63, 76)
- Atractylodes japonica* Koidz. "Okera"  
Leaf, "Hamaki" Mon. Adult unknown. (20)
- Cacalia delphniifolia* Sieb. et Zucc. "Momiji-gasa"  
Leaf, stem, "Togari-kobu-fushi" **new gall rec.** Adult unknown. Subglobular swelling, frequently pointed, usually monothalamous (Fig. 5). Yunono, Kirishima, Kagoshima-ken, 28.IX.1968, J. Yukawa leg.
- Chrysanthemum morifolium* Hemsl. "Kiku"  
Leaf, "Ibo-fushi" Mon. (= "Hime-fushi" Mon.). *Rhopalomyia chrysanthemum* Mon. (20, 22, 23, 70, 76, 92, 102)
- Chrysanthemum ornatum* Hemsl. var. *spontaneum* (Makino) Kitam. "Noji-giku"  
Terminal & Axillary bud, "Naga-tsubo-fushi" new name. Midge not identified (Oligotrophidi). This gall is similar to axillary bud gall caused by *Misopatha longitubifix* Sh. on *Artemisia princeps*. (5)  
Leaf, "Ke-tamafushi" **new gall rec.** Midge not identified (Oligotrophidi). Globular swelling on the lower surface, with whitish hairs, usually monothalamous; similar to leaf gall caused by *Rhopalomyia cinerarius* Mon. on *Artemisia princeps* (Fig. 2). Sata-misaki, Kagoshima-ken, 25.IV.1965 & 26.III.1970, J. Yukawa leg.; Kaimon-cho, Kagoshima-ken, 5.III.1972, J. Yukawa leg.
- Eupatorium chinense* L. var. *simplicifolium* (Makino) Kitam. "Hiyodori-bana"  
Flower, "Hana-fushi" Sh. (? = "Mi-fushi" Sh.). Adult unknown. (63)  
Stem, "Zui-fushi" Sh. (= "Kuki-fushi" Sh.). *Lasioptera eupobiae* Sh. (63, 76)
- Eupatorium fortunei* Turcz. "Fuji-bakama"  
Stem, "Tsuto-fushi" Sh. Adult unknown. (63)
- Eupatorium* sp.  
Stem, "Zui-fushi" Mon. Probably caused by *Lasioptera eupobiae* Sh. (20)
- Hemistepta lyrata* Bunge "Kitsune-azami"  
Stem, "Tsuto-fushi" new name. *Lasioptera azami* Sh. (59, 63, 76)
- Kalimeris yomena* Kitam. "Yomena"  
Axillary bud, "Me-fushi" Sh. *Dasineura procera* RübSaamen. (63)
- Ligularia hodgsoni* Hook. "Takara-kô" (= "Tôge-buki")  
Leaf, "Ha-fukure" Mon. Adult unknown. (19)
- Senecio cannabifolius* Less. "Hangonsô"  
Flower, axillary bud, "Tama-fushi" Mon. Adult unknown. (19)

*Solidago virgaurea* L. subsp. *asiatica* Kitam. "Akino-kirinsô"

Fruit, "Mi-fushi" Sh. Adult unknown. (5, 63)

*Synurus palmatopinnatifidus* (Makino) Kitam. var. *indivisus* Kitam. "Yama-bokuchi"

Flower, "Hana-fushi" Sh. Adult unknown. (63)

Petal, "Hanabira-fushi" Sh. Adult unknown. (63)

*Taraxacum platycarpum* Dahlst. "Tanpopo" (= "Kantô-tanpopo")

Leaf, "Ha-fukure" Mon. Adult unknown. This gall is similar to the leaf gall caused by *Cystiphora hieracii* F. Löw. (20)

## MONOCOTYLEDONEAE

### Zingiberaceae

*Alpinia intermedia* Gagnep. "Aono-kumatake-ran"

Fruit, "Mi-fushi" **new gall rec.** Midge not identified (*Asphondylia*). Irregular swelling of the fruit, shiny green with a reddish tinge; maximum diameter 6.3 to 14.1 mm; usually 1 or 2, sometimes 3 larvae inhabiting each gall (Fig. 3). Sata-misaki, Kagoshima-ken, 10.IV. 1969, J. Yukawa leg.; ditto, 19.II.1971, A. Tanaka leg.

