

Contribution to the Knowledge of the Japanese Pauropod Fauna I: A Cumulative List of Identified Pauropod Specimens from Japan during 1985-2003

Yasunori Hagino

Natural History Museum and Institute, Chiba
955-2 Aoba-cho, Chuo-ku, Chiba 260-8682, Japan
E-mail: hagino@chiba-muse.or.jp

Abstract The identified Japanese pauropod specimens are all enumerated in a list from 27 papers published during 1985-2003. In total 3983 specimens of 26 species belonging to 8 genera and 3 families are reported from 383 collecting lots in 320 localities. Detailed collecting records including new data not appeared in the original papers are also given.

Key words: list, Pauropoda, Brachypauropodidae, Pauropodidae, Eurypauropodidae, Japan.

Since 1985, when I started taxonomic study of Japanese pauropods, 27 papers dealing with Japanese pauropod species had been published by 2003 and several thousands pauropod specimens were reported from a lot of localities in Japan. A part of these papers are of descriptions of new species (Hagino, 1989, 1991a, 1991b, 1991c, 1993a, 1993b, 1994; Hagino and Sheller, 1985) and the remaining large part is, however, of simple list of pauropod species reported from wide regions of Japan, the papers being exclusively written in Japanese (Hagino, 1992, 1993c, 1998a, 1998b, 2000a, 2000b, 2001, 2002, 2003a, 2003b, 2003c; Hirauchi, 1993, 1997; Hirauchi *et al.*, 1995; Nakamura, 1993, 1999; Nunomura and Hirauchi, 1996; Nunomura *et al.*, 1999; Sato *et al.*, 1995). The papers written in Japanese were almost published in scientific reports issued by local self-governing bodies such as the prefectural offices and the municipal authorities. These papers are mostly not easily available to most of researchers, being not usually opened to general academic circles. This situation makes it rather troublesome to collect all the records of species listed in the local reports not only for foreign scientists but also Japanese researchers.

To resolve this problem I present here a cumulative list of identified pauropod specimens from Japan during 1985-2003. It should be noticed that the present paper treats only identified species, neglecting some fifty unidentified forms noted in these papers.

Material and Methods

Twenty seven papers published during 1985-2003,

as mentioned above, are examined to enumerate identified Japanese pauropod specimens. It proved that in total 3983 specimens of 26 species belonging to 8 genera and 3 families have been so far determined in specific level from 383 collecting lots in 320 localities in Japan during 1985-2003.

For all the lots, collecting data were distinctly checked up, on inquiry to each collector, if any are not noted or indistinct in the original papers. The items of collecting data adopted here are as follows: locality name, latitude, longitude, altitude, dominant plants species or vegetation, and name of collector(s).

The phonetic expression of the collecting sites were referred to Geographical Survey Institute (2004a, 2004b), Japan Post (2004), and Kadokawa Shoten (1978-1990); in the case not found in those sources, common readings around the sites are adopted on inquiry to the concerning municipal offices or other similar authorities. Latitude and longitude are calculated based on the Geographical Survey Institute (2004b). The scientific names of plants follow Yonekura and Kajita (2003). Data collected from the papers are represented in two separated forms to avoid the complexity of the contents, but the reference on both of the two will help a better understanding of the whole meanings. One of them is "List I. Identified Japanese pauropod specimens in order of taxonomical arrangement" and the other is "List II. Detailed collecting records and condensed list of pauropod specimens recorded for every collecting lot". As it is usually very hard to find original Japanese expressions (Chinese characters) from Roman expressions, the original

Japanese information on locality names, collectors and cited references are added in square brackets for convenience.

Abbreviations

Following abbreviations (A-E) are used in the text.

A. Number of individuals, developmental stages and sexes of paupod specimens

For every collecting record, number of individual(s) was counted for every developmental stage in each species. At first total number of individual(s) collected is indicated with "ex(s)". Next follows total numbers of each developmental stage in order of elder to young in the form of number of individual(s) without "ex(s)", developmental stage and sex together in parentheses; developmental stage being indicated by number of pairs of legs and sex being given only when distinguished. For example, "14 exs., 3(9♂), 6(9♀), 2(8♂), 3(8)" means "of total 14 specimens, 3 males with 9 pairs of legs, 6 females with 9 pairs of legs, 2 males with 8 pairs of legs, and 3 sexually indeterminate specimens with 8 pairs of legs".

B. Acronyms for registration number

CBM, Natural History Museum and Institute, Chiba; NSMT, National Science Museum (Nat. Hist.), Tokyo.

C. Plant species and vegetation

BM: Bamboo (thicket).

Psb, *Phyllostachys bambusoides*; Psh, *P. heterocyclus*.

DB: Deciduous broadleaved tree (forest).

Acc, *Acer crataegifolium*; Acj, *A. japonicum*; Acp, *A. palmatum*; Acd, *A. pictum* ssp. *dissectum*; Acr, *A. rufinerve*; Acs, *A. r. shirasawanum*; Act, *A. tschonoskii*; Acu, *A. ukurunduense*; Aet, *Aesculus turbinata*; Alj, *Alnus japonica*; Bte, *Betula ermanii*; Clj, *Callicarpa japonica*; Cnj, *Carpinus japonica*; Cnl, *C. laxiflora*; Cnt, *C. tschonoskii*; Ctc, *Castanea crenata*; Cts, *Celtis sinensis*; Cej, *Cerasus jamasakura*; Ces, *C. leveilleana*; Clb, *Clethra barbinervis*; Els, *Eleutherococcus sciadophylloides*; Enm, *Euonymus macropterus*; Fgc, *Fagus crenata*; Fgj, *F. japonica*; Fxl, *Fraxinus lanuginosa*; Hmj, *Hamamelis japonica*; Kxs, *Kalopanax septemlobus*; Lnp, *Lindera praecox*; Ldu, *L. umbellata*; Lyo, *Lyonia ovalifolia*; Mgh, *Magnolia hypoleuca*; Msm, *Meliosma myriantha*; Pcr, *Pterocarya rhoifolia*; QLa, *Quercus acutissima*; QLc, *Q. crispula*; QLS, *Q. serrata*; Rno, *Rhododendron obtusum*; Rsj, *Rhus javanica* var. *chinensis*; Sbc, *Sorbus commixta*; Stj, *Styrax japonica*; Swc, *Swida controversa*; Sms, *Symplocos sawafutagi*; Udj, *Ulmus davidiana* var. *japonica*; Vrf, *Viburnum furcatum*;

Zks, *Zelkova serrata*.

DC: Deciduous coniferous tree (forest).

Lxx, *Larix kaempferi*.

EB: Evergreen broadleaved tree (forest).

Auj, *Aucuba japonica*; Caj, *Camellia japonica*; Css, *Castanopsis sieboldii*; Cit, *Cinnamomum tenuifolium*; Dpm, *Daphniphyllum macropodum*; Erj, *Eurya japonica*; Ixs, *Ilex sugerokii* var. *brevipedunculata*; Lce, *Lithocarpus edulis*; Mlt, *Machilus thunbergii*; Nls, *Neolitsea sericea*; Oth, *Osmanthus heterophyllus*; Pej, *Pieris japonica*; QC sp(p), *Quercus (Cyclobalanopsis)* sp(p); QCa, *Q. acuta*; QCg, *Q. glauca*; QCm, *Q. myrsinaefolia*; Rnb, *Rhododendron brachycarpum*.

EC: Evergreen coniferous tree (forest).

Abf, *Abies firma*; Abm, *A. mariesii*; Abs, *A. sachalinensis*; Abv, *A. s. veitchii*; Cph, *Cephalotaxus harringtonia*; Cho, *Chamaecyparis obtusa*; Crj, *Cryptomeria japonica*; Crr, *C. j.* var. *radicans*; Pij, *Picea jezoensis*; Pih, *P. j.* var. *hondoensis*; Psd, *Pinus densiflora*; Psv, *P. parviflora* var. *parviflora*; Psp, *P. pumila*; Pst, *P. thunbergii*; Tjs, *Thuja standishii*; Tjd, *Thujopsis dolabrata*; Tsd, *Tsuga diversifolia*.

FR: Fern.

Omc, *Osmunda cinnamomea*.

GR: Grassland.

Mcs, *Miscanthus sinensis*.

MF: Mixed forest.

MS: Moss and liverwort.

PM: Palm.

SS: Dwarf bamboo on forest floor.

Plc, *Pleioblastus chino*; Ssb, *Sasa borealis*; Ssk, *S. kurilensis*; "Sasa", Unidentified dwarf bamboo species.

D. Collector's name

EY, Eiji Yamamoto [山本栄治]; GI, Gentaro Imadaté [今立源太良]; HbS, Hidebumi Sato [佐藤英文]; HdH, Hideharu Honoki [朴木英治]; HH, Hiroshi Hosoda [細田浩司]; HK, Hajime Katsumata [勝又肇]; HN, Hisashi Negoro [根来尚]; HO, Hajime Ozawa [小澤創]; HS, Hiroshi Sakayori [坂寄廣]; HT, Hiroshi Tamura [田村浩志]; HW, Hideaki Watanabe [渡辺秀明]; JN, Jun Nakatani [仲谷淳]; KeI, Kei Ichisawa [一澤圭]; KF, Katsuhisa Furuno [古野勝久]; KI, Kiyoshi Ishii [石井清]; KK, Kimiko Kanamori [金森紀美子]; KnT, Kiyonori Tomiyama [富山清升]; KT, Kazunori Tsurumi [敦見和徳]; LZ, Lijun Zhao [趙立軍]; MH, Makiko Hisamatsu [久松真紀子]; MM, Masami Matsunaga [松永雅美]; MsH, Masumi Hara [原真寿]; MtM, Mitsuo Matsumoto [松本充夫]; NH, Naoyuki Hikida [疋田直之]; NK, Nobuhiro Kurisu [栗栖宣博];

NN, Noboru Nunomura [布村 昇]; ON, Osami Nakamura [中村 修美]; RI, Ryosaku Itoh [伊藤 良作]; SC, Shigeo Chinone [茅根 重夫]; SN, Shûhei Nomura [野村 周平]; ST, Shingo Tanaka [田中 真悟]; SY, Shoichi Yoshida [吉田 勝一]; TkO, Tokushige Ogawa [小川 徳重]; TM, Toshiharu Miyata [宮田 俊晴]; TO, Tsutomu Ohmura [大村 邁]; TS, Toshiyuki Satoh [佐藤 俊幸]; TsM, Tadashi Maehara [前原 忠]; TY, Takumi Yanagibashi [柳橋 卓美]; YH, Yasunori Hagino [萩野 康則]; YK, Yoshiaki Kikuchi [菊地 義昭]; YkH, Yoshiko Hirauchi [平内 好子]; YkK, Yukari Kuwabara [桑原 ゆかり]; YsH, Yasuo Hagiwara [萩原 康夫]; YS, Yukio Shishida [宍田 幸男].

E. Pauropod species

Brachypauropodidae

At, *Aletopauropus tanakai*; *Dr*, *Deltopauropus reticulatus*.

Pauropodidae

AAd, *Allopauropus (Allopauropus) danicus*; *AAI*, *A. (A.) loligoformis*; *ADd*, *A. (Decapauropus) dendri-formis*; *ADf*, *A. (D.) fortisus*; *ADib*, *A. (D.) ibarakiensis*; *ADif*, *A. (D.) infurcatus*; *ADit*, *A. (D.) intonsus*; *ADl*, *A. (D.) ligulosus*; *ADp*, *A. (D.) pseudokoreanus*; *ADtr*, *A. (D.) tetraramosus*; *ADts*, *A. (D.) toshiyukii*; *ADy*, *A. (D.) yamizo*; *Pt*, *Pauropus tamurai*; *SSc*, *Stylopauropus (Stylopauropus) canaliculatus*; *SSg*, *S. (S.) gozenyamensis*; *SSpp*, *S. (S.) pedunculatus* "p" type; *SSpb*, *S. (S.) pedunculatus* "b" type; *SDa*, *S. (Donzelotauropus) aramosus*; *SDnk*, *S. (D.) nakamurai*; *SDnd*, *S. (D.) nudisetus*; *SDp*, *S. (D.) peniculatus*; *SDu*, *S. (D.) undulatus*; *Cs*, *Colinauropus schelleri*; *Fi*, *Fagepauropus ishii*.

Eurypauropodidae

Ej, *Eurypauropus japonicus*.

List I. Identified Japanese pauropod specimens in order of taxonomic arrangement

To make the list condensed, collecting data are principally given as a code, and prefectural or municipal name is only shown when it first appears. The code is formed with a numeral and an alphabet, if any, in bold type, which is identical to that preceding every collecting record in the List II.

Family Brachypauropodidae

1. *Aletopauropus tanakai* Hagino, 1989

Can. Ent. 121: 301-303, figs. 1-15.

Type locality: Temple Iwaya-dera, Kumakôgen-chô [Mikawa-mura], Ehime Pref., 33° 39' 43" N, 132° 59' 01" E, 450 m, DB (Aet).

Ibaraki Pref.: Hitachiomiya-shi, 48f, 2 exs., 2 (8♂) [1

paratype, coll. Hagino]; **Tochigi Pref.:** Fujihara-machi, 121, 4 exs., 1 (8), 3 (5); **Saitama Pref.:** Kamiizumi-mura, 224, 1 ex., 1 (8♀); **Chiba Pref.:** Ichihara-shi, 245, 1 ex., 1 (6) [CBM-ZU 533]; **Yamanashi Pref.:** Ôtsuki-shi, 283a, 1 ex., 1 (8♀); 283d, 1 ex., 1 (8♂); **Ehime Pref.:** Kumakôgen-chô, 303, 3 exs., 3 (8♀) [holotype, NSMT-My 202; 2 paratypes, NSMT-My 203, coll. Hagino].

2. *Deltopauropus reticulatus* Hagino, 1989

Can. Ent. 121: 304-306, figs. 16-30.

Type locality: Mt. Yamizo-san, Daigo-machi, Ibaraki Pref., 36° 55' 44" N, 140° 16' 22" E, 960 m, DB (Fgc). **Ibaraki Pref.:** Takahagi-shi, 28, 1 ex., 1 (5); 29, 1 ex., 1 (6); Daigo-machi, 35a, 3 exs., 3 (8♂) [3 paratypes, NSMT-My 205, 2 coll. Hagino]; 36, 1 ex., 1 (8♂) [holotype, NSMT-My 204]; Hitachiôta-shi, 47, 1 ex., 1 (6); Hitachiomiya-shi, 48f, 2 exs., 2 (6); 48g, 5 exs., 2 (8♂), 3 (6); Urizura-machi, 51a, 1 ex., 1 (6); Nanakai-mura, 64, 1 ex., 1 (5); Kasama-shi, 65, 1 ex., 1 (8♂); 69, 7 exs., 4 (8♂), 2 (6♀), 1 (6); Kitaura-machi, 86, 1 ex., 1 (5); Yasato-machi, 87, 1 ex., 1 (8♂); Tsukuba-shi, 90a, 1 ex., 1 (8♂); 90b, 1 ex., 1 (5); 90e, 1 ex., 1 (5); 94b, 2 exs., 2 (8♂); 99a, 1 ex., 1 (6♀); 99b, 1 ex., 1 (5); **Tochigi Pref.:** Nasu-machi, 108, 2 exs., 1 (8♂), 1 (6); 109, 1 ex., 1 (6♀); Kuroiso-shi, 112, 1 ex., 1 (5); 113, 12 exs., 11 (6♀), 1 (5); Kurobane-machi, 116, 6 exs., 4 (8♂), 1 (6♀), 1 (5); Fujihara-machi, 121, 5 exs., 1 (6♀), 3 (6), 1 (3); Motegi-machi, 137, 1 ex., 1 (6♀); Imaichi-shi, 148, 4 exs., 4 (5); Kanuma-shi, 166, 2 exs., 1 (6♂), 1 (6♀); Awano-machi, 171, 1 ex., 1 (5); Nogi-machi, 177, 11 exs., 1 (6♂), 10 (6♀); Ashikaga-shi, 183, 2 exs., 2 (8♂); **Gunma Pref.:** Naganohara-machi, 217a, 4 exs., 2 (8♂), 2 (6♀); **Saitama Pref.:** Kamiizumi-mura, 221, 1 ex., 1 (8♂); 222, 6 exs., 1 (8♂), 1 (8), 1 (6♀), 3 (5); 223, 2 exs., 2 (8♂); 224, 1 ex., 1 (8♂); 226, 6 exs., 3 (8♂), 2 (6♀), 1 (5); Ôtaki-mura, 230, 2 exs., 1 (8♂), 1 (6♀); 232, 4 exs., 3 (8♂), 1 (6♀); **Chiba Pref.:** Nagara-machi, 242, 3 exs., 3 (8♂) [CBM-ZU 291, 298, 299]; Ichihara-shi, 245, 14 exs., 5 (8♂) [CBM-ZU 539, 561, 563-565], 3 (6♀) [CBM-ZU 524, 528, 562], 4 (6) [CBM-ZU 525-527, 559], 2 (5) [CBM-ZU 558, 560]; **Tôkyô Pref.:** Chiyoda-ku, 256a, 1 ex., 1 (5); 259a, 1 ex., 1 (6♀); **Kanagawa Pref.:** Zushi-shi, 266b, 3 exs., 3 (8♂); **Ehime Pref.:** Kumakôgen-chô, 302, 11 exs., 10 (6), 1 (5); Oda-chô, 305, 2 exs., 1 (8♂), 1 (6♀).

Family Pauropodidae

3. *Allopauropus (Allopauropus) danicus* (Hansen, 1902)

Vidensk. Meddr. dansk naturh. Foren. 1901: 376-378.

pl. 3, figs. a-f.

Type locality: Store Klinteskov wood, isl. Møn, Denmark [1892.7., H. J. Hansen, 1 ex. (9♂)].

Ibaraki Pref.: Urizura-machi, 51a, 7 exs., 5 (9♀), 2 (8); Ogawa-machi, 61, 3 exs., 3 (5); Makabe-machi, 79, 1 ex., 1 (6); Tsukuba-shi, 96b, 1 ex., 1 (6); 98b, 4 exs., 1 (8), 2 (6), 1 (3); **Saitama Pref.:** Kamiizumi-mura, 222, 2 exs., 2 (3); 224, 5 exs., 1 (9♀), 1 (8), 1 (6), 2 (5); **Chiba Pref.:** Katsuura-shi, 247, 1 ex., 1 (8) [CBM-ZU 310]; Tomiura-machi, 251a, 1 ex., 1 (8) [CBM-ZU 403]; Tateyama-shi, 253, 4 exs., 2 (9) [CBM-ZU 318, 319], 1 (5) [CBM-ZU 316], 1 (3) [CBM-ZU 317]; **Tōkyō Pref.:** Chiyoda-ku, 256c, 2 exs., 2 (9♀); Hachijō-jima Is., 262, 1 ex., 1 (6); 264, 1 ex., 1 (8); **Yamanashi Pref.:** Ōtsuki-shi, 283c, 1 ex., 1 (3); **Kumamoto Pref.:** Ashikita-machi, 315, 1 ex., 1 (9♀); **Ōita Pref.:** Kujū-machi, 316, 1 ex., 1 (9♀).

4. *Allopauropus (Allopauropus) loligoformis* Hagino, 1991

Can. Ent. 123: 1011-1013, figs. 1-10.

Type locality: Mt. Yamizo-san, Daigo-machi, Ibaraki Pref., 36° 55' 36" N, 140° 16' 12" E, 900 m, DB (Fgc, QLc).

Akita Pref.: Kazuno-shi, 11, 2 exs., 1 (9♀), 1 (6); **Fukushima Pref.:** Nihonmatsu-shi, 14b, 1 ex., 1 (3); 15, 3 exs., 2 (9♀), 1 (6); **Ibaraki Pref.:** Takahagi-shi, 26, 1 ex., 1 (5); 30, 1 ex., 1 (9♂); Daigo-machi, 35a, 1 ex., 1 (9♂); 37, 3 exs., 1 (9♂) [holotype, CBM-ZU 1]; 2 (9♀) [2 paratypes, CBM-ZU 2, 3]; Hitachiōmiya-shi, 48a, 10 exs., 3 (9♂), 7 (9♀); 48h, 1 ex., 1 (5); 48i, 6 exs., 2 (9♂), 4 (9♀); 49, 1 ex., 1 (9♀); Urizura-machi, 51b, 1 ex., 1 (9♀); Jōhoku-machi, 55, 1 ex., 1 (9♀); 56b, 1 ex., 1 (9♀); Mito-shi, 58, 2 exs., 2 (9♀) [2 paratypes, coll. Hagino]; Nanakai-mura, 62, 3 exs., 1 (8♂), 1 (8), 1 (6); 63, 7 exs., 1 (8♂), 3 (8), 3 (6); Kasama-shi, 67, 1 ex., 1 (5); Iwama-machi, 75, 1 ex., 1 (8♂); Yasato-machi, 87, 2 exs., 2 (5); Tsukuba-shi, 94b, 3 exs., 1 (9♀), 1 (8), 1 (5); 95a, 1 ex., 1 (9♂); 95b, 1 ex., 1 (6); 96a, 1 ex., 1 (9♀); 96b, 4 exs., 3 (6), 1 (5); **Tochigi Pref.:** Kuroiso-shi, 113, 4 exs., 2 (5), 2 (3); Kurobane-machi, 116, 1 ex., 1 (3); Fujihara-machi, 121, 3 exs., 3 (6); Kuriyama-mura, 125, 1 ex., 1 (3); 127, 2 exs., 2 (5); Yaita-shi, 134, 1 ex., 1 (8♂); Imaichi-shi, 148, 9 exs., 9 (9); Nikkō-shi, 152, 1 ex., 1 (5); 164, 1 ex., 1 (6); Kanuma-shi, 166, 13 exs., 1 (5), 12 (3); Ashio-machi, 167, 8 exs., 2 (9♀), 3 (8♂), 1 (8), 1 (6), 1 (5); Awano-machi, 171, 1 ex., 1 (8♂); Ashikaga-shi, 181, 1 ex., 1 (6); **Gunma Pref.:** Naganohara-machi, 217b, 1 ex., 1 (9♀); **Saitama Pref.:** Ōtaki-mura, 232, 1 ex., 1 (8♂); 234, 3 exs., 1 (8♂), 1 (6), 1 (5); **Chiba Pref.:** Chōnan-machi, 243, 1 ex., 1 (5) [CBM-ZU 264]; **Toyama Pref.:** Ōyama-machi,

276, 1 ex., 1 (9♀); **Yamanashi Pref.:** Tabayama-mura, 281c, 5 exs., 3 (9♂), 1 (9♀), 1 (8); Ōtsuki-shi, 283d, 2 exs., 1 (8), 1 (5); 283e, 8 exs., 3 (8), 4 (6), 1 (5); Narusawa-mura, 290, 2 exs., 2 (3); **Ehime Pref.:** Oda-chō, 307, 6 exs., 5 (8), 1 (6); 310, 14 exs., 6 (8♂), 5 (8), 3 (6).