### Dioscoreaceae

*Dioscorea japonica* Thunb. "Yama-imo"

Stem, "Tsuru-fukure" Sh. ? *Lestremia yasukunii* Sh. (63, 76)

*Dioscorea nipponica* Makino "Uchiwa-dokoro"

Leaf, "Maru-fushi" Sh. ? *Rhabdophaga dioscoreae* Sh. (56, 63, 76)

*Dioscorea tokoro* Makino "Oni-dokoro" (= "Tokoro")

Stem, "Tsuru-fukure" new name (= "Zui-fushi" Mon., "Zui-fushi" Sh.). ? *Lestremia yasukunii* Sh. This gall is the same as that on *Dioscorea japonica*, probably caused by the same species. (20, 63, 76)

### Liliaceae

*Smilax china* L. "Sarutori-ibara"

Leaf vein, "Haguki-fushi" Sh. ? *Silvestrina smilacifoliae* Sh. (Original description unknown, 63)

*Smilax riparia* A.Dc. "Shiode"

Leaf, "Hamaki" Sh. Adult unknown. (63)

### Gramineae

*Agropyron ciliare* (Trin.) Fr. var. *minus* (Miq.) Ohwi "Ao-kamoji-gusa"

Grain, "Mi-fushi" new name. *Sitodiplosis mosellana* (Gehin). (76, 112, 117)

*Agropyron ciliare* (Trin.) Fr. var. *pilosum* Honda "Tachi-kamoji-gusa"

Grain, "Mi-fushi" new name. *Sitodiplosis mosellana* (Gehin). (76, 112, 117)

*Agropyron tsukushiense* (Honda) Ohwi var. *transiens* (Hackel) Ohwi "Kamoji-gusa"

Grain, "Mi-fushi" new name. *Sitodiplosis mosellana* (Gehin). (76, 112, 117)

*Hordeum vulgare* L. var. *hexastichon* Aschers. "Ômugi"

Grain, "Mi-fushi" new name. *Sitodiplosis mosellana* (Gehin). (76, 112, 117)

*Miscanthus sinensis* Anderss. "Susuki"

Bud, "Takenoko-fushi" Sh. (= "Tamabae-fushi" Sh.). *Orseolia miscanthi* (Sh.)  
(= *Asphondylia sasae* Sh.). (48, 61, 63, 76, 93, 96, 106)

*Miscanthus sinensis* Anderss. var. *condensatus* (Hackel) Makino "Hachijô-susuki"

Bud, "Takenoko-fushi" Sh. *Orseolia miscanthi* (Sh.). (76)

*Phyllostachys pubescens* Mazel "Môsô-chiku"

Bud, "Hime-sasauo-fushi" new name, (= "Sasauo-fushi" Muroi). Adult unknown.  
This gall is smaller than "Sasauo-fushi" caused by *Hasegawaia sasacola* Mon. on  
*Sasa* and *Sasaella* species and is distributed more abundantly in south-western  
Japan. Larvae probably do not pupate in the gall, but in the soil. The same sort  
of gall occurs on the following several other plants. (76, 99)

*Pleiolblastus linearis* Nakai "Ryûkyû-chiku"

Bud, "Hime-sasauo-fushi" new name. Adult unknown. (76)

*Pleiolblastus simonii* Nakai "Me-dake"

Bud, "Hime-sasauo-fushi" new name. (= "Sasauo-fushi" Muroi). Adult unknown. (76,  
99)

Stem, "Eda-fushi" Mon. *Geromyia nawai* (Mon.). (20, 22, 24, 76, 78, 96, 101)

*Pleiolblastus variegatus* Makino var. *viridis* Makino

Bud, "Hime-sasauo-fushi" new name. (= "Sasauo-fushi" Muroi). Adult unknown.  
(76, 99)

*Pseudosasa japonica* Makino "Ya-dake"

Bud, "Hime-sasauo-fushi" new name. (= "Sasauo-fushi" Muroi). Adult unknown.  
(76, 99)

*Pseudosasa purpurascens* Makino "Suzu-take"

Bud, "Hime-sasauo-fushi" new name. (= "Sasauo-fushi" Muroi). Adult unknown.  
(Fig. 4). (76, 99)

*Sasa albomarginata* Makino et Shibata "Kuma-zasa"

Bud, ? "Hime-sasauo-fushi" new name. Adult unknown. (96)

*Sasa kurilensis* Makino et Shibata "Chishima-zasa"

Bud, "Sasauo-fushi" Mon. *Hasegawaia sasacola* Mon. (19, 22, 76, 99)

*Sasa paniculata* Makino et Shibata "Chimaki-zasa"

Bud, "Sasauo-fushi" Mon. *Hasegawaia sasacola* Mon. (76, 99)

*Sasa* sp.

Bud, "Sasauo-fushi" Mon. (= "Sasauo-fushi" Sh.). *Hasegawaia sasacola* Mon. (49, 63,  
108)

*Sasaella ramosa* Makino "Azuma-zasa"

Bud, "Sasauo-fushi" Mon. *Hasegawaia sasacola* Mon. (18, 22, 24, 76, 99)

*Sorghum vulgare* Pers. "Sorugô" or "Sorugamu"

Grain, "Mi-fushi" new name. *Contarinia sorghicola* Coq. (121)

*Triticum aestivum* L. "Komugi"

Grain, "Mi-fushi" new name. *Sitodiplosis mosellana* (Gehin). (76, 92, 112, 117, 118, 119)

Grain, unnamed. *Contarinia* sp. Yuasa, "Mugi-kuro-tamabae" (= "Mugi-kiiro-tama-  
bae"). (76, 112, 117, 118, 119)

Grain, unnamed. Adult unknown. "Mugi-beni-tamabae" (76, 112, 118)

## Unidentified species of Bamboo

Gall bearing organ unknown. *Trishormomyia bambusae* Felt. (76, 79)



## GYMNOSPERMAE

## Pinaceae

*Abies sachalinensis* Fr. Schm. "Aka-todomatsu"

Needle, "Ha-tama-fushi" new name. *Agevillea manii* Inouye. (76, 84, 95)

*Larix leptolepis* Gord. "Kara-matsu"

Flower bud, "Haname-fushi" new name. *Dasineura nipponica* Inouye. (41, 76, 90, 91)

*Picea jezoensis* Carr. "Ezo-matsu"

Bud, twig, "Me-fushi" new name. *Dasineura ezomatsue* Uchida & Inouye. (76, 88, 113)

*Pinus densiflora* Sieb. et Zucc. "Aka-matsu"

Needle, "Ha-tamafushi" Mon. *Thecodiplosis japonensis* Uchida & Inouye. (20, 41, 76, 87, 88, 89, 104, 105, 111, 114)

Terminal bud, "Shintome-fushi" Mon. (= "Shintome-fushi" Sh.). *Contarinia matusintome* Haraguti & Monzen. (18, 24, 63, 76, 80, 88, 89, 105, 115)

*Pinus pentaphylla* Mayr "Hime-komatsu"

Needle, "Ha-tamafushi" new name. *Janetiella kimurai* Inouye. (76, 88, 89)

*Pinus thunbergii* Parl. "Kuro-matsu"

Needle, "Ha-tamafushi" Mon. *Thecodiplosis japonensis* Uchida & Inouye. (76, 87, 88, 89, 104, 105, 111, 114)

Terminal bud, "Shintome-fushi" Mon. *Contarinia matusintome* Haraguti & Monzen. (76, 88, 89, 105, 115)

## Taxodiaceae

*Cryptomeria japonica* D. Don "Sugi"

Needle, "Ha-tamafushi" new name. *Contarinia inouyei* Mani. (76, 85, 86, 88, 95)

Bark, (not gall) unnamed. *Thomasiniana odai* Inouye. (76, 83, 88)

## Cupressaceae

*Juniperus chinensis* L. var. *globosa* Hornobr. "Tama-ibuki"

Bud, "Me-fushi" new name. *Aschistonyx eppoi* Inouye. (76, 88)

*Juniperus rigida* Sieb. et Zucc. "Nezumi-sashi"

Bud, "Chôchin-fushi" new name. *Arceuthomyia nakaharai* Inouye. (? = *Oligotrophus nezu* Kikuti). (76, 84, 94)

Bud, "Roppou-mefushi" new name. *Rhopalomyia uetsukii* Inouye. (76, 84)

Needle, "Ha-tamafushi" new name. *Etsuhua okayamana* Inouye. (76, 84)

## FILICES

## Polypodiaceae

*Pteridium aquilinum* Kuhn "Warabi"

Leaf, "Kuro-haberi-maki" Mon. (= "Haberi-fushi" Sh.). ? *Perrisia filicina* Kieffer. (18, 63)

### Summary

This paper is published as the second part of the check list of Japanese midge galls, containing about 100 sorts of midge gall on 91 plant species included in Sympetalae, Monocotyledoneae, Gymnospermae and Filices. Seven sorts of gall on 8 plant species are recorded, for the first time, from Japan, and 2 plant species are newly recognized as host plants. New Japanese names are given to 16 unnamed galls.

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## Explanation of figures

- Fig. 1. Flower bud gall, "Tsubomi-fushi" on *Cynanchum macranthum*, "Shirobana-kamome-zuru"  
 Fig. 2. Leaf gall, "Ke-tamafushi" on *Chrysanthemum ornatum* var. *spontaneum*, "Noji-giku"  
 Fig. 3. Fruit gall, "Mi-fushi" on *Alpinia intermedia*, "Aono-kumatake-ran"  
 Fig. 4. Bud gall, "Hime-sasauo-fushi" on *Pseudosasa purpurascens*, "Suzu-take"  
 Fig. 5. Leaf gall, "Togari-kobu-fushi" on *Cacalia delphnifolia*, "Momiji-gasa"  
 Fig. 6. Fruit gall, "Mi-fushi" on *Trachelospermum asiaticum*, "Teika-kazura"  
 Fig. 7. Leaf gall, "Ke-tamafushi" on *Callicarpa mollis*, "Yabu-murasaki"  
 Fig. 8. Fruit gall, "Mi-fushi" on *Viburnum japonicum*, "Hakusan-boku"