5. *Allopauropus (Decapauropus) dendriiformis* Hagino, 1993

Nat. Hist. Res. 2 (2): 175-177, fig. 1.

Type locality: Daifusa-misaki, Tomiura-machi, Chiba Pref., 35° 02' 22" N, 139° 48' 46" E, 80 m, EB (Css, Caj, Auj).

Chiba Pref.: Tomiura-machi, 251a, 96 exs., 62 (9♀) [holotype, CBM-ZU 52; 4 paratypes, CBM-ZU 53, 54, 2 coll. Hagino; CBM-ZU 362, 363, 366, 369, 371, 372, 376, 377, 380, 382, 383, 385, 386, 388, 393, 394, 400-402, 406-411, 413-417, 419-423, 426-429, 432, 436-442, 444, 445, 447-451, 453, 454], 15 (9) [CBM-ZU 364, 365, 375, 378, 381, 384, 389, 399, 405, 412, 418, 431, 433, 435, 443], 19 (6) [CBM-ZU 367, 368, 373, 374, 379, 387, 390-392, 395-398, 424, 425, 430, 434, 446, 452]; 251b, 55 exs., 45 (9♀) [CBM-ZU 461, 462, 465, 466, 468-471, 473-475, 477-479, 481-487, 492, 493, 496-498, 501-518, 521], 2 (9) [CBM-ZU 463, 480], 7 (6) [CBM-ZU 472, 476, 491, 499, 500, 519, 520], 1 (?) [CBM-ZU 467].

6. *Allopauropus (Decapauropus) fortisus* Hagino, 1991

Can. Ent. 123: 1013-1014, figs. 11-20.

Type locality: Kotoku, Urizura-machi, Ibaraki Pref., 36° 29' 17" N, 140° 25' 29" E, 70 m, EC (Psd).

Akita Pref.: Kazuno-shi, 11, 1 ex., 1 (9♀); **Ibaraki Pref.:** Kitaibaraki-shi, 22, 1 ex., 1 (8); 23, 1 ex., 1 (9♂); Hitachi-shi, 34, 1 ex., 1 (9♀); Urizura-machi, 51a, 1 ex., 1 (9♀); 51b, 2 exs., 2 (9♀) [holotype, CBM-ZU 4; paratype, CBM-ZU 5]; Jōhoku-machi, 56b, 1 ex., 1 (9♀) [paratype, coll. Hagino]; Ibaraki-machi, 59, 2 exs., 2 (9♀); Makabe-machi, 80, 1 ex., 1 (9♀) [paratype, coll. Hagino]; Tsukuba-shi, 94b, 1 ex., 1 (8); 95a, 8 exs., 8 (9♀); 96a, 2 exs., 2 (9♀); 97a, 1 ex., 1 (9♀); 98a, 2 exs., 2 (9♀); 98b, 1 ex., 1 (8); **Tochigi Pref.:** Batō-machi, 118, 1 ex., 1 (9♀); 119, 1 ex., 1 (9♀); Fujihara-machi, 121, 1 ex., 1 (9♀); **Gunma Pref.:** Katashina-mura, 190, 1 ex., 1 (9♀); 208, 1 ex., 1 (9♀); Naganohara-machi, 217b, 1 ex., 1 (9♀); **Chiba Pref.:** Chiba-shi, 241a, 1 ex., 1 (9♀) [CBM-ZU 581]; Nagara-machi, 242, 1 ex., 1 (9♀) [CBM-ZU 296]; Katsuura-shi, 247, 1 ex., 1 (9♀) [CBM-ZU 308]; **Yamanashi Pref.:** Ōtsuki-shi, 283a, 1 ex., 1 (9♀); **Shizuoka Pref.:** Izu-shi, 295, 1 ex., 1 (9♀); **Ehime Pref.:** Oda-chō, 308, 1 ex., 1 (6); **Fukuoka Pref.:** Kitakyūshū-shi, 312, 1 ex., 1 (9♀); **Miyazaki Pref.:** Hinokage-chō, 317, 2 exs., 2 (9♀); Takachiho-chō,

318, 2 exs., 1 (9♂), 1 (9♀).

7. *Allopauropus (Decapauropus) ibarakiensis*

Hagino, 1991

Can. Ent. 123: 1015-1016, figs. 21-32.

Type locality: Kamishimohata, Hitachiôta-shi [Satomi-mura], 36° 40' 25"N, 140° 31' 52"E, 290 m, in rotten wood, EC (Cho) + DB (QLs).

Hokkaidô Pref.: Rishiri-tô Is., 3, 10 exs., 6 (9♀), 2 (8), 1 (6), 1 (5); **Akita Pref.:** Kazuno-shi, 11, 2 exs., 2 (9♀); **Fukushima Pref.:** Hinoemata-mura, 16, 6 exs., 2 (9♂), 3 (9♀), 1 (8); **Ibaraki Pref.:** Kitaibaraki-shi, 21, 3 exs., 2 (9♀), 1 (8); 22, 7 exs., 1 (9♀), 3 (6), 3 (5); 23, 1 ex., 1 (8♂); 25, 13 exs., 4 (8♂), 4 (8), 5 (6); Takahagi-shi, 30, 2 exs., 2 (9♀); Hitachi-shi, 32, 2 exs., 1 (9♂), 1 (9♀); 34, 34 exs., 1 (9♂), 33 (9♀); Daigo-machi, 38a, 1 ex., 1 (9♀); 41a, 2 exs., 2 (9♀) [2 paratypes, coll. Hagino]; 43, 3 exs., 2 (9♀), 1 (6); Hitachiôta-shi, 46, 3 exs., 3 (9♀) [holotype, CBM-ZU 6; 2 paratypes, CBM-ZU 7, 8]; Katsura-mura, 53, 1 ex., 1 (9♀); Jôhoku-machi, 56b, 1 ex., 1 (9♂); Ibaraki-machi, 59, 4 exs., 4 (9♀); Iwase-machi, 71, 1 ex., 1 (9♀); Yasato-machi, 87, 1 ex., 1 (9♂); Tsukuba-shi, 90a, 1 ex., 1 (6); 90b, 4 exs., 1 (9♀), 2 (6), 1 (5); 90c, 1 ex., 1 (9♀); 90d, 1 ex., 1 (9♀); 90e, 15 exs., 5 (9♂), 8 (9♀), 1 (8), 1 (6); 91b, 1 ex., 1 (8); 93a, 3 exs., 1 (9♂), 2 (9♀); 94a, 5 exs., 2 (9♂), 3 (9♀); 94b, 1 ex., 1 (8♂); 99a, 2 exs., 1 (9♂), 1 (9♀); Sakuragawa-mura, 103a, 1 ex., 1 (9♂) [paratype, coll. Hagino]; Ryûgasaki-shi, 104a, 3 exs., 3 (9♀); **Tochigi Pref.:** Nasu-machi, 107, 24 exs., 22 (9♀), 1 (8), 1 (6); 109, 1 ex., 1 (9♀); 110, 6 exs., 6 (9♀); Kuroiso-shi, 112, 1 ex., 1 (5); 113, 8 exs., 5 (8), 3 (6); Shiobara-machi, 114, 1 ex., 1 (6); Kurobane-machi, 115, 1 ex., 1 (9♀); 116, 2 exs., 1 (6), 1 (5); Batô-machi, 119, 4 exs., 1 (9♀), 3 (9); Fujihara-machi, 120, 4 exs., 3 (9♀), 1 (9); 121, 8 exs., 4 (9♀), 1 (8), 1 (6), 2 (5); Kuriyama-mura, 122, 3 exs., 2 (9♀), 1 (8); 123, 11 exs., 10 (9♀), 1 (8); 124, 79 exs., 1 (9♂), 55 (9♀), 3 (9), 1 (8♂), 8 (8), 4 (6), 7 (5); 125, 5 exs., 5 (9♀); 126, 4 exs., 3 (9♀), 1 (8); 127, 19 exs., 6 (9♂), 7 (9♀), 1 (8), 3 (6), 2 (5); 128, 1 ex., 1 (8♂); 129, 1 ex., 1 (9♀); Yaita-shi, 132, 4 exs., 4 (9♀); Imaichi-shi, 147, 4 exs., 1 (9♀), 3 (9); 148, 20 exs., 4 (9♂), 16 (9♀); Nikkô-shi, 149, 1 ex., 1 (9♀); 151, 7 exs., 2 (9♀), 1 (8♂), 1 (8), 1 (6), 2 (5); 153, 1 ex., 1 (9♀); 156, 1 ex., 1 (9♀); 157, 1 ex., 1 (9♀); 158, 10 exs., 2 (9♂), 6 (9♀), 2 (6); 159, 1 ex., 1 (9♀); 160, 1 ex., 1 (9♀); 164, 2 exs., 2 (6); Kanuma-shi, 165, 19 exs., 1 (9♂), 5 (9♀), 1 (8♂), 3 (8), 3 (6), 4 (5), 2 (3); Ashio-machi, 168, 2 exs., 2 (9♀); Awano-machi, 170, 1 ex., 1 (9♂); 171, 1 ex., 1 (9♂); Kuzu-machi, 178, 1 ex., 1 (9♂); Ashikaga-shi, 183, 2 exs., 2

(9♀); **Gunma Pref.:** Katashina-mura, 185, 10 exs., 9 (9♀), 1 (8); 186, 1 ex., 1 (9♀); 188d, 1 ex., 1 (9♀); 190, 18 exs., 1 (9♂), 9 (9♀), 3 (8), 3 (6), 1 (5), 1 (3); 192, 1 ex., 1 (9♀); 198, 1 ex., 1 (9♂); 207, 3 exs., 2 (9♂), 1 (9♀); 208, 2 exs., 1 (9♂), 1 (6); 209, 3 exs., 1 (9♂), 1 (9♀), 1 (8♂); Naganohara-machi, 216a, 3 exs., 2 (9♀), 1 (3); 216b, 14 exs., 12 (9♀), 1 (8), 1 (6); 217a, 2 exs., 1 (9♂), 1 (8); 217b, 1 ex., 1 (9♂); Fujimi-mura, 219, 1 ex., 1 (5); **Saitama Pref.:** Kamiizumi-mura, 224, 3 exs., 3 (9♀); Ôtaki-mura, 228, 1 ex., 1 (9♂); 231, 6 exs., 1 (9♂), 2 (9♀), 2 (8), 1 (6); 232, 20 exs., 5 (9♂), 3 (9♀), 8 (8♂), 3 (6), 1 (5); 233, 11 exs., 1 (9♂), 5 (9♀), 2 (8♂), 2 (8), 1 (6); 234, 5 exs., 1 (9♂), 2 (9♀), 2 (8); 235, 1 ex., 1 (8♂); **Chiba Pref.:** Chôshi-shi, 239, 4 exs., 4 (9♀) [CBM-ZU 591-594]; Nagara-machi, 242, 8 exs., 3 (9♂), 5 (9♀) [CBM-ZU 292-295, 297]; Ichihara-shi, 245, 9 exs., 8 (9♀) [CBM-ZU 540, 544, 546, 549, 553, 555, 557, 572], 1 (6) [CBM-ZU 567]; Katsuura-shi, 246, 5 exs., 5 (9♀) [CBM-ZU 347, 353, 354, 356, 358]; Tateyama-shi, 253, 2 exs., 2 (9♀) [CBM-ZU 320, 321]; **Tôkyô Pref.:** Chiyoda-ku, 254, 1 ex., 1 (9♀); Hachijô-jima Is., 263, 1 ex., 1 (9♀); **Niigata Pref.:** Uonuma-shi, 267, 2 exs., 1 (9♀), 1 (6); **Toyama Pref.:** Ôyama-machi, 276, 2 exs., 1 (9♂), 1 (9♀); 279b, 5 exs., 5 (9♀); **Yamanashi Pref.:** Tabayama-mura, 281d, 1 ex., 1 (9♀); 281g, 1 ex., 1 (9♂); Narusawa-mura, 289a, 7 exs., 3 (9♂), 2 (9♀), 1 (9), 1 (8); 290, 9 exs., 2 (9♂), 6 (9♀), 1 (8♂); Kamikuishiki-mura, 291b, 1 ex., 1 (6); **Gifu Pref.:** Hida-shi, 292, 1 ex., 1 (9♀); **Ehime Pref.:** Kumakôgen-chô, 302, 1 ex., 1 (9♀); **Miyazaki Pref.:** Takachiho-chô, 318, 1 ex., 1 (9♀).

8. *Allopauropus (Decapauropus) infurcatus*

Hagino, 1991

Can. Ent. 123: 1017-1019, figs. 33-42.

Type locality: Sakai, Iwase-machi, IbarakiPref., 36° 20' 24"N, 140° 05' 44"E, 170 m, EC (Psd) + EB (Erj).

Ibaraki Pref.: Daigo-machi, 39a, 1 ex., 1 (6); Urizura-machi, 49b, 1 ex., 1 (8); Naka-machi, 50, 1 ex., 1 (9♀); Jôhoku-machi, 52, 1 ex., 1 (8); Ibaraki-machi, 57, 3 exs., 1 (10♀), 1 (8), 1 (6); 58, 2 exs., 1 (10♀), 1 (8); Nanakai-mura, 60, 37 exs., 5 (10♀), 18 (9♀), 9 (8), 3 (6), 2 (5); 61, 4 exs., 2 (9♀), 1 (8), 1 (6); 62, 2 exs., 1 (10♀), 1 (8); Kasama-shi, 66, 4 exs., 2 (10♀), 1 (9♀), 1 (8); 68, 3 exs., 1 (10♀), 2 (9♀); Iwase-machi, 71, 2 exs., 2 (10♀); 72, 1 ex., 1 (9♀) [holotype, CBM-ZU 9]; Kyôwa-machi, 80, 1 ex., 1 (9♀); Shimotsuma-shi, 81, 2 exs., 1 (9♀) [paratype, coll. Hagino], 1 (8); Yasato-machi, 85, 1 ex., 1 (9♀); Tsukuba-shi, 95b, 12 exs., 2 (10♀), 1 (9♀), 3 (8), 6

(6); **96a**, 1 ex., 1 (5); **96b**, 3 exs., 1 (10♀), 1 (9♀), 1 (6); Koga-shi, **99**, 1 ex., 1 (8); Iwai-shi, **100**, 3 exs., 1 (9♀) [paratype, coll.Hagino], 1 (8), 1 (3); Ryūgasaki-shi, **102a**, 1 ex., 1 (10♀); Moriya-shi, **103**, 1 ex., 1 (9♀) [paratype, CBM-ZU 10]; **Tochigi Pref.**: Nasu-machi, **108**, 2 exs., 2 (6); Kuroiso-shi, **111**, 8 exs., 2 (9♀), 1 (9), 1 (8), 2 (6), 2 (3); Ōtawara-shi, **115**, 2 exs., 1 (9♀), 1 (9); Yaita-shi, **131**, 1 ex., 1 (9♀); **132**, 1 ex., 1 (9♀); Ujiie-machi, **134**, 1 ex., 1 (10♀); Motegi-machi, **135**, 1 ex., 1 (10♀); Haga-machi, **136**, 1 ex., 1 (9♀); Mōka-shi, **137**, 2 exs., 2 (9♀); **138**, 1 ex., 1 (10♀); Ninomiya-machi, **140**, 3 exs., 1 (10♀), 2 (9♀); Kamikawachi-machi, **141**, 1 ex., 1 (9); Utsunomiya-shi, **142**, 1 ex., 1 (9♀); Imaichi-shi, **146**, 6 exs., 1 (10), 2 (9), 2 (6), 1 (3); Mibu-machi, **171**, 9 exs., 1 (10♀), 8 (9♀); Oyama-shi, **173**, 1 ex., 1 (9♀); Nogi-machi, **174**, 1 ex., 1 (10♀); **175**, 1 ex., 1 (8); **Saitama Pref.**: Kamiizumi-mura, **221**, 3 exs., 1 (10), 2 (9♀); **223**, 1 ex., 1 (10); **Chiba Pref.**: Noda-shi, **234**, 4 exs., 1 (9♀) [CBM-ZU 588], 1 (8) [CBM-ZU 587], 1 (6) [CBM-ZU 586], 1 (5) [CBM-ZU 585]; **235**, 1 ex., 1 (9♀) [CBM-ZU 589]; Nagareyama-shi, **236**, 1 ex., 1 (8) [CBM-ZU 590]; Chōshi-shi, **238**, 6 exs., 4 (9♀) [CBM-ZU 597-600], 1 (9) [CBM-ZU 595], 1 (8) [CBM-ZU 596]; Chōnan-machi, **241**, 20 exs., 6 (10♀) [CBM-ZU 268, 272, 277, 280, 283, 287], 1 (10) [CBM-ZU 282], 10 (9♀) [CBM-ZU 266, 271, 273, 274, 276, 278, 278, 284-286], 3 (9) [CBM-ZU 270, 275, 281]; Ichihara-shi, **243**, 1 ex., 1 (9♀) [CBM-ZU 535]; Kimitsu-shi, **246**, 1 ex., 1 (9♀) [CBM-ZU 605]; Tomiura-machi, **249a**, 9 exs., 2 (10♀) [CBM-ZU 455, 458], 1 (10) [CBM-ZU 370], 3 (9♀) [CBM-ZU 360, 456, 457], 1 (9) [CBM-ZU 404], 2 (6) [CBM-ZU 359, 361]; **249b**, 7 exs., 1 (10♀) [CBM-ZU 490], 2 (9♀) [CBM-ZU 464, 489], 1 (9) [CBM-ZU 488], 2 (8) [CBM-ZU 460, 494], 1 (6) [CBM-ZU 495].

9. *Allopauropus (Decapauropus) intonsus* Remy, 1956

Mém. Inst. scient. Madagascar, Sér. A 10: 184-186, fig. 40.

Type locality: Ambatolampy, Madagascar [1947, P. A. Remy, 1 ex.(9♀)].

Hokkaidō Pref.: Rishiri-tō Is., 2, 1 ex., 1 (8); 3, 2 exs., 2 (9♀); **Ibaraki Pref.**: Kitaibaraki-shi, **22**, 1 ex., 1 (9♀); Hitachi-shi, **34**, 1 ex., 1 (9♀); Daigo-machi, **42**, 1 ex., 1 (9♀); Hitachiōmiya-shi, **48j**, 3 exs., 3 (9♀); Katsura-mura, **53**, 1 ex., 1 (9♀); Ogawa-machi, **61**, 3 exs., 2 (9♀), 1 (6); Shimotsuma-shi, **83**, 1 ex., 1 (9♀); Tsukuba-shi, **97b**, 7 exs., 3 (9♀), 4 (8); **98a**, 1 ex., 1 (5); **98b**, 5 exs., 1 (9♂), 1 (9♀), 3 (8); **99a**, 1 ex., 1 (9♀); **99b**, 1 ex., 1 (9♀); Yūki-shi, **100**, 1 ex., 1 (9♀); Sakuragawa-mura, **103b**, 1 ex., 1 (9♀); **Tochigi Pref.**:

Fujihara-machi, **121**, 2 exs., 1 (5), 1 (3); Kuriyamamura, **122**, 1 ex., 1 (9♀); Utsunomiya-shi, **145**, 1 ex., 1 (9♀); Nikkō-shi, **161**, 1 ex., 1 (9♀); **Gunma Pref.**: Katashina-mura, **185**, 2 exs., 2 (9♀); **188a**, 3 exs., 3 (9♀); **190**, 6 exs., 6 (9♀); **191**, 1 ex., 1 (9♀); Fujimimura, **219**, 1 ex., 1 (9♀); **Chiba Pref.**: Ichihara-shi, **245**, 4 exs., 3 (9♀) [CBM-ZU 530-532], 1 (8) [CBM-ZU 529]; **Tōkyō Pref.**: Chiyoda-ku, **258**, 1 ex., 1 (9♀); **259a**, 1 ex., 1 (9♀); **259b**, 1 ex., 1 (9♀); **260**, 1 ex., 1 (9♀); **Yamanashi Pref.**: Kamikuishiki-mura, **291a**, 2 exs., 1 (9♀), 1 (8); **Yamaguchi Pref.**: Misumi-chō, **299**, 1 ex., 1 (9♀); Mitō-chō, **300**, 1 ex., 1 (8); **Kumamoto Pref.**: Aso-machi, **314**, 1 ex., 1 (8).

10. *Allopauropus (Decapauropus) ligulosus* Hagino, 1991

Can. Ent. 123: 1019-1021, figs. 43-52.

Type locality: Tokushuku-jōshi, Hokota-machi, Ibaraki Pref., 36° 11' 04" N, 140° 31' 14" E, 30 m, EB (Css, Auj, Caj).

Akita Pref.: Kazuno-shi, 11, 1 ex., 1 (9♀); Sannaimura, 13, 1 ex., 1 (9♀); **Fukushima Pref.**: Hinoemata-mura, 18, 1 ex., 1 (6); **Ibaraki Pref.**: Kitaibaraki-shi, 21, 1 ex., 1 (9♀); **22**, 2 exs., 2 (6); **23**, 2 exs., 1 (9♀), 1 (8); **25**, 1 ex., 1 (8); Takahagi-shi, **26**, 1 ex., 1 (6); **27**, 1 ex., 1 (9♀); **29**, 12 exs., 12 (9♀); Daigo-machi, **38a**, 1 ex., 1 (9♀) [paratype, CBM-ZU 13]; **39b**, 2 exs., 2 (9♀) [2 paratypes, coll. Hagino]; **40**, 1 ex., 1 (9♀); Hitachiōmiya-shi, **48a**, 1 ex., 1 (9♀); **48b**, 4 exs., 4 (9♀); **48c**, 10 exs., 9 (9♀), 1 (8); **48d**, 14 exs., 7 (9♀), 3 (8), 2 (6), 2 (3); **48e**, 10 exs., 10 (9♀); **48g**, 1 ex., 1 (9♀); **48h**, 29 exs., 26 (9♀), 3 (8); **48i**, 12 exs., 7 (9♀), 3 (8), 1 (5), 1 (3); **48j**, 1 ex., 1 (9♀); **48k**, 16 exs., 16 (9♀); Urizura-machi, **51b**, 1 ex., 1 (9♀); Jōhoku-machi, **54**, 1 ex., 1 (9♀); **56b**, 10 exs., 10 (9♀); **57**, 1 ex., 1 (9♀); Iwase-machi, **73**, 3 exs., 3 (9♀); Yamato-mura, **77**, 2 exs., 2 (9♀); Kyōwa-machi, **82**, 1 ex., 1 (9♀); Hokota-machi, **84**, 2 exs., 2 (9♀) [holotype, CBM-ZU 11; paratype, CBM-ZU 12]; Niihari-mura, **88a**, 2 exs., 2 (9♀); Tsukuba-shi, **94a**, 13 exs., 1 (9♂), 12 (9♀); **94b**, 2 exs., 2 (8); **95a**, 5 exs., 5 (9♀); **96a**, 2 exs., 2 (9♀); **97a**, 1 ex., 1 (9♀); **97b**, 2 exs., 2 (8); **98a**, 5 exs., 5 (9♀); **98b**, 1 ex., 1 (8); **99a**, 6 exs., 6 (9♀); Sakuragawa-mura, **103b**, 1 ex., 1 (9♀); Toride-shi, **106**, 1 ex., 1 (9♀); **Tochigi Pref.**: Nasu-machi, **107**, 5 exs., 4 (9♀), 1 (5); **110**, 4 exs., 4 (9♀); Kuroiso-shi, **113**, 1 ex., 1 (6); Shiobara-machi, **114**, 1 ex., 1 (9); Batō-machi, **119**, 2 exs., 2 (9); Fujihara-machi, **120**, 3 exs., 1 (9♀), 1 (8♀), 1 (6); **121**, 6 exs., 2 (9♀), 1 (8), 1 (6), 2 (5); Kuriyamamura, **122**, 1 ex., 1 (8); **124**, 3 exs., 3 (9♀); **127**, 9 exs., 4 (9♀), 4 (8), 1 (6); Imaichi-shi, **147**, 1 ex., 1 (9♀); **148**, 64 exs., 27 (9♀), 36 (9), 1 (8); Nikkō-shi, **157**, 1

ex., 1 (9♀); 159, 1 ex., 1 (6); 160, 1 ex., 1 (9♀); 164, 4 exs., 2 (8), 2 (6); Kanuma-shi, 165, 10 exs., 4 (9♀), 1 (9), 2 (8), 1 (6), 1 (5), 1 (3); 166, 6 exs., 5 (9♀), 1 (8); Ashio-machi, 168, 8 exs., 3 (9♀), 3 (8), 1 (6), 1 (5); Awano-machi, 172, 2 exs., 1 (9♀), 1 (6); Sano-shi, 180, 6 exs., 1 (9♀), 1 (8), 4 (6); Ashikaga-shi, 181, 1 ex., 1 (6); 182, 6 exs., 1 (9♂), 1 (9♀), 2 (8), 1 (6), 1 (5); Gunma Pref.: Katashina-mura, 185, 2 exs., 2 (9♀); 189, 1 ex., 1 (9♀); 190, 3 exs., 2 (9♀), 1 (8); Naganohara-machi, 216a, 1 ex., 1 (9♀); 216b, 20 exs., 19 (9♀), 1 (5); 217a, 3 exs., 3 (9♀); 217b, 1 ex., 1 (9♂); Fujimi-mura, 219, 1 ex., 1 (6); Saitama Pref.: Kamiizumi-mura, 224, 7 exs., 7 (9♀); 225, 3 exs., 3 (9♀); 226, 4 exs., 4 (9♀); Ôtaki-mura, 229, 2 exs., 2 (9♀); Chiba Pref.: Chiba-shi, 241b, 3 exs., 2 (9♀) [CBM-ZU 582, 584], 1 (9) [CBM-ZU 583]; Chōnan-machi, 243, 3 exs., 3 (9♀) [CBM-ZU 263, 265, 267]; 244, 1 ex., 1 (9♀) [CBM-ZU 601]; Ichihara-shi, 245, 16 exs., 13 (9♀) [CBM-ZU 522, 534, 542, 543, 545, 547, 548, 550-552, 554, 568, 569], 1 (9) [CBM-ZU 571], 2 (3) [CBM-ZU 566, 570]; Katsuura-shi, 246, 26 exs., 23 (9♀) [CBM-ZU 322, 323, 325-339, 342, 343, 348, 349, 351, 357], 3 (9) [CBM-ZU 324, 340, 350]; 247, 11 exs., 9 (9♀) [CBM-ZU 300-302, 304-307, 311, 312], 1 (9) [CBM-ZU 309], 1 (6) [CBM-ZU 303]; Kimitsu-shi, 248, 1 ex., 1 (9♀) [CBM-ZU 606]; Futtsu-shi, 250, 1 ex., 1 (9♀) [CBM-ZU 607]; Tateyama-shi, 252, 1 ex., 1 (9) [CBM-ZU 608]; Tōkyō Pref.: Chiyoda-ku, 256b, 15 exs., 15 (9♀); 257b, 1 ex., 1 (9♀); 260, 1 ex., 1 (9♀); Hachijō-jima Is., 263, 6 exs., 4 (9♀), 1 (8), 1 (5); Kanagawa Pref.: Matsuda-machi, 265, 3 exs., 3 (9♀); Zushi-shi, 266b, 3 exs., 3 (9♀); Yamanashi Pref.: Tabayama-mura, 281a, 4 exs., 4 (9♀); Ôtsuki-shi, 283e, 1 ex., 1 (6); Enzan-shi, 285, 3 exs., 3 (9♀); Narusawa-mura, 290, 3 exs., 1 (9♀), 1 (9), 1 (6); Kamikuishiki-mura, 291a, 2 exs., 2 (6); 291b, 9 exs., 7 (9♀), 1 (9), 1 (6); Gifu Pref.: Takayama-shi, 293, 2 exs., 2 (9♀); Ehime Pref.: Kumakōgen-chō, 302, 1 ex., 1 (9♀); Oda-chō, 304, 3 exs., 1 (9♀), 1 (6), 1 (5); 305, 9 exs., 4 (6), 3 (5), 2 (3); 309, 1 ex., 1 (8); Uchiko-chō, 311, 4 exs., 1 (9♀), 2 (6), 1 (5); Fukuoka Pref.: Kitakyūshū-shi, 312, 6 exs., 6 (9♀); Miyazaki Pref.: Takachiho-chō, 318, 5 exs., 4 (9♀), 1 (6).

11. *Allopauropus (Decapauropus) pseudokoreanus* Hagino, 1991

Can. Ent. 123: 1021-1023, figs. 53-64.

Type locality: Temple Seion-ji, Jōhoku-machi, Ibaraki Pref., 36°27'07"N, 140°20'06"E, 110 m, EB (QCg, QCm) + EC (Crj).

Ibaraki Pref.: Kitaibaraki-shi, 21, 1 ex., 1 (9♂); Hitachiōmiya-shi, 50, 1 ex., 1 (9♂) [paratype, coll.

Hagino]; Jōhoku-machi, 56b, 5 exs., 3 (9♂) [holotype, CBM-ZU 14; 2 paratypes, CBM-ZU 15, coll. Hagino], 2 (9♀) [2 paratypes, CBM-ZU 16, coll. Hagino]; Kasama-shi, 69, 3 exs., 2 (8♂), 1 (8); Tsukuba-shi, 98b, 2 exs., 2 (5); 99b, 1 ex., 1 (9♀); Toride-shi, 106, 1 ex., 1 (9♂); Tochigi Pref.: Kamikawachi-machi, 143, 1 ex., 1 (8); Kanuma-shi, 166, 14 exs., 2 (8♂), 1 (8), 10 (5), 1 (3); Chiba Pref.: Tateyama-shi, 253, 1 ex., 1 (9♂); Toyama Pref.: Asahi-machi, 269, 1 ex., 1 (9♀); Yamanashi Pref.: Kamikuishiki-mura, 291a, 1 ex., 1 (8); Kagoshima Pref.: Amami-Ōshima Is., 320, 1 ex., 1 (9♀).

12. *Allopauropus (Decapauropus) tetraramosus* Hagino, 1991

Can. Ent. 123: 1023-1025, figs. 65-76.

Type locality: Mt. Yamizo-san, Daigo-machi, Ibaraki Pref., 36°55'44"N, 140°16'25"E, 980 m, DB (Fgc).

Ibaraki Pref.: Daigo-machi, 35a, 3 exs., 3 (9♀) [holotype, CBM-ZU 17; 2 paratypes, CBM-ZU 18, coll. Hagino]; Jōhoku-machi, 54, 3 exs., 3 (9♀); 56c, 1 ex., 1 (9♀) [paratype, coll. Hagino]; Iwase-machi, 72, 2 exs., 2 (9♀); Tsukuba-shi, 94a, 1 ex., 1 (9♀); 94b, 1 ex., 1 (8); 95a, 1 ex., 1 (9♀); Tochigi Pref.: Nasu-machi, 107, 4 exs., 4 (9♀); Shiobara-machi, 114, 1 ex., 1 (9); Batō-machi, 119, 18 exs., 5 (9♂), 7 (9♀), 6 (9); Fujihara-machi, 121, 1 ex., 1 (9♀); Kuriyama-mura, 127, 2 exs., 2 (6); Nikkō-shi, 151, 6 exs., 3 (9♀), 2 (9), 1 (8); 160, 4 exs., 4 (9♀); 161, 1 ex., 1 (9♀); Kanuma-shi, 165, 2 exs., 2 (5); 166, 2 exs., 1 (8♂), 1 (6); Mibu-machi, 173, 1 ex., 1 (6); Tanuma-machi, 179, 1 ex., 1 (6); Gunma Pref.: Naganohara-machi, 216b, 1 ex., 1 (9♀); Yamanashi Pref.: Fujiyoshida-shi, 288, 1 ex., 1 (9♂); Kamikuishiki-mura, 291b, 1 ex., 1 (9♀).

13. *Allopauropus (Decapauropus) toshiyukii* Hagino, 1991

Can. Ent. 123: 1025-1027, figs. 77-88.

Type locality: Konaka, Hitachiōta-shi [Satomi-mura], Ibaraki Pref., 36°44'40" N, 140°28'51"E, 300 m, In rotten wood, EC (Crj).

Fukushima Pref.: Hinoemata-mura, 19, 3 exs., 3 (9♀); Ibaraki Pref.: Hitachiōta-shi, 44, 4 exs., 4 (9♀) [holotype, CBM-ZU 19; 3 paratypes, CBM-ZU 20, 2 coll. Hagino]; Kitaura-machi, 85, 1 ex., 1 (9♀); Tsuchiura-shi, 89, 1 ex., 1 (6); Tsukuba-shi, 90a, 1 ex., 1 (9♂); 97b, 3 exs., 3 (9♀); 98b, 1 ex., 1 (9♀); 99b, 1 ex., 1 (9♀); Tochigi Pref.: Nasu-machi, 110, 2 exs., 2 (9♀); Imaichi-shi, 148, 1 ex., 1 (9♀); Ashikaga-shi, 183, 1 ex., 1 (9♀); Gunma Pref.: Katashina-mura, 185, 4 exs., 3 (9♀), 1 (6); 193, 1 ex., 1 (6); Saitama Pref.: Kamiizumi-mura, 224, 1 ex., 1 (9♀); Chiba Pref.: Chōnan-machi, 243, 1 ex., 1 (9) [CBM-ZU 269];

Toyama Pref.: Ôyama-machi, 279b, 2 exs., 1 (9 ♀), 1 (6); **Yamanashi Pref.:** Fujiyoshida-shi, 286a, 3 exs., 3 (9 ♀); 286b, 2 exs., 2 (9 ♀); **Shizuoka Pref.:** Shimodashi, 297, 1 ex., 1 (9 ♀); **Ehime Pref.:** Kumakôgen-chô, 302, 1 ex., 1 (9 ♀).

14. *Allopauropus (Decapauropus) yamizo* Hagino, 1991

Can. Ent. 123: 1029-1031, figs. 89-99.

Type locality: Mt. Yamizo-san, Daigo-machi, Ibaraki Pref., 36° 55' 44" N, 140° 16' 25" E, 980 m, DB (Fgc).

Hokkaidô Pref.: Rishiri-tô Is., 2, 1 ex., 1 (9 ♀); 3, 1 ex., 1 (6); **Ibaraki Pref.:** Daigo-machi, 35b, 1 ex., 1 (9 ♀) [holotype, CBM-ZU 21]; 38a, 1 ex., 1 (9 ♂) [paratype, CBM-ZU 22]; Urizura-machi, 51a, 2 exs., 2 (9 ♀) [2 paratypes, coll. Hagino]; Jôhoku-machi, 54, 1 ex., 1 (9 ♀); Mito-shi, 58, 1 ex., 1 (9 ♀) [paratype, CBM-ZU 23]; Ibaraki-machi, 59, 1 ex., 1 (9 ♂); Kasama-shi, 65, 3 exs., 3 (9 ♀); 66, 1 ex., 1 (9 ♀); Tsukuba-shi, 90e, 1 ex., 1 (9 ♀); 92a, 1 ex., 1 (9 ♀); **Tochigi Pref.:** Nasu-machi, 109, 1 ex., 1 (9 ♀); Nikkô-shi, 158, 1 ex., 1 (9 ♀); **Gunma Pref.:** Katashina-mura, 184, 1 ex., 1 (9 ♂); 207, 1 ex., 1 (8); **Saitama Pref.:** Ôtaki-mura, 232, 1 ex., 1 (9 ♂); Chiba Pref.: Tomiura-machi, 251a, 1 ex., 1 (9 ♂); **Yamanashi Pref.:** Kamikuishiki-mura, 291b, 1 ex., 1 (3).

15. *Pauropus tamurai* Hagino, 1991

Can. Ent. 123: 1033-1035, figs. 111-120.

Type locality: Mt. Sannô-san, Hitachiômiya-shi [Gozen'yama-mura], Ibaraki Pref., 36° 34' 35" N, 140° 15' 23" E, 230 m, DB (QLs, Ces).

Hokkaidô Pref.: Rishiri-tô Is., 3, 1 ex., 1 (9 ♀); Tomakomai-shi, 5, 1 ex., 1 (9 ♀); **Ibaraki Pref.:** Kitaibaraki-shi, 22, 4 exs., 1 (9 ♂), 1 (9 ♀), 1 (8), 1 (6); 25, 1 ex., 1 (6); Takahagi-shi, 26, 1 ex., 1 (9 ♀) [paratype, coll. Hagino]; 30, 1 ex., 1 (9 ♀) [paratype, coll. Hagino]; Hitachi-shi, 31, 2 exs., 1 (8), 1 (5); Hitachiômiya-shi, 48f, 1 ex., 1 (9 ♂) [holotype, CBM-ZU 26]; Jôhoku-machi, 56b, 1 ex., 1 (9 ♂) [paratype, coll. Hagino]; Mito-shi, 58, 1 ex., 1 (9 ♀) [paratype, CBM-ZU 27]; Nanakai-mura, 62, 5 exs., 1 (9 ♂), 1 (9 ♀), 1 (8 ♂), 2 (6); Kasama-shi, 68, 3 exs., 1 (9 ♂), 2 (9 ♀); 69, 3 exs., 3 (9 ♀); Yasato-machi, 87, 3 exs., 1 (9 ♂), 2 (9 ♀); Tsukuba-shi, 90a, 2 exs., 1 (9 ♀), 1 (6); 93b, 1 ex., 1 (8 ♂); 96a, 2 exs., 1 (9 ♂), 1 (9 ♀); 96b, 1 ex., 1 (8 ♂); **Tochigi Pref.:** Kuroiso-shi, 113, 3 exs., 1 (9 ♀), 2 (8 ♂); Kurobane-machi, 116, 3 exs., 1 (9 ♀), 1 (9), 1 (8); Fujihara-machi, 121, 1 ex., 1 (3); Kuriyama-mura, 126, 3 exs., 1 (9 ♀), 2 (8); 127, 1 ex., 1 (9 ♂); Yaita-shi, 133, 1 ex., 1 (8); Môka-shi, 139, 1 ex., 1 (9 ♀); Kamikawachi-machi, 143, 1 ex., 1 (9 ♀); Imaichi-shi, 148, 3 exs., 2 (9 ♀), 1 (6); Nikkô-shi, 163, 1 ex., 1 (9); Kanuma-shi, 165, 7 exs., 1 (9 ♂), 4 (9 ♀),

1 (8 ♂), 1 (8); 166, 4 exs., 2 (9 ♂), 1 (9 ♀), 1 (8 ♂); Awano-machi, 170, 1 ex., 1 (8); Nogi-machi, 177, 1 ex., 1 (9 ♂); Kuzuu-machi, 178, 1 ex., 1 (5); **Gunma Pref.:** Katashina-mura, 185, 1 ex., 1 (9 ♂); 186, 2 exs., 2 (9 ♀); 212, 1 ex., 1 (9 ♀); **Saitama Pref.:** Ôtaki-mura, 228, 1 ex., 1 (9 ♂); 230, 1 ex., 1 (5); 232, 1 ex., 1 (9 ♀); Tôkyô Pref.: Hachiôji-shi, 261a, 4 exs., 2 (9 ♂), 2 (9 ♀); **Kanagawa Pref.:** Matsuda-machi, 265, 1 ex., 1 (9 ♀); Zushi-shi, 266a, 1 ex., 1 (9 ♀); **Niigata Pref.:** Uonuma-shi, 267, 5 exs., 2 (9 ♂), 1 (9 ♀), 1 (8 ♂), 1 (8); **Yamanashi Pref.:** Tabayama-mura, 281a, 2 exs., 1 (9 ♂), 1 (8); Ôtsuki-shi, 283e, 1 ex., 1 (9 ♀); Enzan-shi, 285, 1 ex., 1 (9 ♂); Fujiyoshida-shi, 286b, 1 ex., 1 (6); Narusawa-mura, 289a, 1 ex., 1 (6); Kamikuishiki-mura, 291a, 5 exs., 1 (9), 1 (8), 1 (6), 1 (5), 1 (3); 291b, 10 exs., 8 (9 ♂), 2 (9 ♀).

16. *Stylopauropus (Stylopauropus) canaliculatus* Hagino, 1991

Can. Ent. 123: 1035-1037, figs. 121-131.

Type locality: Mt. Sannô-san, Hitachiômiya-shi [Gozen'yama-mura], Ibaraki Pref., 36° 34' 35" N, 140° 15' 23" E, 230 m, DB (QLs, Ces).

Hokkaidô Pref.: Tomakomai-shi, 5, 1 ex., 1 (9 ♀); **Aomori Pref.:** Towadako-machi, 8, 1 ex., 1 (5); **Akita Pref.:** Kazuno-shi, 11, 2 exs., 1 (9 ♀), 1 (5); **Fukushima Pref.:** Hinoemata-mura, 16, 1 ex., 1 (9 ♂); **Ibaraki Pref.:** Kitaibaraki-shi, 23, 2 exs., 2 (9 ♀) [2 paratypes, CBM-ZU 29, 30]; Takahagi-shi, 30, 1 ex., 1 (9 ♂) [paratype, coll. Hagino]; Hitachiômiya-shi, 48f, 1 ex., 1 (9 ♂) [holotype, CBM-ZU 28]; Makabe-machi, 78, 2 exs., 1 (9 ♀), 1 (8 ♂); 80, 1 ex., 1 (9 ♂) [paratype, coll. Hagino]; Tsukuba-shi, 90a, 2 exs., 2 (9 ♂); 90b, 7 exs., 1 (9 ♀), 1 (8), 2 (6), 3 (5); 91b, 1 ex., 1 (9 ♀); 92b, 2 exs., 2 (9 ♂); 93b, 5 exs., 1 (9 ♂), 2 (9 ♀), 1 (6), 1 (5); 94a, 1 ex., 1 (9 ♂); 94b, 7 exs., 1 (9 ♀), 1 (8 ♂), 3 (6), 2 (5); 95a, 2 exs., 1 (9 ♂), 1 (9 ♀); 95b, 1 ex., 1 (8 ♂); 96a, 10 exs., 6 (9 ♂), 4 (9 ♀); 96b, 9 exs., 3 (9 ♂), 1 (9 ♀), 3 (8 ♂), 1 (8), 1 (5); 97b, 2 exs., 1 (8), 1 (6); 98a, 26 exs., 6 (9 ♂), 12 (9 ♀), 1 (8 ♂), 2 (8), 2 (6), 3 (5); 98b, 16 exs., 3 (9 ♂), 3 (9 ♀), 1 (8 ♂), 3 (8), 5 (6), 1 (5); 99a, 6 exs., 2 (9 ♂), 4 (9 ♀); 99b, 1 ex., 1 (8); **Tochigi Pref.:** Fujihara-machi, 120, 8 exs., 4 (9 ♂), 4 (9 ♀); Kuriyama-mura, 122, 4 exs., 4 (9 ♂); 123, 2 exs., 1 (9 ♀), 1 (8 ♂); 124, 2 exs., 2 (9 ♂); 125, 7 exs., 3 (9 ♀), 4 (8); 127, 1 ex., 1 (3); Shioya-machi, 135, 2 exs., 1 (8), 1 (6); Imaichi-shi, 147, 2 exs., 1 (9 ♀), 1 (8); Nikkô-shi, 151, 2 exs., 1 (9 ♂), 1 (9 ♀); 157, 2 exs., 1 (9 ♂), 1 (9 ♀); Kanuma-shi, 165, 31 exs., 13 (9 ♂), 9 (9 ♀), 4 (8 ♂), 2 (8), 2 (6), 1 (5); 166, 1 ex., 1 (8 ♂); Ashio-machi, 167, 1 ex., 1 (9 ♀); Awano-machi, 170, 3 exs., 2 (9 ♂), 1 (8); 172, 2 exs., 1 (9 ♂), 1 (8 ♂); Kuzuu-machi, 178, 1 ex., 1 (8); **Gunma Pref.:**

Katashina-mura, 184, 1 ex., 1 (9 ♀); 186, 1 ex., 1 (9 ♂); 197, 3 exs., 2 (9 ♀), 1 (6); 209, 1 ex., 1 (9 ♀); Saitama Pref.: Ôtaki-mura, 229, 3 exs., 1 (9 ♂), 1 (8), 1 (5); 232, 4 exs., 1 (9 ♂), 2 (9 ♀), 1 (6); Chiba Pref.: Katsuura-shi, 246, 1 ex., 1 (9) [CBM-ZU 352]; Kimitsu-shi, 249, 2 exs., 2 (9 ♀) [CBM-ZU 603, 604]; Tôkyô Pref.: Hachiôji-shi, 261b, 2 exs., 1 (9 ♂), 1 (6); Yamanashi Pref.: Fujiyoshida-shi, 287, 1 ex., 1 (9 ♀); Narusawa-mura, 289a, 3 exs., 1 (9 ♂), 1 (9 ♀), 1 (6); Kamikuishiki-mura, 291a, 4 exs., 3 (9 ♂), 1 (9 ♀); Ehime Pref.: Oda-chô, 304, 2 exs., 1 (8 ♂), 1 (5); 305, 1 ex., 1 (9 ♀); 307, 1 ex., 1 (8); 308, 1 ex., 1 (6); 309, 1 ex., 1 (9 ♂); 310, 1 ex., 1 (9 ♀).

17. *Stylopaupopus (Stylopaupopus) gozennyamensis* Hagino, 1994

Edaphologia (51): 7-11, figs. 1-13.

Type locality: Mt. Sannô-san, Hitachiômiya-shi [Gozen'yama-mura], Ibaraki Pref., 36° 34' 35" N, 140° 15' 23" E, 230 m, DB (QLs, Ces).

Ibaraki Pref.: Daigo-machi, 37, 1 ex., 1 (9 ♀) [paratype, coll. Hagino]; Hitachiômiya-shi, 48d, 1 ex., 1 (9 ♀); [paratype, CBM-ZU 93]; 48i, 3 exs., 2 (9 ♂) [holotype, CBM-ZU 92; paratype, coll. Hagino], 1 (9 ♀) [paratype, CBM-ZU 94].

18. *Stylopaupopus (Stylopaupopus) pedunculatus* (Lubbock, 1867)

Trans. Linn. Soc. Lond. 26: 185, pl. 10, fig. 20.

Type locality: London, England [1866, Autumn, J. Lubbock].

Remarks. Two "subspecies" are recognized in this species, viz. *S. (S.) pedunculatus pedunculatus* nom. subsp. and *S. (S.) pedunculatus brevicornis* Chalupsky, 1964. Intermediate forms of them are often found (Chalupsky, 1964; Scheller, 1979), however, their status as subspecies remains room for discussion.

In Japanese specimens of this species, too, intermediate forms often occur. All the Japanese *pedunculatus*-type specimens, as far as I observed, exclusively have only pygidial stylus of *brevicornis* type. Furthermore, two forms are often found from the same collecting site, as if they live sympatrically. Since it is unknown whether they are separated in microhabitats, the justifiability of their subspecific status is still not clear. For these reasons, these two forms are treated here as *S. (S.) pedunculatus* "p" type, and *S. (S.) pedunculatus* "b" type, respectively.

18a. *Stylopaupopus (Stylopaupopus) pedunculatus* "p" type

Hokkaidô Pref.: Tomakomai-shi, 5, 6 exs., 3 (9 ♀), 2 (8), 1 (3); Kumaishi-chô, 6, 1 ex., 1 (9 ♀); Assabu-chô, 7, 4 exs., 1 (9 ♀), 2 (5), 1 (3); Akita Pref.: Kosaka-machi, 10, 1 ex., 1 (9 ♀); Kazuno-shi, 11, 2

exs., 1 (9 ♀), 1 (6); Fukushima Pref.: Nihonmatsu-shi, 14a, 3 exs., 1 (9 ♂), 2 (9 ♀); 14b, 1 ex., 1 (9 ♀); Ibaraki Pref.: Kitaibaraki-shi, 21, 2 exs., 2 (9 ♀); 23, 3 exs., 3 (9 ♂); 25, 1 ex., 1 (6); Takahagi-shi, 30, 6 exs., 6 (9 ♀); Daigo-machi, 35a, 6 exs., 4 (9 ♂), 2 (9 ♀); 38b, 4 exs., 4 (9 ♀); 42, 2 exs., 1 (8), 1 (6); Hitachiôta-shi, 47, 1 ex., 1 (8); Jôhoku-machi, 56b, 1 ex., 1 (9 ♂); 57, 3 exs., 2 (9 ♂), 1 (8); Nanakai-mura, 62, 10 exs., 1 (9 ♀), 2 (8 ♂), 7 (8); 64, 3 exs., 3 (8); Kasama-shi, 67, 1 ex., 1 (5); Iwase-machi, 72, 1 ex., 1 (9 ♀); Makabe-machi, 78, 1 ex., 1 (9 ♀); Yasato-machi, 87, 2 exs., 1 (9 ♂), 1 (9 ♀); Niitari-mura, 88b, 1 ex., 1 (9 ♀); Tsuchiura-shi, 89, 2 exs., 1 (9 ♂), 1 (9 ♀); Tsukuba-shi, 90b, 3 exs., 2 (6), 1 (5); 90c, 2 exs., 1 (8 ♂), 1 (6); 90d, 1 ex., 1 (8 ♂); 92b, 1 ex., 1 (6); 93a, 2 exs., 2 (9 ♀); 94b, 5 exs., 1 (9 ♀), 1 (8), 3 (6); 96b, 1 ex., 1 (6); Sakuragawa-mura, 103a, 3 exs., 3 (9 ♀); Tochigi Pref.: Nasu-machi, 107, 1 ex., 1 (8); 110, 8 exs., 2 (9 ♂), 3 (9 ♀), 2 (6), 1 (5); Kuroiso-shi, 112, 1 ex., 1 (6); Fujihara-machi, 121, 1 ex., 1 (8); Kuriyama-mura, 124, 1 ex., 1 (8); 126, 1 ex., 1 (9 ♀); 127, 5 exs., 1 (9 ♀), 1 (8 ♂), 2 (6), 1 (3); Yaita-shi, 133, 1 ex., 1 (8); Môka-shi, 140, 1 ex., 1 (9 ♀); Utsunomiya-shi, 145, 1 ex., 1 (8); 146, 1 ex., 1 (9 ♀); Kanuma-shi, 165, 4 exs., 3 (9 ♀), 1 (5); 166, 2 exs., 1 (9 ♂), 1 (5); Awano-machi, 170, 1 ex., 1 (8); 172, 1 ex., 1 (6); Tanuma-machi, 179, 2 exs., 2 (5); Sano-shi, 180, 9 exs., 1 (9 ♀), 1 (8 ♂), 2 (8), 4 (6), 1 (5); Ashikaga-shi, 181, 1 ex., 1 (6); 182, 5 exs., 5 (6); Gunma Pref.: Katashina-mura, 188a, 1 ex., 1 (6); 188c, 1 ex., 1 (9 ♀); Naganohara-machi, 216a, 2 exs., 2 (9 ♀); 217a, 2 exs., 1 (9 ♀), 1 (8); 217b, 1 ex., 1 (9 ♀); Saitama Pref.: Ôtaki-mura, 229, 2 exs., 1 (8), 1 (5); 232, 7 exs., 2 (9 ♂), 3 (9 ♀), 2 (8); Chiba Pref.: Ichihara-shi, 245, 7 exs., 5 (9 ♀) [CBM-ZU 523, 575, 577, 579, 580], 1 (9) [CBM-ZU 576], 1(?) [CBM-ZU 541]; Yamanashi Pref.: Kamikuishiki-mura, 291b, 2 exs., 2 (9 ♀).

18b. *Stylopaupopus (Stylopaupopus) pedunculatus* "b" type

Hokkaidô Pref.: Rishiri-tô Is., 2, 1 ex., 1 (9 ♀); 3, 6 exs., 2 (9 ♂), 4 (9 ♀); Sapporo-shi, 4, 3 exs., 1 (9 ♂), 1 (9 ♀), 1 (8); Kumaishi-chô, 6, 1 ex., 1 (8); Aomori Pref.: Aomori-shi, 9, 3 exs., 2 (9 ♂), 1 (9 ♀); Akita Pref.: Kosaka-machi, 10, 1 ex., 1 (9 ♂); Sannai-mura, 13, 2 exs., 1 (9 ♀), 1 (6); Fukushima Pref.: Hinoemata-mura, 16, 12 exs., 3 (9 ♂), 4 (9 ♀), 2 (6), 2 (5), 1 (3); 19, 1 ex., 1 (6); Ibaraki Pref.: Kitaibaraki-shi, 21, 1 ex., 1 (9 ♀); 22, 3 exs., 1 (9 ♀), 1 (5), 1 (3); 23, 3 exs., 1 (9 ♂), 2 (9 ♀); 24, 4 exs., 3 (8), 1 (6); 25, 4 exs., 1 (8 ♂), 2 (8), 1 (6); Daigo-machi, 38b, 4 exs., 1 (9 ♂), 3 (9 ♀); Jôhoku-machi, 56c, 4 exs., 3 (9 ♂), 1 (9 ♀); 57, 4 exs., 2 (9 ♂), 2 (9 ♀); Nanakai-mura, 62, 8 exs.,

1 (9♂), 5 (8), 2 (6); 63, 2 exs., 1 (8♂), 1 (8); Kasama-shi, 65, 7 exs., 4 (9♂), 2 (9♀), 1 (8); Iwamamachi, 75, 10 exs., 3 (8♂), 3 (8), 2 (6), 2 (5); Makabe-machi, 80, 1 ex., 1 (8); Yasato-machi, 87, 5 exs., 1 (9♂), 4 (9♀); Tsukuba-shi, 90d, 2 exs., 1 (8♂), 1 (8); 94a, 3 exs., 3 (9♂); Tochigi Pref.: Kurobane-machi, 116, 2 exs., 1 (9♂), 1 (9♀); Batô-machi, 119, 2 exs., 1 (9♂), 1 (9); Kuriyamamura, 123, 3 exs., 1 (8♂), 2 (8); 125, 4 exs., 4 (9♀); 126, 1 ex., 1 (9♀); 128, 2 exs., 1 (9♀), 1 (6); 130, 1 ex., 1 (8♂); Utsunomiya-shi, 144, 1 ex., 1 (8); Nikkô-shi, 151, 6 exs., 4 (9♂), 2 (9♀); 152, 1 ex., 1 (9♂); 155, 3 exs., 2 (9♀), 1 (6); 158, 3 exs., 2 (9♂), 1 (9♀); 164, 2 exs., 2 (8); Kanuma-shi, 166, 6 exs., 1 (9♂), 2 (9♀), 3 (3); Awano-machi, 170, 1 ex., 1 (9♀); 171, 3 exs., 2 (9♂), 1 (6); Kuzuu-machi, 178, 3 exs., 3 (6); Tanuma-machi, 179, 1 ex., 1 (9♂); Ashikaga-shi, 182, 2 exs., 1 (9♀), 1 (6); Gunma Pref.: Katashina-mura, 184, 20 exs., 5 (9♂), 14 (9♀), 1 (5); 185, 29 exs., 8 (9♂), 9 (9♀), 1 (8♂), 4 (8), 6 (6), 1 (5); 189, 5 exs., 2 (9♂), 1 (8), 1 (6), 1 (5); 190, 3 exs., 2 (9♂), 1 (8♂); 191, 3 exs., 1 (9♂), 1 (9♀), 1 (8); 193, 3 exs., 3 (9♀); 195, 1 ex., 1 (9♂); 198, 10 exs., 5 (9♂), 3 (9♀), 1 (8), 1 (5); 199, 1 ex., 1 (9♀); 200, 1 ex., 1 (9♂); 201, 2 exs., 1 (9♀), 1 (8); 202, 20 exs., 3 (9♂), 13 (9♀), 1 (8♂), 2 (8), 1 (6); 203, 3 exs., 1 (9♀), 2 (6); 204, 5 exs., 2 (8♂), 3 (8); 205, 2 exs., 1 (9♀), 1 (5); 206, 1 ex., 1 (8); 207, 1 ex., 1 (9♂); 208, 7 exs., 2 (9♂), 1 (9♀), 1 (9), 2 (8), 1 (6); 209, 1 ex., 1 (6); 210, 8 exs., 2 (9♂), 2 (9♀), 2 (5), 2 (3); 213, 28 exs., 8 (9♂), 4 (9♀), 1 (8♂), 4 (8), 3 (6), 1 (5), 7 (3); 214, 12 exs., 5 (9♂), 6 (9♀), 1 (5); 215, 2 exs., 1 (9♀), 1 (8); Naganohara-machi, 217a, 6 exs., 5 (9♀), 1 (8); Fujimi-mura, 218, 1 ex., 1 (5); Saitama Pref.: Kamiizumi-mura, 224, 1 ex., 1 (3); 226, 1 ex., 1 (9♀); Tôkyô Pref.: Chiyoda-ku, 257a, 1 ex., 1 (9♂); Hachioji-shi, 261a, 3 exs., 3 (9♀); 261b, 1 ex., 1 (9♀); Niigata Pref.: Uonuma-shi, 267, 5 exs., 1 (9♂), 1 (9♀), 1 (8♂), 1 (8), 1 (6); 268, 23 exs., 4 (9♂), 5 (9♀), 6 (8♂), 1 (8), 4 (6), 3 (5); Yamanashi Pref.: Tabayama-mura, 281a, 1 ex., 1 (9♀); 281b, 5 exs., 3 (9♀), 2 (8); 281c, 1 ex., 1 (6); 281d, 1 ex., 1 (8♂); Ôtsuki-shi, 283a, 12 exs., 5 (9♂), 7 (9♀); Narusawamura, 289b, 1 ex., 1 (9♂); Kamikuishiki-mura, 291a, 2 exs., 1 (9♀), 1 (6); Ehime Pref.: Kumakôgen-chô, 301, 1 ex., 1 (9♂); 302, 2 exs., 1 (9♂), 1 (9♀).

19. *Stylopaupopus (Donzelotaupopus) aramosus* Hagino, 1991

Publ. Itako Hydrobiol. Stn. 5: 1-4, figs. 1-11.

Type locality: Akazawa-rindô, Kôto, Hitachiomiya-shi [Gozen'yama-mura], Ibaraki Pref., 36° 32' 21" N, 140° 19' 20" E, 80 m, In rotten wood, EC (Crj).

Ibaraki Pref.: Hitachiôta-shi, 46, 1 ex., 1 (9♀); Hitachiomiya-shi, 48i, 1 ex., 1 (9♂); 48j, 2 exs., 1 (9♀), 1 (6); 49, 5 exs., 2 (9♂) [2 paratypes, CBM-ZU 42, coll. Hagino], 3 (9♀) [holotype, CBM-ZU 40; 2 paratypes, CBM-ZU 41, coll. Hagino]; Tsukuba-shi, 93a, 1 ex., 1 (9♀); 95a, 1 ex., 1 (9♀); Tochigi Pref.: Nasu-machi, 108, 1 ex., 1 (9♂); Kuriyama-mura, 122, 1 ex., 1 (9♂); Nikkô-shi, 153, 2 exs., 2 (9♂); Kanumashi, 165, 1 ex., 1 (8♂); Gunma Pref.: Naganoharamachi, 217b, 1 ex., 1 (9♂); Tôkyô Pref.: Hachioji-shi, 261b, 1 ex., 1 (9♀); Yamanashi Pref.: Kamikuishikimura, 291a, 1 ex., 1 (8♂); Fukuoka Pref.: Kitakyûshû-shi, 312, 22 exs., 4 (9♂), 18 (9♀).

20. *Stylopaupopus (Donzelotaupopus) nakamurai* Hagino, 1993

Edaphologia (49): 35-41, figs. 14-24.

Type locality: Taga, Akasaka-chô, Okayama Pref., 34° 49' 39" N, 134° 00' 10" E, 60 m, EC (Psd).

Okayama Pref.: Akasaka-chô, 298, 5 exs., 3 (9♂) [holotype, CBM-ZU 49; 2 paratypes, coll. Hagino], 2 (9♀) [2 paratypes, CBM-ZU 50, 51].

21. *Stylopaupopus (Donzelotaupopus) nudisetus* Hagino, 1993

Edaphologia (49): 34-35, figs. 1-13.

Type locality: Mt. Yamizo-san, Daigo-machi, Ibaraki Pref., 36° 55' 44" N, 140° 16' 25" E, 980 m, DB (Fgc).

Ibaraki Pref.: Daigo-machi, 35a, 3 exs., 1 (9♂) [paratype, coll. Hagino], 2 (9♀) [holotype, CBM-ZU 46; 1 paratype, CBM-ZU 48]; 38c, 1 ex., 1 (9♂) [paratype, coll. Hagino]; 39a, 1 ex., 1 (9♂) [paratype, CBM-ZU 47]; Tochigi Pref.: Nasu-machi, 110, 1 ex., 1 (9♂); Sano-shi, 180, 3 exs., 1 (9♂), 1 (9♀), 1 (8); Ashikaga-shi, 182, 2 exs., 1 (9♂), 1 (9♀); Chiba Pref.: Ichihara-shi, 245, 7 exs., 3 (9♂) [CBM-ZU 538, 556, 578], 1 (9♀) [CBM-ZU 574], 2 (8♂) [CBM-ZU 536, 537], 1 (8) [CBM-ZU 573]; Tôkyô Pref.: Chiyoda-ku, 255, 1 ex., 1 (9♀); 256a, 1 ex., 1 (8); Niigata Pref.: Uonuma-shi, 267, 1 ex., 1 (8); Ehime Pref.: Oda-chô, 304, 1 ex., 1 (9♂).

22. *Stylopaupopus (Donzelotaupopus) peniculatus* Hagino, 1991

Can. Ent. 123: 1037-1040, figs. 132-146.

Type locality: Mt. Yamizo-san, Daigo-machi, Ibaraki Pref., 36° 55' 36" N, 140° 16' 12" E, 900 m, DB (Fgc, QLc).

Hokkaidô Pref.: Rishiri-tô Is., 1, 4 exs., 2 (9♂), 2 (6); 2, 14 exs., 3 (9♂), 6 (9♀), 2 (8♂), 3 (8); 3, 4 exs., 3 (9♀), 1 (8); Sapporo-shi, 4, 1 ex., 1 (8); Akita Pref.: Kosaka-machi, 10, 4 exs., 2 (9♀), 1 (8), 1 (6); Kazuno-shi, 11, 3 exs., 1 (9♀), 2 (6); Ani-machi, 12, 17 exs., 7 (9♂), 5 (9♀), 1 (8♂), 4 (6); Fukushima Pref.: Nihonmatsu-shi, 14b, 1 ex., 1 (8); Hinoemata-

mura, 16, 6 exs., 3 (9♀), 3 (5); 17, 13 exs., 1 (9♂), 5 (9♀), 2 (8♂), 3 (6), 1 (5), 1 (3); 18, 3 exs., 1 (9♀), 2 (8); 19, 3 exs., 1 (9♂), 1 (8♂), 1 (5); 20, 2 exs., 1 (9♂), 1 (6); Ibaraki Pref.: Kitaibaraki-shi, 24, 1 ex., 1 (9♀); Hitachi-shi, 32, 5 exs., 1 (9♀), 2 (8), 1 (6), 1 (5); 33, 2 exs., 2 (9♀); Daigo-machi, 37, 4 exs., 4 (9♂) [holotype, CBM-ZU 31; 3 paratypes, CBM-ZU 32, 33, coll. Hagino]; 38b, 1 ex., 1 (9♂) [paratype, coll. Hagino]; 38c, 3 exs., 3 (8); 39a, 1 ex., 1 (8); Jōhokumachi, 56b, 2 exs., 2 (9♀); Nanakai-mura, 64, 10 exs., 1 (8♂), 6 (8), 1 (6), 2 (5); Kasama-shi, 69, 3 exs., 1 (8♂), 2 (5); Iwase-machi, 71, 5 exs., 1 (9♂), 3 (9♀), 1 (5); Iwama-machi, 75, 1 ex., 1 (5); Makabe-machi, 78, 1 ex., 1 (8♂); 80, 7 exs., 1 (9♀), 2 (8), 2 (6), 2 (5); 81, 1 ex., 1 (6); Yasato-machi, 87, 3 exs., 2 (9♂), 1 (9♀); Niihari-mura, 88a, 9 exs., 5 (9♂), 4 (9♀); 88b, 1 ex., 1 (9♂); Tsukuba-shi, 90c, 1 ex., 1 (8); 90e, 2 exs., 1 (9♀), 1 (6); 91a, 8 exs., 2 (9♂), 1 (9♀), 4 (8), 1 (6); 91b, 4 exs., 1 (9♂), 2 (9♀), 1 (6); 92a, 5 exs., 1 (9♂), 1 (9♀), 2 (6), 1 (5); 92b, 5 exs., 4 (6), 1 (5); 93a, 3 exs., 2 (9♂), 1 (9♀); 93b, 8 exs., 3 (6), 4 (5), 1 (3); 94a, 2 exs., 1 (9♀), 1 (8); 94b, 15 exs., 3 (9♀), 7 (6), 4 (5), 1 (3); 95a, 23 exs., 13 (9♂), 10 (9♀); 95b, 1 ex., 1 (8♂); 96a, 10 exs., 5 (9♂), 4 (9♀), 1 (8); 96b, 12 exs., 1 (8♂), 8 (6), 3 (5); 97a, 1 ex., 1 (9♀); 98a, 2 exs., 1 (9♂), 1 (9♀); 98b, 2 exs., 1 (8♂), 1 (3); Ryūgasaki-shi, 104b, 5 exs., 2 (9♂), 2 (9♀), 1 (6); Tochigi Pref.: Nasu-machi, 107, 15 exs., 5 (9♂), 4 (9♀), 1 (8♂), 3 (8), 1 (6), 1 (5); 109, 1 ex., 1 (8); 110, 11 exs., 8 (8), 3 (6); Kuroiso-shi, 111, 2 exs., 2 (8); Kurobane-machi, 115, 7 exs., 2 (9♀), 1 (9), 3 (8), 1 (6); 116, 12 exs., 2 (9), 2 (8), 6 (5), 2 (3); Fujihara-machi, 120, 1 ex., 1 (9♂); 121, 9 exs., 2 (9♂), 1 (9♀), 1 (8♂), 1 (8), 1 (6), 3 (5); Kuriyamamura, 122, 1 ex., 1 (9♂); 126, 18 exs., 2 (9♂), 8 (9♀), 3 (8♂), 4 (8), 1 (3); 128, 8 exs., 2 (9♂), 1 (8♂), 1 (8), 3 (6), 1 (5); 130, 3 exs., 3 (9♂); 131, 2 exs., 1 (9♂), 1 (8♂); Ninomiya-machi, 141, 8 exs., 1 (9♂), 2 (9♀), 3 (9), 1 (8), 1 (5); Nikkō-shi, 150, 1 ex., 1 (9♀); 151, 11 exs., 2 (9♂), 2 (9♀), 1 (9), 5 (6), 1 (3); 153, 3 exs., 1 (9♀), 1 (8), 1 (6); 154, 1 ex., 1 (9♂); 155, 8 exs., 1 (9♂), 1 (9), 1 (8♂), 1 (8), 2 (6), 2 (5); 156, 1 ex., 1 (9♀); 161, 4 exs., 1 (9♂), 2 (9♀), 1 (8♂); 162, 6 exs., 1 (9♂), 2 (9♀), 1 (8♂), 1 (6), 1 (5); 163, 7 exs., 1 (9♂), 2 (9♀), 1 (9), 3 (6); Kanuma-shi, 165, 6 exs., 1 (9♂), 1 (9♀), 1 (9), 3 (8♂); 166, 4 exs., 1 (9♂), 2 (9♀), 1 (8♂); Ashio-machi, 167, 13 exs., 1 (9♀), 2 (8), 10 (6); 168, 1 ex., 1 (8♂); Awano-machi, 169, 1 ex., 1 (6); 170, 6 exs., 2 (9♂), 2 (9♀), 2 (8); 171, 3 exs., 2 (9♂), 1 (9♀); 172, 3 exs., 1 (9♂), 2 (9♀); Tochigi-shi, 174, 1 ex., 1 (9♂); Tanuma-machi, 179, 1 ex., 1 (8♂); Ashikaga-shi,

181, 1 ex., 1 (8); Gunma Pref.: Katashina-mura, 184, 7 exs., 4 (9♂), 1 (9♀), 1 (8♂), 1 (8); 187, 5 exs., 3 (9♂), 1 (9♀), 1 (9); 188b, 1 ex., 1 (9♀); 188c, 2 exs., 2 (8♂); 190, 5 exs., 4 (6), 1 (3); 194, 1 ex., 1 (9♀); 196, 2 exs., 2 (9♂); 198, 6 exs., 1 (8), 4 (6), 1 (5); 200, 1 ex., 1 (9♂); 201, 7 exs., 2 (9♂), 2 (9♀), 2 (8), 1 (6); 203, 1 ex., 1 (8); 205, 3 exs., 1 (9♂), 1 (6), 1 (5); 208, 3 exs., 1 (9♀), 2 (6); 209, 15 exs., 2 (9♂), 1 (8♂), 4 (8), 8 (6); 210, 46 exs., 4 (9♂), 21 (9♀), 4 (9), 3 (8♂), 6 (8), 7 (6), 1 (3); 211, 5 exs., 1 (8♂), 1 (8), 1 (6), 2 (3); 213, 16 exs., 4 (9♂), 3 (9♀), 1 (8♂), 8 (5); 214, 3 exs., 1 (9♀), 1 (8♂), 1 (5); 215, 4 exs., 2 (9♀), 2 (8); Saitama Pref.: Kamiizumi-mura, 224, 1 ex., 1 (5); Ōtaki-mura, 227, 1 ex., 1 (9♀); 228, 5 exs., 3 (9♂), 2 (9♀); 232, 1 ex., 1 (9♀); 234, 1 ex., 1 (6); Chiba Pref.: Tomiura-machi, 251b, 1 ex., 1 (9♂) [CBM-ZU 459]; Tōkyō Pref.: Hachijōji-shi, 261a, 1 ex., 1 (9♂); Kanagawa Pref.: Zushi-shi, 266b, 6 exs., 2 (9♂), 4 (9♀); Niigata Pref.: Uonuma-shi, 267, 6 exs., 3 (9♀), 3 (8); Toyama Pref.: Tateyama-machi, 270, 1 ex., 1 (9♂); 271, 1 ex., 1 (8♂); 272, 2 exs., 2 (9♀); 273, 1 ex., 1 (6); 274, 1 ex., 1 (8♂); Ōyama-machi, 275a, 2 exs., 1 (9♀), 1 (8); 277, 1 ex., 1 (6); 278, 3 exs., 1 (8♂), 1 (8), 1 (6); 279a, 3 exs., 1 (9♂), 1 (9♀), 1 (8); Yamanashi Pref.: Tabayama-mura, 281a, 1 ex., 1 (6); 281b, 10 exs., 2 (9♂), 7 (9♀), 1 (8♂); 281c, 5 exs., 2 (9♀), 1 (8♂), 1 (8), 1 (5); 281d, 5 exs., 1 (9♀), 2 (8♂), 2 (6); 281e, 2 exs., 1 (9♂), 1 (8); 281f, 5 exs., 1 (9♂), 3 (9♀), 1 (8); 281g, 5 exs., 3 (9♂), 1 (9♀), 1 (3); Ōtsuki-shi, 283d, 1 ex., 1 (5); Enzan-shi, 284, 1 ex., 1 (9♀); Narusawa-mura, 289a, 1 ex., 1 (6); 289b, 1 ex., 1 (9♂); Gifu Pref.: Hida-shi, 292, 1 ex., 1 (9♀); Shizuoka Pref.: Izu-shi, 295, 1 ex., 1 (9♀); 296, 1 ex., 1 (9♀); Ehime Pref.: Kumakōgen-chō, 302, 4 exs., 4 (5); Oda-chō, 304, 5 exs., 5 (3); 305, 37 exs., 37 (3); 306, 2 exs., 1 (9♂), 1 (5); 310, 1 ex., 1 (6); Uchiko-chō, 311, 1 ex., 1 (3).

23. *Stylopauropus (Donzelotauropus) undulatus* Hagino, 1991

Can. Ent. 123: 1040-1043, figs. 147-159.

Type locality: Mt. Yamizo-san, Daigo-machi, Ibaraki Pref., 36° 54' 44" N, 140° 16' 11" E, 700 m, DB (Cej, Ctc, QLS).

Fukushima Pref.: Hinoemata-mura, 16, 4 exs., 1 (9♂), 3 (9♀); Ibaraki Pref.: Kitaibaraki-shi, 24, 7 exs., 4 (8♂), 2 (8), 1 (6); Hitachi-shi, 33, 3 exs., 1 (9♂), 2 (9♀); Daigo-machi, 35b, 1 ex., 1 (8♂); 38b, 1 ex., 1 (9♀) [paratype, coll. Hagino]; 39a, 1 ex., 1 (9♀) [paratype, coll. Hagino]; 39b, 3 exs., 1 (9♂) [holotype, CBM-ZU 34], 2 (9♀) [2 paratypes, CBM-ZU 35, 36]; Tsukuba-shi, 94b, 3 exs., 1 (8♂), 1 (8), 1 (6); 95b, 1 ex., 1 (6); 96b, 1 ex., 1 (8); Tochigi Pref.:

Kurobane-machi, 115, 3 exs., 3 (9♂); Batô-machi, 119, 1 ex., 1 (9♀); Fujihara-machi, 120, 1 ex., 1 (8♂); Kuriyama-mura, 122, 2 exs., 2 (9♀); 124, 3 exs., 1 (9♂), 1 (9♀), 1 (8); 126, 1 ex., 1 (8); 127, 1 ex., 1 (6); Shiyoa-machi, 135, 3 exs., 1 (9♂), 1 (9♀), 1 (8); Môka-shi, 140, 1 ex., 1 (6); Nikkô-shi, 156, 1 ex., 1 (9♀); 158, 8 exs., 3 (9♂), 4 (9♀), 1 (5); Kanuma-shi, 165, 36 exs., 1 (9♀), 2 (9), 22 (6), 9 (5), 2 (3); 166, 9 exs., 8 (6), 1 (5); Ashio-machi, 168, 1 ex., 1 (9♀); Awano-machi, 169, 5 exs., 3 (9♀), 1 (8♂), 1 (8); 172, 5 exs., 1 (9♀), 4 (6); Mibu-machi, 173, 1 ex., 1 (6); Gunma Pref.: Katashina-mura, 185, 10 exs., 4 (9), 1 (6), 1 (5), 4 (3); 190, 4 exs., 2 (9♂), 2 (9♀); 198, 2 exs., 2 (9♀); 207, 1 ex., 1 (9♀); Saitama Pref.: Ôtaki-mura, 228, 2 exs., 1 (9♂), 1 (8); Kanagawa Pref.: Matsuda-machi, 265, 4 exs., 3 (9♀), 1 (8); Niigata Pref.: Uonuma-shi, 268, 1 ex., 1 (8); Toyama Pref.: Ôyama-machi, 275b, 1 ex., 1 (8); 276, 1 ex., 1 (9♀); Yamanashi Pref.: Tabayama-mura, 281d, 1 ex., 1 (8); 281e, 1 ex., 1 (8); 281f, 6 exs., 2 (9♂), 1 (9♀), 1 (8), 1 (6), 1 (5); 281g, 1 ex., 1 (9♀); Kosuge-mura, 282, 2 exs., 1 (9♂), 1 (9♀); Ôtsuki-shi, 283b, 1 ex., 1 (8♂); 283c, 2 exs., 2 (8♂); 283e, 2 exs., 2 (9♀); Enzan-shi, 284, 11 exs., 2 (9♂), 9 (9♀); Fujiyoshida-shi, 286a, 1 ex., 1 (9); Kamikuishiki-mura, 291a, 11 exs., 6 (9♂), 5 (9); Gifu Pref.: Takayama-shi, 293, 2 exs., 1 (9♂), 1 (9♀); Kuguno-chô, 294, 5 exs., 3 (9♂), 2 (9♀); Yamaguchi Pref.: Mitô-chô, 300, 5 exs., 2 (9♂), 2 (9♀), 1 (8); Fukuoka Pref.: Kitakyûshû-shi, 312, 32 exs., 7 (9♂), 22 (9♀), 1 (8), 2 (6); Fukuokashi, 313, 1 ex., 1 (9♂); Ôita Pref.: Kujû-machi, 316, 1 ex., 1 (9♀).

24. *Colinauropus schelleri* Hagino, 1991
Can. Ent. 123: 1031-1033, figs. 100-110.
Type locality: Hillside near River Kôto-gawa, Kôto, Hitachiômiya-shi [Gozen'yama-mura], Ibaraki Pref., 36° 32' 19" N, 140° 18' 54" E. 75 m, EC (Crj) + EB (QCg).
Ibaraki Pref.: Takahagi-shi, 28, 1 ex., 1 (9♀); Hitachiôta-shi, 46, 1 ex., 1 (9♀) [paratype, coll. Hagino]; Hitachiômiya-shi, 50, 1 ex., 1 (9♀) [holotype, CBM-ZU 24]; Urizura-machi, 51a, 2 exs., 2 (9♀); Jôhoku-machi, 56a, 1 ex., 1 (9♀) [paratype, CBM-ZU 25]; Iwase-machi, 72, 1 ex., 1 (9♀); Iwama-machi, 76, 1 ex., 1 (9♀); Makabe-machi, 80, 3 exs., 3 (9♀); Yasato-machi, 87, 1 ex., 1 (8); Tsukuba-shi, 90d, 1 ex., 1 (9♀); 91a, 1 ex., 1 (9♀); 92a, 2 exs., 2 (9♀); 92b, 4 exs., 2 (8), 2 (6); 93b, 2 exs., 2 (8); 94a, 1 ex., 1 (9♀); 97a, 2 exs., 2 (9♀); Tochigi Pref.: Nasu-machi, 107, 5 exs., 5 (9♀); 109, 6 exs., 6 (9♀); Kurobane-machi, 115, 2 exs., 2 (9♀); Kuriyama-mura, 124, 1 ex., 1 (9♀); 125, 1 ex., 1 (6); Imaichi-shi,

148, 2 exs., 2 (9); Saitama Pref.: Kamiizumi-mura, 224, 3 exs., 1 (9♀), 2 (5); Ôtaki-mura, 235, 1 ex., 1 (9♀); Chiba Pref.: Chônân-machi, 244, 1 ex., 1 (9♀) [CBM-ZU 602]; Katsuura-shi, 246, 4 exs., 2 (9♀) [CBM-ZU 346, 355], 2 (9) [CBM-ZU 341, 345]; Kanagawa Pref.: Zushi-shi, 266a, 2 exs., 2 (9♀); 266b, 4 exs., 1 (9♂), 3 (9♀); Yamanashi Pref.: Ôtsuki-shi, 283d, 2 exs., 1 (9♀), 1 (6); 283e, 1 ex., 1 (9♀); Narusawa-mura, 290, 6 exs., 1 (9♀), 3 (9), 2 (6); Shizuoka Pref.: Izu-shi, 296, 2 exs., 2 (9♀); Ehime Pref.: Kumakôgen-chô, 303, 1 ex., 1 (9♀) [paratype, coll. Hagino].

25. *Fagepauropus ishii* Hagino, 1991

Edaphologia (47): 11-15, figs. 1-11.

Type locality: Temple Kasamori-kannon, Chônân-machi, Chiba Pref., 35° 23' 59" N, 140° 12' 04" E, 80 m, EB (Css, Erj, Caj).

Chiba Pref.: Nagara-machi, 242, 2 exs., 2 (9♀) [2 paratypes, CBM-ZU 39, coll. Hagino]; Chônân-machi, 243, 6 exs., 4 (9♀) [holotype, CBM-ZU 37; 1 paratype, CBM-ZU 38; CBM-ZU 288, 289]; 2 (9) [CBM-ZU 290]; Katsuura-shi, 246, 1 ex., 1 (9) [CBM-ZU 344]; 247, 4 exs., 1 (9♀) [paratype, coll. Hagino], 3 (9) [CBM-ZU 313-315].

Family Eurypauropodidae

26. *Eurypauropus japonicus* Hagino and Scheller, 1985

Proc. Jpn. Soc. syst. Zool. (31): 38-42, figs. 1, 2.

Type locality: Mt. Sannô-san, Hitachiômiya-shi [Gozen'yama-mura], Ibaraki Pref., 36° 34' 35" N, 140° 15' 23" E, 230 m, DB (QLs, Ces).

Fukushima Pref.: Nihonmatsu-shi, 15, 4 exs., 2 (9♂), 1 (9♀), 1 (8); Ibaraki Pref.: Kitaibaraki-shi, 21, 2 exs., 2 (9♀); 23, 5 exs., 1 (9♂), 2 (8), 2 (5); Takahagi-shi, 26, 1 ex., 1 (6); 28, 1 ex., 1 (9♂); Daigo-machi, 36, 2 exs., 1 (9♀), 1 (8); 37, 4 exs., 4 (9♂); 41a, 2 exs., 1 (9♀), 1 (8); 41b, 5 exs., 1 (9♂), 3 (9♀), 1 (8); Hitachiôta-shi, 45, 1 ex., 1 (9♀); Hitachiômiya-shi, 48a, 1 ex., 1 (9♀) [paratype, coll. Scheller]; 48b, 3 exs., 1 (9♂) [paratype, coll. Scheller], 2 (9♀) [2 paratypes, coll. Hagino]; 48g, 2 exs., 1 (9♂) [paratype, NSMT-My 137], 1 (9♀) [holotype, NSMT-My 136]; 50, 1 ex., 1 (9♀); Nanakai-mura, 62, 1 ex., 1 (8); 64, 1 ex., 1 (6); Iwase-machi, 71, 1 ex., 1 (5); 72, 1 ex., 1 (9♂); Tochigi Pref.: Kanuma-shi, 165, 1 ex., 1 (9♀); 166, 3 exs., 3 (3); Gunma Pref.: Kiryû-shi, 220, 3 exs., 1 (9♂), 2 (8); Saitama Pref.: Ôtaki-mura, 232, 2 exs., 1 (9♀), 1 (8); Fukui Pref.: Obama-shi, 280, 1 ex., 1 (8); Miyazaki Pref.: Tôgô-chô, 319, 2 exs., 2 (9♂).

List II. Detailed collecting data and condensed list of paupropod specimens recorded for every collecting lot

Collecting data are arranged in order of locality name, latitude, longitude, altitude, dominant plant/vegetation, collecting date, and collector(s). Municipal names were sometimes modified after the collecting date. In such a case, the new municipality changed by the end of 2004 is adopted here and the former name follows in square brackets. An alternative code of collecting data appeared in the original paper, if any, is added in square brackets after reference cited. An asterisk indicates that incorrect data was presented in the original paper. For details, see Errata.

Hokkaidô Prefecture [北海道]

Sôya Province [宗谷支庁]

Rishiri-tô Island [利尻島]

1. Kutsukata, Rishiri-chô, Sôya Prov., 45° 10' 56" N, 141° 12' 14" E, 600 m, DB (*Alnus crispa* ssp. *maximowiczii*, Bte), 22.VI.2000, TsM. *SDp*, 4 exs., 2 (9♂), 2 (6). (Hagino, 2003b[St.3]). [利尻郡利尻町杓形登山道脇]
2. *Ibid.*, 45° 10' 52" N, 141° 11' 24" E, 400 m, EC (Abs, Pij), 20.VI.2000, TsM. *ADit*, 1 ex., 1 (8); *ADy*, 1 ex., 1 (9♀); *SSpb*, 1 ex., 1 (9♀); *SDp*, 14 exs., 3 (9♂), 6 (9♀), 2 (8♂), 3 (8). (Hagino, 2003b[St.2]).
3. *Ibid.*, 45° 10' 56" N, 141° 10' 24" E, 200 m, EC (Abs, Pij), 21.VI.2000, TsM. *ADib*, 10 exs., 6 (9♀), 2 (8), 1 (6), 1 (5); *ADit*, 2 exs., 2 (9♀); *ADy*, 1 ex., 1 (6); *Pr*, 1 ex., 1 (9♀); *SSpb*, 6 exs., 2 (9♂), 4 (9♀); *SDp*, 4 exs., 3 (9♀), 1 (8). (Hagino, 2003b[St.1])

Ishikari Province [石狩支庁]

4. Mt. Soranuma-dake, Minami-ku, Sapporo-shi, 42° 55' 29" N, 141° 15' 29" E, 360 m, EC (Pij, Abs) + DB (Bte, *Betula maximowicziana*, *Tilia japonica*), 30.VII.1984, ST. *SSpb*, 3 exs., 1 (9♂), 1 (9♀), 1 (8); *SDp*, 1 ex., 1 (8). (Hagino, 1992). [札幌市南区空沼実験林]

Iburi Province [胆振支庁]

5. Mt. Tarumae-san, Tomakomai-shi, 42° 41' 57" N, 141° 23' 26" E, 650 m, DB (Bte), 29.VII.1984, ST. *Pr*, 1 ex., 1 (9♀); *SSc*, 1 ex., 1 (9♀); *SSpp*: 6 exs., 3 (9♀), 2 (8), 1 (3). (Hagino, 1992). [苫小牧市樽前山]

Hiyama Province [檜山支庁]

6. Unseki-tôge Pass, Kumaishi-chô, 42° 10' 48" N, 140° 05' 31" E, 420 m, GR ("Sasa"), 31.VII.1984, ST. *SSpp*, 1 ex., 1 (9♀); *SSpb*, 1 ex., 1 (8). (Hagino, 1992). [爾志郡熊石町雲石峠]
7. Midori-machi, Assabu-chô, 41° 54' 46" N, 140° 12' 51" E, 120 m, DB, 31.VII.1984, ST. *SSpp*, 4 exs.,

1 (9♀), 2 (5), 1 (3). (Hagino, 1992). [檜山郡厚沢部町緑町]

Aomori Prefecture [青森県]

8. * Tsuta-onsen, Towadako-machi, 40° 36' 03" N, 140° 57' 32" E, 480 m, DB, 2.VIII.1984, ST. *SSc*, 1 ex., 1 (5). (Hagino, 1992). [上北郡十和田湖町*葛温泉]
9. Jigoku-numa, Mt. Hakkôda-san, Aomori-shi, 40° 38' 50" N, 140° 51' 39" E, 970 m, DB, 2.VIII.1984, ST. *SSpb*, 3 exs., 2 (9♂), 1 (9♀). (Hagino, 1992). [青森市八甲田山地獄沼]

Akita Prefecture [秋田県]

10. Takinosawa-tôge Pass, Kosaka-machi, 40° 29' 46" N, 140° 49' 39" E, 700 m, DB, 2.VIII.1984, ST. *SSpp*, 1 ex., 1 (9♀); *SSpb*, 1 ex., 1 (9♂); *SDp*, 4 exs., 2 (9♀), 1 (8), 1 (6). (Hagino, 1992). [鹿角郡小坂町滝ノ沢峠]
11. Yuze, Kazuno-shi, ca. 40° 07' N, ca. 140° 50' E, 240 m, DB (QLs, Ctc), 11.X.1971, GI. *AAI*, 2 exs., 1 (9♀), 1 (6); *ADf*, 1 ex., 1 (9♀); *ADib*, 2 exs., 2 (9♀); *ADI*, 1 ex., 1 (9♀); *SSc*, 2 exs., 1 (9♀), 1 (5); *SSpp*, 2 exs., 1 (9♀), 1 (6); *SDp*, 3 exs., 1 (9♀), 2 (6). (Hagino, 1992). [鹿角市湯瀬]
12. Sadosugi, Ani-machi, ca. 39° 53' N, ca. 140° 37' E, 925 m, EC (Crj) + DB (Fgc), 6.X.1977, GI. *SDp*, 17 exs., 7 (9♂), 5 (9♀), 1 (8♂), 4 (6). (Hagino, 1992). [北秋田郡阿仁町佐渡杉]
13. Hiranosawa, Sannai-mura, ca. 39° 16' N, ca. 140° 37' E, 150 m, DB (QLs, Ctc), 13.X.1971, GI. *ADI*, 1 ex., 1 (9♀); *SSpb*, 2 exs., 1 (9♀), 1 (6). (Hagino, 1992). [平鹿郡山内村平野沢]

Fukushima Prefecture [福島県]

- 14a. Kongôshimizu, Mt. Adatarata-yama, Nihonmatsushi, 37° 38' 22" N, 140° 19' 27" E, *850 m, DB (Fgc, QLc, *Acer* sp(p).), 26.VI.1983, HT. *SSpp*, 3 exs., 1 (9♂), 2 (9♀). (Hagino, 1992). [二本松市安達太良山金剛清水]
- 14b. *Ibid.*, DB (Fgc, QLc, Acj), 29.VII.1985, YH. *AAI*, 1 ex., 1 (3); *SSpp*, 1 ex., 1 (9♀); *SDp*, 1 ex., 1 (8). (Hagino, 1992).
15. Goyômatsudaira, Mt. Adatarata-yama, Nihonmatsushi, 37° 37' 10" N, 140° 18' 06" E, 1450 m, EC (Psv), 30.VII.1985, YH. *AAI*, 3 exs., 2 (9♀), 1 (6); *Ej*, 4 exs., 2 (9♂), 1 (9♀), 1 (8). (Hagino, 1992). [同市安達太良山五葉松平]
16. West foot of Mt. Hiuchiga-take, Hinoemata-mura, 36° 57' 10" N, 139° 15' 32" E, 1500 m, DB (Fgc) + SS (Ssk), 19.X.1996, YsH-HH-HO. *ADib*, 6 exs., 2 (9♂), 3 (9♀), 1 (8); *SSc*, 1 ex., 1 (9♂); *SSpb*, 12 exs., 3 (9♂), 4 (9♀), 2 (6), 2 (5), 1 (3); *SDp*, 6 exs., 3 (9♀), 3 (5); *SDu*, 4 exs., 1 (9♂), 3 (9♀). (Hagino, 1998b[St.52]). [南会津郡檜枝岐村燧ヶ

- 岳西麓]
17. West slope of Mt. Hiuchiga-take, Hinoemata-mura, 36° 57' 06" N, 139° 16' 17" E, 1750 m. EC (Abv, Tsd) + DB (Bte, Els, Sbc, Vrf, Act) + SS (Ssk), 19.X.1996, YsH-HH-HO. *SDp*, 13 exs., 1 (9 ♂), 5 (9 ♀), 2 (8 ♂), 3 (6), 1 (5), 1 (3). (Hagino, 1998b[St.51]). [同村燧ヶ岳西斜面]
18. Tôden' oze-bashi Bridge, Tadami-gawa River, Hinoemata-mura 36° 56' 41" N, 139° 14' 39" E, 1420 m, DB (QLc, Fgc, Acj) + SS ("Sasa"), 2.IX.1995, HT-YS-KI-RI-HS-ON-YH. *ADl*, 1 ex., 1 (6); *SDp*, 3 exs., 1 (9 ♀), 2 (8). (Hagino, 1998b[St.25]). [同村只見川東尾瀬橋東]
19. East of Miharashi, Hinoemata-mura, 36° 56' 28" N, 139° 15' 18" E, 1440 m, DB (Fgc, Bte, Acd), 2.IX.1995, HT-YS-KI-RI-HS-ON-YH. *ADrs*, 3 exs., 3 (9 ♀); *SSpb*, 1 ex., 1 (6); *SDp*, 3 exs., 1 (9 ♂), 1 (8 ♂), 1 (5). (Hagino, 1998b[St.24]). [同村見晴東]
20. Hill between Azami-shitsugen Moor and Ô-shitsugen Moor, Hinoemata-mura, 36° 55' 51" N, 139° 18' 52" E, 1650 m, EC (Abm, Tsd) + DB (Bte, Sbc), 25.VII.1995, HT-KI-RI-HS-KnT-YH. *SDp*, 2 exs., 1 (9 ♂), 1 (6). (Hagino, 1998b[St.13]). [同村大江湿原・浅湖湿原間の丘]
- Ibaraki Prefecture [茨城県]**
21. Ogawa Scientific Forest Reserve, Sadanami, Kitaibaraki-shi, 36° 56' 19" N, 140° 35' 35" E, 620 m. In rotten wood. 19.V.1985, YH. *ADib*, 3 exs., 2 (9 ♀), 1 (8); *ADl*, 1 ex., 1 (9 ♀); *ADp*, 1 ex., 1 (9 ♂); *SSpp*, 2 exs., 2 (9 ♀); *SSpb*, 1 ex., 1 (9 ♀); *Ej*, 2 exs., 2 (9 ♀). (Hagino, 1992). [北茨城市定波小川学術参考保存林]
22. *Ibid.*, 36° 56' 12" N, 140° 35' 04" E, 650 m, DB (Fgc, QLc), 9.VIII.1986, HS. *ADf*, 1 ex., 1 (8); *ADib*, 7 exs., 1 (9 ♀), 3 (6), 3 (5); *ADit*, 1 ex., 1 (9 ♀); *ADl*, 2 exs., 2 (6); *Pt*, 4 exs., 1 (9 ♂), 1 (9 ♀), 1 (8), 1 (6); *SSpb*, 3 exs., 1 (9 ♀), 1 (5), 1 (3). (Hagino, 1992).
23. *Ibid.*, *36° 56' 05" N, 140° 35' 11" E, 650 m, DB (QLc, *Acer tenuifolium*, Fgc), 19.V.1985, YH. *ADf*, 1 ex., 1 (9 ♂); *ADib*, 1 ex., 1 (8 ♂); *ADl*, 2 exs., 1 (9 ♀), 1 (8); *SSc*, 2 exs., 2 (9 ♀) [2 paratypes, CBM-ZU 29, 30]; *SSpp*, 3 exs., 3 (9 ♂); *SSpb*, 3 exs., 1 (9 ♂), 2 (9 ♀); *Ej*, 5 exs., 1 (9 ♂), 2 (8), 2 (5). (Hagino, 1991a[1], 1992).
24. Kameyaji, Hanazono, Kitaibaraki-shi, 36° 53' 32" N, 140° 36' 13" E, 780 m, DB (QLs, QLa), 20.VIII.1985, HS. *SSpb*, 4 exs., 3 (8), 1 (6); *SDp*, 1 ex., 1 (9 ♀); *SDu*, 7 exs., 4 (8 ♂), 2 (8), 1 (6). (Hagino, 1992). [同市花園亀谷地]
25. Mizunuma Dam, Hanazono, Kitaibaraki-shi, 36° 51' 03" N, 140° 40' 25" E, 360 m, DB, 30.VIII.1986, HT. *ADib*, 13 exs., 4 (8 ♂), 4 (8), 5 (6); *ADl*, 1 ex., 1 (8); *Pt*, 1 ex., 1 (6); *SSpp*, 1 ex., 1 (6); *SSpb*, 4 exs., 1 (8 ♂), 2 (8), 1 (6). (Hagino, 1992). [同市水沼ダム]
26. Takinokura-shitsugen Swamp, Takahagi-shi, 140° 32' 51" N, 140° 35' 06" E, 650 m, DB (Alj, Clb), 31.VIII.1986, HT. *AAI*, 1 ex., 1 (5); *ADl*, 1 ex., 1 (6); *Pt*, 1 ex., 1 (9 ♀) [paratype, coll. Hagino]; *Ej*, 1 ex., 1 (6). (Hagino, 1991a[5], 1992). [高萩市滝ノ倉湿原]
27. Shrine Jûden-jinja, Kamikimita, Takahagi-shi, 36° 47' 34" N, 140° 34' 13" E, 600 m, EC (Crj), 9.XI.1987, HK. *ADl*, 1 ex., 1 (9 ♀). (Hagino, 1992). [同市上君田十殿神社]
28. Wano, Takahagi-shi, 36° 43' 57" N, 140° 40' 41" E, 70 m, EC (Psd), 13.XI.1984, YH. *Dr*, 1 ex., 1 (5); *Cs*, 1 ex., 1 (9 ♀); *Ej*, 1 ex., 1 (9 ♂). (Hagino, 1992). [同市上野]
29. Horinouchi, Takahagi-shi, 36° 43' 47" N, 140° 41' 15" E, 70 m, EC (Psd, Crj) + DB (QLs), 13.XI.1984, YH. *Dr*, 1 ex., 1 (6); *ADl*, 12 exs., 12 (9 ♀). (Hagino, 1992). [同市堀ノ内]
30. Mt. Tatsuwara-san, Takahagi-shi, 36° 42' 39" N, 140° 33' 35" E, 600 m, DB (Fgc), 17.V.1985, HS. *AAI*, 1 ex., 1 (9 ♂); *ADib*, 2 exs., 2 (9 ♀); *Pt*, 1 ex., 1 (9 ♀) [paratype, coll. Hagino]; *SSc*, 1 ex., 1 (9 ♂) [paratype, coll. Hagino]; *SSpp*, 6 exs., 6 (9 ♀). (Hagino, 1991a[6], 1992). [同市堅割山頂上付近]
31. Ishihama, Hitachi-shi [Jûh-machi], Ibaraki Pref., 36° 40' 00" N, 140° 42' 50" E, 20 m, EC (Pst) + EB (Erj), 30.VIII.1986, HT. *Pt*, 2 exs., 1 (8), 1 (5). [日立市[多賀郡十王町]伊師浜]
32. Mt. Takasuzu-yama, Hitachi-shi, 36° 37' 16" N, 140° 35' 21" E, 600 m, DB (Clb) + EB (Pej), 16.XI.1986, HT. *ADib*, 2 exs., 1 (9 ♂), 1 (9 ♀); *SDp*, 5 exs., 1 (9 ♀), 2 (8), 1 (6), 1 (5). (Hagino, 1992). [同市高鈴山]
33. *Ibid.*, 36° 37' 06" N, 140° 35' 35" E, 550 m, EB (Pej), 16.XI.1986, HT. *SDp*, 2 exs., 2 (9 ♀); *SDu*, 3 exs., 1 (9 ♂), 2 (9 ♀). (Hagino, 1992).
34. *Ibid.*, 36° 37' 17" N, 140° 35' 45" E, 480 m, DB (QLs, Alj) + *Rhododendron* sp., 16.XI.1986, HT. *ADf*, 1 ex., 1 (9 ♀); *ADib*, 34 exs., 1 (9 ♂), 33 (9 ♀); *ADit*, 1 ex., 1 (9 ♀). (Hagino, 1992).
- 35a. Mt. Yamizo-san, Daigo-machi, 36° 55' 44" N, 140° 16' 25" E, 980 m, DB (Fgc), 25.IV.1985, YH. *Dr*, 5 exs., 3 (8 ♂) [3 paratypes, NSMT-My 205, 2 coll. Hagino]; *AAI*, 1 ex., 1 (9 ♂); *ADir*, 3 exs., 3 (9 ♀) [holotype, CBM-ZU 17; 2 paratypes, CBM-ZU 18, coll. Hagino]; *SSpp*, 6 exs., 4 (9 ♂), 2 (9 ♀); *SDnd*, 3 exs., 1 (9 ♂) [paratype, coll. Hagino], 2 (9 ♀)

- [holotype, CBM-ZU 46; 1 paratype, CBM-ZU 48]. (Hagino, 1989, 1991a[2A], 1992, 1993a). [久慈郡大子町八溝山]
- 35b. *Ibid.*, 36° 55' 44" N, 140° 16' 25" E, 980 m, DB (Fgc), 1.XII.1985, YH. *ADy*, 1 ex., 1 (9 ♀) [holotype, CBM-ZU 21]; *SDu*, 1 ex., 1 (8 ♂). (Hagino, 1991a, 1992).
36. *Ibid.*, 36° 55' 44" N, 140° 16' 22" E, 960 m, DB (Fgc), 25.IV.1985, YH. *Dr*, 1 ex., 1 (8 ♂) [holotype, NSMT-My 204]; *Ej*, 2 exs., 1 (9 ♀), 1 (8). (Hagino, 1989, 1992).
37. *Ibid.*, 36° 55' 36" N, 140° 16' 12" E, 900 m, DB (Fgc, QLc), 25.IV.1985, YH. *AAI*, 3 exs., 1 (9 ♂) [holotype, CBM-ZU 1]; 2 (9 ♀) [2 paratypes, CBM-ZU 2, 3]; *SSg*, 1 ex., 1 (9 ♀) [paratype, coll. Hagino]; *SDp*, 4 exs., 4 (9 ♂) [holotype, CBM-ZU 31; 3 paratypes, CBM-ZU 32, 33, coll. Hagino]; *Ej*, 4 exs., 4 (9 ♂). (Hagino, 1991a, 1992, 1994a).
- 38a. *Ibid.*, 36° 55' 15" N, 140° 15' 56" E, 800 m, DB (QLc, Cej), 19.XII.1984, YH. *ADib*, 1 ex., 1 (9 ♀); *ADl*, 1 ex., 1 (9 ♀) [paratype, CBM-ZU 13]; *ADy*, 1 ex., 1 (9 ♂) [paratype, CBM-ZU 22]. (Hagino, 1991a [2D], 1992).
- 38b. *Ibid.*, 25.IV.1985, YH. *SSpp*, 4 exs., 4 (9 ♀); *SSpb*, 4 exs., 1 (9 ♂), 3 (9 ♀); *SDp*, 1 ex., 1 (9 ♂) [paratype, coll. Hagino]; *SDu*, 1 ex., 1 (9 ♀) [paratype, coll. Hagino]. (Hagino, 1991a[2E], 1992).
- 38c. *Ibid.*, 1.XII.1985, YH. *SDnd*, 1 ex., 1 (9 ♂) [paratype, coll. Hagino]; *SDp*, 3 exs., 3 (8). (Hagino, 1992, 1993a).
- 39a. *Ibid.*, 36° 54' 44" N, 140° 16' 11" E, 700 m, DB (Cej, Ctc, QLs), 19.XII.1984, YH. *SDnd*, 1 ex., 1 (9 ♂) [paratype, CBM-ZU 47]; *SDp*, 1 ex., 1 (8); *SDu*, 1 ex., 1 (9 ♀) [paratype, coll. Hagino]. (Hagino, 1991a[2F], 1992, 1993a).
- 39b. *Ibid.*, 1.XII.1985, YH. *ADl*, 2 exs., 2 (9 ♀) [2 paratypes, coll. Hagino]; *SDu*, 3 exs., 1 (9 ♂) [holotype, CBM-ZU 34], 2 (9 ♀) [2 paratypes, CBM-ZU 35, 36]. (Hagino, 1991a[2G], 1992).
40. *Ibid.*, 36° 54' 25" N, 140° 16' 09" E, 620 m, DB (QLs, Cej), 1.XII.1985, YH. *ADl*, 1 ex., 1 (9 ♀). (Hagino, 1992).
- 41a. Inohana-tôge Pass, Daigo-machi, 36° 45' 34" N, 140° 27' 42" E, 380 m, Under rotten wood, DB (Cej, Ctc, QLa, QLs), 19.XII.1984, YH. *ADib*, 2 exs., 2 (9 ♀) [2 paratypes, coll. Hagino]; *ADjf*, 1 ex., 1 (6); *Ej*, 2 exs., 1 (9 ♀), 1 (8). (Hagino, 1991a[*2H], 1992). [同町猪ノ鼻峠]
- 41b. *Ibid.*, In rotten wood, DB (Cej, Ctc, QLa, QLs), 19.XII.1984, YH. *Ej*, 5 exs., 1 (9 ♂), 3 (9 ♀), 1 (8). (Hagino, 1992).
42. Fukuroda, Daigo-machi, 36° 44' 50" N, 140° 22' 38" E, 100 m, BM, 28.VII.1983, YH. *ADit*, 1 ex., 1 (9 ♀); *SSpp*, 2 exs., 1 (8), 1 (6). (Hagino, 1992). [同町袋田]
43. Mt. Nantai-san, Daigo-machi, 36° 43' 29" N, 140° 25' 09" E, 650 m, DB (Fgc), 26.X.1986, HT. *ADib*, 3 exs., 2 (9 ♀), 1 (6). (Hagino, 1992). [同町男体山]
44. Konaka, Hitachiôta-shi[Satomi-mura], 36° 44' 40" N, 140° 28' 51" E, 300 m, In rotten wood, EC (Crj), 17.I.1985, TS. *ADrs*, 4 exs., 4 (9 ♀) [holotype, CBM-ZU 19; 3 paratypes, CBM-ZU 20, 2 coll. Hagino], (Hagino, 1991a[3], 1992). [常陸太田市[同郡里美村]小中]
45. Yokokawa-kôsen, Hitachiôta-shi[Satomi-mura], 36° 43' 27" N, 140° 30' 25" E, 280 m, In rotten wood, EC (Crj), 7.XII.1984, YH. *Ej*, 1 ex., 1 (9 ♀). (Hagino, 1992). [同市[同村]横川鉾泉]
46. Kamishimohata, Hitachiôta-shi[Satomi-mura], 36° 40' 25" N, 140° 31' 52" E, *290 m, In rotten wood, EC (Cho) + DB (QLs), 7.XII.1984, YH. *ADib*, 3 exs., 3 (9 ♀) [holotype, CBM-ZU 6; 2 paratypes, CBM-ZU 7, 8]; *SDa*, 1 ex., 1 (9 ♀); *Cs*, 1 ex., 1 (9 ♀) [paratype, coll. Hagino]. (Hagino, 1991a[4], 1992). [同市[同村]上下幡]
47. Seizan-sô, Hitachiôta-shi, 36° 32' 36" N, 140° 30' 17" E, 60 m, DB (Ctc, QLa, QLs, *Acer* spp.), 9.VIII.1985, HS. *Dr*, 1 ex., 1 (6); *SSpp*, 1 ex., 1 (8). (Hagino, 1992). [同市西山荘]
- 48a. Mt. Sannô-san, Hitachiômiya-shi [Gozen'yama-mura], 36° 34' 35" N, 140° 15' 23" E, 230 m, In rotten wood, DB (QLs, Ces), 21.IV.1984, *TY-HW. *AAI*, 10 exs., 3 (9 ♂), 7 (9 ♀); *ADl*, 1 ex., 1 (9 ♀); *Ej*, 1 ex., 1 (9 ♀) [paratype, coll. Scheller]. (Hagino and Scheller, 1985; Hagino, 1992). [常陸大宮市[東茨城郡御前山村]三王山]
- 48b. *Ibid.*, 24.V.1984, YH. *ADl*, 4 exs., 4 (9 ♀); *Ej*, 3 exs., 1 (9 ♂) [paratype, coll. Scheller], 2 (9 ♀) [2 paratypes, coll. Hagino]. (Hagino and Scheller, 1985; Hagino, 1992).
- 48c. *Ibid.*, 2.VIII.1984, YH. *ADl*, 10 exs., 9 (9 ♀), 1 (8). (Hagino, 1992).
- 48d. *Ibid.*, 25.VIII.1984, YH. *Ej*, 2 exs., 2 (8). (Hagino, 1992).
- 48e. *Ibid.*, 13.XII.1984, YH. *ADl*, 14 exs., 7 (9 ♀), 3 (8), 2 (6), 2 (3); *SSg*, 1 ex., 1 (9 ♀) [paratype, CBM-ZU 93]. (Hagino, 1992, 1994a).
- 48f. *Ibid.*, 3.VII.1985, YH. *ADl*, 10 exs., 10 (9 ♀). (Hagino, 1992).
- 48g. *Ibid.*, DB (QLs, Ces) (*non* in rotten wood), 3.V.1984, HW. *At*, 2 exs., 2 (8 ♀) [1 paratype, coll. Hagino]; *Dr*, 2 exs., 2 (6); *Pt*, 1 ex., 1 (9 ♂)

- [holotype, CBM-ZU 26]; *SSc*, 1 ex., 1 (9 ♂)
[holotype, CBM-ZU 28]. (Hagino, 1989, 1991a[8], 1992).
- 48h. *Ibid.*, 9.V.1984, YH. *Dr*, 5 exs., 2 (8 ♂), 3 (6); *ADl*, 1 ex., 1 (9 ♀); *Ej*, 2 exs., 1 (9 ♂) [paratype, NSMT-My 137], 1 (9 ♀) [holotype, NSMT-My 136]. (Hagino and Scheller, 1985; Hagino, 1992).
- 48i. *Ibid.*, 2.VIII.1984, YH. *AAI*, 1 ex., 1 (5); *ADl*, 29 exs., 26 (9 ♀), 3 (8). (Hagino, 1992).
- 48j. *Ibid.*, 8.XI.1984, YH. *AAI*, 6 exs., 2 (9 ♂), 4 (9 ♀); *ADl*, 12 exs., 7 (9 ♀), 3 (8), 1 (5), 1 (3); *SSg*, 3 exs., 2 (9 ♂) [holotype, CBM-ZU 92; paratype, coll. Hagino], 1 (9 ♀) [paratype, CBM-ZU 94]; *SDa*, 1 ex., 1 (9 ♂). (Hagino, 1992, 1994a).
- 48k. *Ibid.*, 13.XII.1984, YH. *ADit*, 3 exs., 3 (9 ♀); *ADl*, 1 ex., 1 (9 ♀); *SDa*, 2 exs., 1 (9 ♀), 1 (6). (Hagino, 1992).
- 48l. *Ibid.*, 13.IV.1985, YH. *ADl*, 16 exs., 16 (9 ♀). (Hagino, 1992).
49. Akazawa-rindô, Kôto, Hitachiômiya-shi [Gozen'yama-mura], 36° 32' 21" N, 140° 19' 20" E, 80 m, In rotten wood, EC (Crj), 6.IV.1985, YH. *AAI*, 1 ex., 1 (9 ♀); *SDa*, 5 exs., 2 (9 ♂) [2 paratypes, CBM-ZU 42, coll. Hagino], 3 (9 ♀) [holotype, CBM-ZU 40; 2 paratypes, CBM-ZU 41, coll. Hagino]. (Hagino, 1991c, 1992). [同市[同村]赤沢林道]
50. Hillside near River Kôto-gawa, Kôto, Hitachiômiya-shi [Gozen'yama-mura], 36° 32' 19" N, 140° 18' 54" E, 75 m, EC (Crj) + EB (QCg), 6.IV.1985, YH. *ADp*, 1 ex., 1 (9 ♂) [paratype, coll. Hagino]; *Cs*, 1 ex., 1 (9 ♀) [holotype, CBM-ZU 24]; *Ej*, 1 ex., 1 (9 ♀). (Hagino, 1991a[7], 1992). [同市[同村]光戸皇都川河岸崖の斜面]
- 51a. Kotoku, Urizura-machi, 36° 29' 17" N, 140° 25' 29" E, 70 m, EC (Psd), *I.II.1985, KI. *Dr*, 1 ex., 1 (6); *AAAd*, 7 exs., 5 (9 ♀), 2 (8); *ADf*, 1 ex., 1 (9 ♀); *ADy*, 2 exs., 2 (9 ♀) [2 paratypes, coll. Hagino]; *Cs*, 2 exs., 2 (9 ♀). (Hagino, 1991a[*10A], 1992). [那珂郡瓜連町古徳]
- 51b. *Ibid.*, 2.II.1985, KI. *AAI*, 1 ex., 1 (9 ♀); *ADf*, 2 exs., 2 (9 ♀) [holotype, CBM-ZU 4; paratype, CBM-ZU 5]; *ADif*, 1 ex., 1 (8); *ADl*, 1 ex., 1 (9 ♀). (Hagino, 1991a[*10B], 1992).
52. To, Naka-machi, 36° 28' 11" N, 140° 25' 44" E, 10 m, EC (Psd), 16.IV.1983, YH. *ADif*, 1 ex., 1 (9 ♀). (Hagino, 1992). [同郡那珂町戸]
53. Akazawa, Katsura-mura, 36° 32' 16" N, 140° 20' 08" E, 80 m, DB (QLa, QLs, Ctc), 5.XII.1983, YH. *ADib*, 1 ex., 1 (9 ♀); *ADit*, 1 ex., 1 (9 ♀). (Hagino, 1992). [東茨城郡桂村赤沢]
54. Shrine Aoyama-jinja, Kamiaoyama, Jôhoku-machi, 36° 28' 29" N, 140° 21' 30" E, 60 m, EC (Crj, Cho, *Chamaecyparis pisifera*) + EB (QCm, Erj, *Trachelospermum asiaticum*), 4.XII.1999, MH-MM-YsH-HH. *ADif*, 1 ex., 1 (8); *ADl*, 1 ex., 1 (9 ♀); *ADit*, 3 exs., 3 (9 ♀); *ADy*, 1 ex., 1 (9 ♀). (Hagino, 2001[33]). [同郡常北町上青山青山神社]
55. South of Kajiyasawa Pasture, Kamifuruuchi-shinden, Jôhoku-machi, 36° 27' 13" N, 140° 18' 39" E, 140 m, DB (QLs, Cej, Clb) + EC (Psd) + EB (QCg, Caj), 4.XII.1999, MH-MM-YsH-HH. *AAI*, 1 ex., 1 (9 ♀). (Hagino, 2001[35]). [同町上古内新田鍛冶屋沢放牧場近く]
- 56a. Temple Seion-ji, Jôhoku-machi, 36° 27' 07" N, 140° 20' 06" E, 110 m, EB (QCg, QCm) + EC (Crj), 30.IV.1984, YH. *Cs*, 1 ex., 1 (9 ♀) [paratype, CBM-ZU 25]. (Hagino, 1991a[9A], 1992). [同町清音寺]
- 56b. *Ibid.*, 18.III.1985, YH. *AAI*, 1 ex., 1 (9 ♀); *ADf*, 1 ex., 1 (9 ♀) [paratype, coll. Hagino]; *ADib*, 1 ex., 1 (9 ♂); *ADl*, 10 exs., 10 (9 ♀); *ADp*, 5 exs., 3 (9 ♂) [holotype, CBM-ZU 14; 2 paratypes, CBM-ZU 15, coll. Hagino], 2 (9 ♀) [2 paratypes, CBM-ZU 16, coll. Hagino]; *Pt*, 1 ex., 1 (9 ♂) [paratype, coll. Hagino]; *SSpp*, 1 ex., 1 (9 ♂); *SDp*, 2 exs., 2 (9 ♀). (Hagino, 1991a[*9B], 1992).
- 56c. *Ibid.*, 9.XI.1985, YH. *ADit*, 1 ex., 1 (9 ♀) [paratype, coll. Hagino]; *SSpb*, 4 exs., 3 (9 ♂), 1 (9 ♀). (Hagino, 1991a[9C], 1992).
57. Shimofuruuchi, Jôhoku-machi, 36° 26' 13" N, 140° 21' 05" E, 80 m, DB (QLs, Cej) + SS (Plc), 4.XII.1999, SC-KF-TM. *ADl*, 1 ex., 1 (9 ♀); *SSpp*, 3 exs., 2 (9 ♂), 1 (8); *SSpb*, 4 exs., 2 (9 ♂), 2 (9 ♀). (Hagino, 2001[30]). [同町下古内老人福祉センター]
58. Tano, Mito-shi, 36° 24' 40" N, 140° 25' 14" E, 30 m, EC (Crj) + EB (Erj), 18.IV.1984, YH. *AAI*, 2 exs., 2 (9 ♀) [2 paratypes, coll. Hagino]; *ADy*, 1 ex., 1 (9 ♀) [paratype, CBM-ZU 23]; *Pt*, 1 ex., 1 (9 ♀) [paratype, CBM-ZU 27]. (Hagino, 1991a[11], 1992). [水戸市田野]
59. Yatabe, Ibaraki-machi, 36° 17' 41" N, 140° 27' 01" E, 25 m, EC (Crj), 15.XI.1997, HT-HS-YK-TO-KI-KF. *ADf*, 2 exs., 2 (9 ♀); *ADib*, 4 exs., 4 (9 ♀); *ADif*, 3 exs., 1 (10 ♀), 1 (8); *ADy*, 1 ex., 1 (9 ♂). (Hagino, 2001[5]). [同郡茨城町谷田部]
60. Oyazawa, Nakaishizaki, Ibaraki-machi, 36° 16' 58" N, 140° 28' 49" E, 30 m, EB (QCm, Css, Erj) + DB (Acr) + PM (*Trachycarpus fortunei*), 15.XI.1997, HT-HS-YK-TO-KI-KF. *ADif*, 2 exs., 1 (10 ♀), 1 (8). (Hagino, 2001[9]). [同町中石崎親沢]
61. Shimobaba, Ogawa-machi, 36° 09' 54" N, 140°

- 21' 50"E, 25 m, BM, 19.X.1986, HS. *AAl*, 3 exs., 3 (5); *ADir*, 3 exs., 2 (9♀), 1 (6). (Hagino, 1992). [同郡小川町下馬場]
62. Ogachi, Nanakai-mura, 36° 28' 52"N, 140° 16' 46"E, 160 m, DB (Mgh, Cej, Stj, Kxs, Msm) + EC (Psd), 7.IX.1997, HT-HS-KI-RI-KF-NK-MH-MM-KT-YsH-HH-LZ-NH-YH. *AAl*, 3 exs., 1 (8♂), 1 (8), 1 (6); *ADif*, 37 exs., 5 (10♀), 18 (9♀), 9 (8), 3 (6), 2 (5); *Pt*, 5 exs., 1 (9♂), 1 (9♀), 1 (8♂), 2 (6); *SSpp*, 10 exs., 1 (9♀), 2 (8♂), 7 (8); *SSpb*, 8 exs., 1 (9♂), 5 (8), 2 (6); *Ej*, 1 ex., 1 (8). (Hagino, 2001[3]). [西茨城郡七会村小勝]
63. Ôsawa, Nanakai-mura, 36° 28' 14"N, 140° 14' 26"E, 220 m, DB (QLs, QLa, Ctc, Lnp, Fxl), 7.IX.1997, HT-HS-KI-RI-KF-NK-MH-MM-KT-YsH-HH-LZ-NH-YH. *AAl*, 7 exs., 1 (8♂), 3 (8), 3 (6); *ADif*, 4 exs., 2 (9♀), 1 (8), 1 (6); *SSpb*, 2 exs., 1 (8♂), 1 (8). (Hagino, 2001[2]). [同村大沢]
64. Kamiakasawa, Nanakai-mura, 36° 26' 35" N, 140° 12' 18"E, 200 m, DB (QLs, Cej, Clb, Ctc, QLa, Fxl, Ldu, Acc) + EC (Psd), 7.IX.1997, HT-HS-KI-RI-KF-NK-MH-MM-KT-YsH-HH-LZ-NH-YH. *Dr*, 1 ex., 1 (5); *ADif*, 2 exs., 1 (10♀), 1 (8); *SSpp*, 3 exs., 3 (8); *SDp*, 10 exs., 1 (8♂), 6 (8), 1 (6), 2 (5); *Ej*, 1 ex., 1 (6). (Hagino, 2001[1]). [同村上赤沢]
65. Iida Dam, Iida, Kasama-shi, 36° 25' 29"N, 140° 16' 37"E, 120 m, DB (QLs, Cej, Mgh) + EB (Erj) + SS (Plc), 4.XII.1999, HS-YK-YH. *Dr*, 1 ex., 1 (8♂); *ADy*, 3 exs., 3 (9♀); *SSpb*, 7 exs., 4 (9♀), 2 (9♀), 1 (8). (Hagino, 2001[40]). [笠間市飯田飯田タム]
66. Ikenobe, Kasama-shi, 36° 24' 19"N, 140° 19' 59"E, 100 m, DB (QLs, Cej) + EC (Cho, Psd) + EB (Erj), 4.XII.1999, SC-KF-TM. *ADy*, 1 ex., 1 (9♀). (Hagino, 2001[32]). [同市池野辺]
67. Mt. Sashiro-san, Kasama-shi, 36° 23' 02"N, 140° 16' 03"E, 150 m, EB (Css, QCm, *Camellia sinensis*, *Castanopsis cuspidata*) + DB (Zks), 21.VI.1998, HT-HS-KI-RI-KF-MH-MM-YsH-HH-YH. *AAl*, 1 ex., 1 (5); *SSpp*, 1 ex., 1 (5). (Hagino, 2001[15]). [同市佐白山]
68. Temple Iwaya-dera, Kurusu, Kasama-shi, 36° 21' 55"N, 140° 13' 54"E, 80 m, EB (QCg, QCm, Erj, Auj) + DB (QLs) + EC (Cho, Abf), 26.VI.1999, HT-HS-YK-KI-RI-KF-YsH-HH-YH. *ADif*, 4 exs., 2 (10♀), 1 (9♀), 1 (8); *Pt*, 3 exs., 1 (9♂), 2 (9♀). (Hagino, 2001[25]). [同市来栖岩谷寺境内]
69. Kawamukô, Kasama-shi, 36° 20' 33"N, 140° 16' 03"E, 50 m, EC (Cho, Psd) + DB (Ctc, Cej, Acc, *Rhus trichocarpa*) + EB (Erj) + SS (Plc), 26.VI.1999, HT-HS-YK-KI-RI-KF-YsH-HH-YH. *Dr*, 7 exs., 4 (8♂), 2 (6♀), 1 (6); *ADp*, 3 exs., 2 (8♂), 1 (8); *Pt*, 3 exs., 3 (9♀); *SDp*, 3 exs., 1 (8♂), 2 (5). (Hagino, 2001[26]). [同市川向]
70. West slope, Mt. Wagakuchi-san, Fukuhara, Kasama-shi, 36° 19' 17"N, 140° 11' 58"E, 440 m, DB (QLs, Clb, Lyo, Fgj, Cnl) + EB (QCa) + SS (Ssb), 20.VI.1998, HT-HS-KI-RI-KF-MH-MM-YsH-HH-YH. *ADif*, 3 exs., 1 (10♀), 2 (9♀). (Hagino, 2001[14]). [同市福原吾国山西斜面]
71. Hirasawa, Iwase-machi, 36° 23' 46"N, 140° 09' 05"E, 300 m, DB (Cej, QLs, Cnl, Mgh) + EB (Erj), 26.VI.1999, HT-HS-YK-KI-RI-KF-YsH-HH-YH. *ADib*, 1 ex., 1 (9♀); *SDp*, 5 exs., 1 (9♂), 3 (9♀), 1 (5); *Ej*, 1 ex., 1 (5). (Hagino, 2001[28]). [西茨城郡岩瀬町平沢]
72. Temple Tomiya-kan'on, Tomiya, Iwase-machi, 36° 23' 00"N, 140° 05' 59"E, 200 m, EB (QCg, Css, Auj, *Ilex integra*, Caj) + EC (Cho) + SS (Plc), 4.XII.1999, HT-KI-RI-Ys. *ADir*, 2 exs., 2 (9♀); *SSpp*, 1 ex., 1 (9♀); *Cs*, 1 ex., 1 (9♀); *Ej*, 1 ex., 1 (9♂). (Hagino, 2001[38]). [同町富谷富谷観音境内]
73. Kamishiro, Iwase-machi, 36° 20' 32"N, 140° 07' 20"E, 150 m, DB (QLs, Cej, Zks, Acf f. *dissectum*, Rno) + EC (Psd) + EB (Erj) + SS (Plc), 26.VI.1999, HT-HS-YK-KI-RI-KF-YsH-HH-YH. *ADif*, 2 exs., 2 (10♀); *ADi*, 3 exs., 3 (9♀). (Hagino, 2001[24]). [同町上城]
74. Sakai, Iwase-machi, 36° 20' 24"N, 140° 05' 44"E, 170 m, EC (Psd) + EB (Erj), 21.XII.1985, YH. *ADif*, 1 ex., 1 (9♀). (Hagino, 1991a[12], 1992). [同町境]
75. Mt. Nandai, Iwama-machi, 36° 18' 20"N, 140° 13' 16"E, 500 m, DB (Fgc), 28.VIII.1985, HS. *AAl*, 1 ex., 1 (8♂); *SSpb*, 10 exs., 3 (8♂), 3 (8), 2 (6), 2 (5); *SDp*, 1 ex., 1 (5). (Hagino, 1992). [同郡岩間町難台山]
76. Temple Takimae-fudôson, Komaba, Kamigô, Iwama-machi, 36° 17' 31"N, 140° 14' 25"E, 100 m, EC (Crj, Cho) + DB (QLs, Clb, Acr) + EB (QCg, Erj, QCm, Auj) + EC (Psd) + BM (Psh), 24.X.1998, HT-HS-YK-KI-RI-KF-KT-YsH-HH. *Cs*, 1 ex., 1 (9♀). (Hagino, 2001[21]). [同町上郷駒場滝入不動尊]
77. Temple Amabiki-kan'on, Yamato-mura, 36° 19' 54"N, 140° 07' 02"E, 180 m, EB (QCm, Erj) + EC (Psd), 18.I.1987, HT. *ADi*, 2 exs., 2 (9♀). (Hagino, 1992). [真壁郡大和村雨引観音]
78. Mt. Ashio, Makabe-machi, 36° 16' 46"N, 140° 08' 52"E, 620 m, DB (Ctc, QLa, QLs, Cnt), 30.V.1985, HS. *SSc*, 2 exs., 1 (9♀), 1 (8♂); *SSpp*, 1

- ex., 1 (9♀); *SDp*, 1 ex., 1 (8♂). (Hagino, 1992). [同郡真壁町足尾山]
79. West slope, Mt. Tsukuba-san, Makabe-machi, 36° 13' 42" N, 140° 04' 51" E, 250 m, EC (Psd), 5.X.1984, HW. *AAd*, 1 ex., 1 (6). (Hagino, 1992). [同町筑波山西斜面]
80. Nyotai-hô, Mt. Tsukuba-san, Makabe-machi, 36° 13' 21" N, 140° 06' 55" E, 650 m, DB (Fgc, QLc), 10.XI.1985, HS. *ADf*, 1 ex., 1 (9♀) [paratype, coll. Hagino]; *SSc*, 1 ex., 1 (9♂) [paratype, coll. Hagino]; *SDp*, 7 exs., 1 (9♀), 2 (8), 2 (6), 2 (5); *Cs*, 3 exs., 3 (9♀). (Hagino, 1991a[13], 1992). [同町筑波山女体峰]
81. *Ibid.*, 36° 13' 21" N, 140° 06' 52" E, 660 m, DB (Cnl), EC (Cho), 25.IX.1984, HW. *SDp*, 1 ex., 1 (6). (Hagino, 1992).
82. Temple Yomogida-temmangû, Kyôwa-machi, 36° 22' 10" N, 140° 02' 11" E, 50 m, EC (Psd, Abf, Crj, Cho) + EB (QCm), 18.I.1987, HT. *ADif*, 1 ex., 1 (9♀); *ADl*, 1 ex., 1 (9♀). (Hagino, 1992). [同郡協和町蓬田天満宮]
83. Takasai, Shimotsuma-shi, 36° 11' 38" N, 140° 00' 31" E, 20 m, BM (Psb), 22.X.1987, YH. *ADif*, 1 ex., 1 (9♀) [paratype, coll. Hagino]; *ADir*, 1 ex., 1 (9♀). (Hagino, 1991a[16], 1992). [下妻市高道祖]
84. Tokushuku-jôshi, Hokota-machi, 36° 11' 04" N, 140° 31' 14" E, 30 m, EB (Css, Auj, Caj), 27. XI. 1983, YH. *ADl*, 2 exs., 2 (9♀) [holotype, CBM-ZU 11; paratype, CBM-ZU 12]. (Hagino, 1991a[18], 1992). [鹿島郡鉾田町徳宿城跡]
85. Minamihara, Kitaura-machi[-mura], 36° 06' 44" N, 140° 27' 26" E, 30 m, BM (Psh) + EC (Crj), 19. X. 1986, HS. *ADrs*, 1 ex., 1 (9♀). (Hagino, 1992). [行方郡北浦町[村]南原]
86. Temple Jishô-ji, Kitaura-machi[-mura], 36° 06' 08" N, 140° 29' 56" E, 30 m, EB (Css, Mlt, QCm), 19.X.1986, HS. *Dr*, 1 ex., 1 (5). (Hagino, 1992). [同町[村]自性寺]
87. Northwest slope, Mt. Nandai-san, Yasato-machi, 36° 18' 18" N, 140° 13' 17" E, 500 m, DB (Fgc, Cnl, Cej, QLs, Clb, Rno) + EB (Erj, Auj) + SS (Ssb), 20.VI.1998, HT-HS-KI-RI-KF-MH-MM-YsH-HH-YH. *Dr*, 1 ex., 1 (8♂); *AAI*, 2 exs., 2 (5); *ADib*, 1 ex., 1 (9♂); *ADif*, 1 ex., 1 (9♀); *Pr*, 3 exs., 1 (9♂), 2 (9♀); *SSpp*, 2 exs., 1 (9♂), 1 (9♀); *SSpb*, 5 exs., 1 (9♂), 4 (9♀); *SDp*, 3 exs., 2 (9♂), 1 (9♀); *Cs*, 1 ex., 1 (8). (Hagino, 2001[11]). [新治郡八郷町難台山北西斜面(尾根の西側)]
- 88a. Temple Tôjô-ji, Niihari-mura, 36° 10' 01" N, 140° 09' 14" E, 120 m, EB (QCm) + DB (QLa, QLs), 13.III.1986, HS. *ADl*, 2 exs., 2 (9♀); *SDp*, 9 exs., 5 (9♂), 4 (9♀). (Hagino, 1992). [同郡新治村東城寺]
- 88b. *Ibid.*, 2.VI.1986, HS. *SSpp*, 1 ex., 1 (9♀); *SDp*, 1 ex., 1 (9♂). (Hagino, 1992).
89. Ôiwata, Tsuchiura-shi, 36° 03' 19" N, 140° 12' 39" E, 20 m, DB (QLa, QLs), 18.XI.1986, HS. *ADrs*, 1 ex., 1 (6); *SSpp*, 2 exs., 1 (9♂), 1 (9♀). (Hagino, 1992). [土浦市大岩田町]
- 90a. North slope just below the summit, Mt. Tsukuba, Tsukuba, Tsukuba-shi, 36° 13' 35" N, 140° 05' 54" E, 840 m, DB (Fgc, QLc, *Carpinus* sp(p).), 8.VII.1995, HS-SC-KI-YH. *Dr*, 1 ex., 1 (8♂); *ADib*, 1 ex., 1 (6); *ADrs*, 1 ex., 1 (9♂); *Pr*, 2 exs., 1 (9♀), 1 (6); *SSc*, 2 exs., 2 (9♂). (Hagino, 1998a[1]). [つくば市筑波筑波山頂上直下北斜面]
- 90b. *Ibid.*, 6.VIII.1995, HS. *Dr*, 1 ex., 1 (5); *ADib*, 4 exs., 1 (9♀), 2 (6), 1 (5); *SSc*, 7 exs., 1 (9♀), 1 (8), 2 (6), 3 (5); *SSpp*, 3 exs., 2 (6), 1 (5). (Hagino, 1998a[2]).
- 90c. *Ibid.*, 10.IX.1995, HS. *ADib*, 1 ex., 1 (9♀); *SSpp*, 2 exs., 1 (8♂), 1 (6); *SDp*, 1 ex., 1 (8). (Hagino, 1998a[3]).
- 90d. *Ibid.*, 10.X.1995, HS. *ADib*, 1 ex., 1 (9♀); *SSpp*, 1 ex., 1 (8♂); *SSpb*, 2 exs., 1 (8♂), 1 (8); *Cs*, 1 ex., 1 (9♀). (Hagino, 1998a[4]).
- 90e. *Ibid.*, 4.XI.1995, HS. *Dr*, 1 ex., 1 (5); *ADib*, 15 exs., 5 (9♂), 8 (9♀), 1 (8), 1 (6); *ADy*, 1 ex., 1 (9♀); *SDp*, 2 exs., 1 (9♀), 1 (6). (Hagino, 1998a[5]).
- 91a. Summit of Mt. Tsukuba, Tsukuba, Tsukuba-shi, 36° 13' 32" N, 140° 05' 55" E, 860 m, DB (Fgc, Fgj, Cnj), 24.III.1996, HS-KI-RI-KF-NK-YsH-YH. *SDp*, 8 exs., 2 (9♂), 1 (9♀), 4 (8), 1 (6); *Cs*, 1 ex., 1 (9♀). (Hagino, 1998a[6]). [同市筑波筑波山頂上]
- 91b. *Ibid.*, 16.VIII.1996, HS-YK-TO-KI-RI-KF-NK-KT-TM-YsH-YH. *ADib*, 1 ex., 1 (8); *SSc*, 1 ex., 1 (9♀); *SDp*, 4 exs., 1 (9♂), 2 (9♀), 1 (6). (Hagino, 1998a[15]).
- 92a. South slope, Mt. Tsukuba, Tsukuba, Tsukuba-shi, 36° 13' 28" N, 140° 06' 00" E, 760 m, DB (Fgc, Cnt) + EB (QCa) + EC (Cph), 24.III.1996, HS-KI-RI-KF-NK-YsH-YH. *ADy*, 1 ex., 1 (9♀); *SDp*, 5 exs., 1 (9♂), 1 (9♀), 2 (6), 1 (5); *Cs*, 2 exs., 2 (9♀). (Hagino, 1998a[7]). [同市筑波筑波山南斜面]
- 92b. *Ibid.*, 16.VIII.1996, HS-YK-TO-KI-RI-KF-NK-KT-TM-YsH-YH. *SSc*, 2 exs., 2 (9♂); *SSpp*, 1 ex., 1 (6); *SDp*, 5 exs., 4 (6), 1 (5); *Cs*, 4 exs., 2 (8), 2 (6). (Hagino, 1998a[16]).
- 93a. *Ibid.*, 36° 13' 26" N, 140° 06' 05" E, 660 m, EC (Crj, Abf) + EB (QCa, Caj, Oth), 24.III.1996, HS-KI-RI-KF-NK-YsH-YH. *ADib*, 3 exs., 1 (9♂), 2 (9♀); *SSpp*, 2 exs., 2 (9♀); *SDa*, 1 ex., 1 (9♀); *SDp*, 3

- exs., 2 (9♂), 1 (9♀). (Hagino, 1998a[8]).
- 93b. *Ibid.*, 16.VIII.1996, HS-YK-TO-KI-RI-KF-NK-KT-TM-YsH-YH. *Pt.* 1 ex., 1 (8♂); *SSc.* 5 exs., 1 (9♂), 2 (9♀), 1 (6), 1 (5); *SDp.* 8 exs., 3 (6), 4 (5), 1 (3); *Cs.* 2 exs., 2 (8). (Hagino, 1998a[17]).
- 94a. *Ibid.*, 36° 13' 17"N, 140° 06' 13"E, 560 m, EC (Crj, Abf) + EB (QCa, Nls) + EC (Psd), 24.III.1996, HS-KI-RI-KF-NK-YsH-YH. *ADib.* 5 exs., 2 (9♂), 3 (9♀); *ADl.* 13 exs., 1 (9♂), 12 (9♀); *ADtr.* 1 ex., 1 (9♀); *SSc.* 1 ex., 1 (9♂); *SSpb.* 3 exs., 3 (9♂); *SDp.* 2 exs., 1 (9♀), 1 (8); *Cs.* 1 ex., 1 (9♀). (Hagino, 1998a[9]).
- 94b. *Ibid.*, 16.VIII.1996, HS-YK-TO-KI-RI-KF-NK-KT-TM-YsH-YH. *Dr.* 2 exs., 2 (8♂); *AAI.* 3 exs., 1 (9♀), 1 (8), 1 (5); *ADf.* 1 ex., 1 (8); *ADib.* 1 ex., 1 (8♂); *ADl.* 2 exs., 2 (8); *ADtr.* 1 ex., 1 (8); *SSc.* 7 exs., 1 (9♀), 1 (8♂), 3 (6), 2 (5); *SSpp.* 5 exs., 1 (9♀), 1 (8), 3 (6); *SDp.* 15 exs., 3 (9♀), 7 (6), 4 (5), 1 (3); *SDu.* 3 exs., 1 (8♂), 1 (8), 1 (6). (Hagino, 1998a[18]).
- 95a. *Ibid.*, 36° 13' 13"N, 140° 06' 11"E, 460 m, EC (Crj, Abf) + EB (QCa, *Daphniphyllum teijsmannii*, Erj), 24.III.1996, HS-KI-RI-KF-NK-YsH-YH. *AAI.* 1 ex., 1 (9♂); *ADf.* 8 exs., 8 (9♀); *ADl.* 5 exs., 5 (9♀); *ADtr.* 1 ex., 1 (9♀); *SSc.* 2 exs., 1 (9♂), 1 (9♀); *SDa.* 1 ex., 1 (9♀); *SDp.* 23 exs., 13 (9♂), 10 (9♀). (Hagino, 1998a[10]).
- 95b. *Ibid.*, 16.VIII.1996, HS-YK-TO-KI-RI-KF-NK-KT-TM-YsH-YH. *AAI.* 1 ex., 1 (6); *SSc.* 1 ex., 1 (8♂); *SDp.* 1 ex., 1 (8♂); *SDu.* 1 ex., 1 (6). (Hagino, 1998a[19]).
- 96a. *Ibid.*, 36° 13' 02"N, 140° 06' 03"E, 360 m, EC (Crj, Abf) + EB (*Quercus sessilifolia*, Nls, Auj), 24.III.1996, HS-KI-RI-KF-NK-YsH-YH. *AAI.* 1 ex., 1 (9♀); *ADf.* 2 exs., 2 (9♀); *ADl.* 2 exs., 2 (9♀); *Pt.* 2 exs., 1 (9♂), 1 (9♀); *SSc.* 10 exs., 6 (9♂), 4 (9♀); *SDp.* 10 exs., 5 (9♂), 4 (9♀), 1 (8). (Hagino, 1998a[11]).
- 96b. *Ibid.*, 16.VIII.1996, HS-YK-TO-KI-RI-KF-NK-KT-TM-YsH-YH. *AAI.* 1 ex., 1 (6); *AAI.* 4 exs., 3 (6), 1 (5); *Pt.* 1 ex., 1 (8♂); *SSc.* 9 exs., 3 (9♂), 1 (9♀), 3 (8♂), 1 (8), 1 (5); *SSpp.* 1 ex., 1 (6); *SDp.* 12 exs., 1 (8♂), 8 (6), 3 (5); *SDu.* 1 ex., 1 (8). (Hagino, 1998a[20]).
- 97a. *Ibid.*, 36° 12' 49"N, 140° 05' 55"E, 260 m, DB (QLa, QLs) + EB (QCm, QCg, Oth), 24.III.1996, HS-KI-RI-KF-NK-YsH-YH. *ADf.* 1 ex., 1 (9♀); *ADl.* 1 ex., 1 (9♀); *SDp.* 1 ex., 1 (9♀); *Cs.* 2 exs., 2 (9♀). (Hagino, 1998a[12]).
- 97b. *Ibid.*, 24.VIII.1996, HS. *ADif.* 12 exs., 2 (10♀), 1 (9♀), 3 (8), 6 (6); *ADit.* 7 exs., 3 (9♀), 4 (8); *ADl.* 2 exs., 2 (8); *ADts.* 3 exs., 3 (9♀); *SSc.* 2 exs., 1 (8), 1 (6). (Hagino, 1998a[21]).
- 98a. *Ibid.*, 36° 12' 35"N, 140° 05' 42"E, 160 m, DB (QLs, QLa) + EB (Erj) + SS (Plc), 3.IV.1996, HS. *ADf.* 2 exs., 2 (9♀); *ADif.* 1 ex., 1 (5); *ADit.* 1 ex., 1 (5); *ADl.* 5 exs., 5 (9♀); *SSc.* 26 exs., 6 (9♂), 12 (9♀), 1 (8♂), 2 (8), 2 (6), 3 (5); *SDp.* 2 exs., 1 (9♂), 1 (9♀). (Hagino, 1998a[13]).
- 98b. *Ibid.*, 30.VIII.1996, HS. *AAI.* 4 exs., 1 (8), 2 (6), 1 (3); *ADf.* 1 ex., 1 (8); *ADif.* 3 exs., 1 (10♀), 1 (9♀), 1 (6); *ADit.* 5 exs., 1 (9♂), 1 (9♀), 3 (8); *ADl.* 1 ex., 1 (8); *ADp.* 2 exs., 2 (5); *ADts.* 1 ex., 1 (9♀); *SSc.* 16 exs., 3 (9♂), 3 (9♀), 1 (8♂), 3 (8), 5 (6), 1 (5); *SDp.* 2 exs., 1 (8♂), 1 (3). (Hagino, 1998a[22]).
- 99a. *Ibid.*, 36° 12' 15"N, 140° 05' 32"E, 60 m, BM (Psb) + EB (QCm, Erj) + DB (Zks, QLs), 3.IV.1996, HS. *Dr.* 1 ex., 1 (6♀); *ADib.* 2 exs., 1 (9♂), 1 (9♀); *ADit.* 1 ex., 1 (9♀); *ADl.* 6 exs., 6 (9♀); *SSc.* 6 exs., 2 (9♂), 4 (9♀). (Hagino, 1998a[14]).
- 99b. *Ibid.*, 4.IX.1996, HS. *Dr.* 1 ex., 1 (5); *ADit.* 1 ex., 1 (9♀); *ADp.* 1 ex., 1 (9♀); *ADts.* 1 ex., 1 (9♀); *SSc.* 1 ex., 1 (8). (Hagino, 1998a[23]).
100. Katafuta, Yûki-shi, 36° 16' 48"N, 139° 51' 35"E, 35 m, EC (Psd) + DB (Ctc, QLs), 22.X.1987, YH. *ADit.* 1 ex., 1 (9♀). (Hagino, 1992). [結城市片蓋]
101. Uemachi, Koga-shi, 36° 09' 16"N, 139° 43' 21"E, 15 m, DB (Ctc) + EB (Erj), 22.X.1987, YH. *ADif.* 1 ex., 1 (8). (Hagino, 1992). [古河市上町]
102. Nakazato, Iwai-shi, 36° 01' 29"N, 139° 54' 02"E, 10 m, EC (Psd, Crj) + DB (QLs), 22.X.1987, YH. *ADif.* 1 ex., 1 (9♀) [paratype, coll. Hagino]. (Hagino, 1991a[17], 1992). [岩井市中里]
- 103a. Shrine Ôsugi-jinja, Sakuragawa-mura, 35° 57' 09"N, 140° 23' 07"E, 20 m, BM, 20.IV.1986, HT. *ADib.* 1 ex., 1 (9♂) [paratype, coll. Hagino]; *SSpp.* 3 exs., 3 (9♀). (Hagino, 1992). [稲敷郡桜川村大杉神社]
- 103b. *Ibid.*, EC (Crj) + EB (Css), 20.IV.1986, HS. *ADit.* 1 ex., 1 (9♀); *ADl.* 1 ex., 1 (9♀). (Hagino, 1992).
- 104a. Hebinuma, Ryûgasaki-shi, 35° 56' 31"N, 140° 09' 54"E, 10 m, EC (Psd, Cho), 20.IV.1986, HT. *ADib.* 3 exs., 3 (9♀); *ADif.* 1 ex., 1 (10♀). (Hagino, 1992). [龍ヶ崎市蛇沼]
- 104b. *Ibid.*, 20.IV.1986, HS. *SDp.* 5 exs., 2 (9♂), 2 (9♀), 1 (6). (Hagino, 1992).
105. Shimizu, Moriya-shi[-machi], 35° 56' 49"N, 139° 58' 43"E, 20 m, EC (Psd, Cho, Crj) + DB (QLs), 22.X.1987, YH. *ADif.* 1 ex., 1 (9♀). (Hagino, 1991a[15], 1992). [守谷市[北相馬郡守谷町]清水]
106. Shrine Omotaru-jinja, Omonma, Toride-shi, 35° 53' 28"N, 140° 05' 52"E, 20 m, EB (Css), 20.IV.

1986. HT. *ADl*, 1 ex., 1 (9♀); *ADp*, 1 ex., 1 (9♂). (Hagino, 1992). [取手市小文間面足神社]
- Tochigi Prefecture [栃木県]**
107. Yosasagawa-bashi, Ōshima, Nasu-machi, 37° 07' 24" N, 140° 00' 51" E, 900 m, DB (QLc), 3.XI.1994, KI-KF-HS-YsH-YH. *ADib*, 24 exs., 22 (9♀), 1 (8), 1 (6); *ADl*, 5 exs., 4 (9♀), 1 (5); *ADtr*, 4 exs., 4 (9♀); *SSpp*, 1 ex., 1 (8); *SDp*, 15 exs., 5 (9♂), 4 (9♀), 1 (8♂), 3 (8), 1 (6), 1 (5); *Cs*, 5 exs., 5 (9♀). (Hagino, 2002[42]). [那須郡那須町大島那須甲子有料道路余笹川橋]
108. Jōminyūgari, Toyoharaotsu, Nasu-machi, 37° 06' 02" N, 140° 06' 34" E, 510 m, DB (QLs, Ctc) + EC (Psd), 16.X.1994, KI-KF-RI-KT-YH. *Dr*, 2 exs., 1 (8♂), 1 (6); *SDa*, 1 ex., 1 (9♂). (Hagino, 2002[40]). [同町豊原乙常民夕狩]
109. Zusawa, Yorui, Nasu-machi, 37° 02' 40" N, 140° 10' 48" E, 470 m, DB (Ctc, QLs), 16.X.1994, KI-KF-RI-KT-YH. *Dr*, 1 ex., 1 (6♀); *ADib*, 1 ex., 1 (9♀); *ADy*, 1 ex., 1 (9♀); *SDp*, 1 ex., 1 (8); *Cs*, 6 exs., 6 (9♀). (Hagino, 2002[39]). [同町寄居豆沢]
110. Shrine Yuzen-jinja, Iōno, Nasu-machi, 36° 57' 36" N, 140° 09' 52" E, 270 m, EB (QC sp(p.)) + DB (Zks), 16.X.1994, KI-KF-RI-KT-YH. *ADib*, 6 exs., 6 (9♀); *ADif*, 2 exs., 2 (6); *ADl*, 4 exs., 4 (9♀); *ADts*, 2 exs., 2 (9♀); *SSpp*, 8 exs., 2 (9♂), 3 (9♀), 2 (6), 1 (5); *SDnd*, 1 ex., 1 (9♂); *SDp*, 11 exs., 8 (8), 3 (6). (Hagino, 2002[37]). [同町伊王野霞岡温泉神社]
111. Sasanosawa, Momura, Kuroiso-shi, 37° 05' 16" N, 139° 50' 56" E, 1300 m, DB (Fgc) + EC (Tjd), 18.VIII.1994, KI-KF-YS-RI-TM-KeI-YH. *SDp*, 2 exs., 2 (8). (Hagino, 2002[18]). [黒磯市百村塩那道路笹の沢]
112. Bank of Kinomata-gawa River, Momura, Kuroiso-shi, 37° 02' 54" N, 139° 54' 41" E, 580 m, DB (QLs, Ctc), 9.IX.1994, KF-YsH-YH. *Dr*, 1 ex., 1 (5); *ADib*, 1 ex., 1 (5); *SSpp*, 1 ex., 1 (6). (Hagino, 2002[26]). [同市百村木ノ俣川]
113. Fujimi-tōge Pass, Terago, Kuroiso-shi, 36° 57' 47" N, 140° 06' 59" E, 290 m, DB (QLs) + EC (Psd), 14.VII.1994, KI-KF-KT-YsH. *Dr*, 12 exs., 11 (6♀), 1 (5); *AAI*, 4 exs., 2 (5), 2 (3); *ADib*, 8 exs., 5 (8), 3 (6); *ADif*, 8 exs., 2 (9♀), 1 (9), 1 (8), 2 (6), 2 (3); *ADl*, 1 ex., 1 (6); *Pr*, 3 exs., 1 (9♀), 2 (8♂). (Hagino, 2002[5]). [同市寺子富士見峠]
114. Ōnuma-kōen, Yumotoshiobara, Shiobara-machi, 36° 56' 55" N, 139° 48' 09" E, 960 m, DB (QLc, Aet, Fgc), 13.XI.1994, KI-KF-HT-YS-HS-KT-YsH-YH. *ADib*, 1 ex., 1 (6); *ADl*, 1 ex., 1 (9); *ADtr*, 1 ex., 1 (9). (Hagino, 2002[59]). [那須郡塩原町湯元塩原大沼公園(1)]
115. Kaminanbō, Nanbō, Kurobane-machi, 36° 56' 37" N, 140° 14' 28" E, 740 m, DB (Ctc, QLc, Fgc) + EC (Abf, Psd), 15.X.1994, KI-KF-RI-KT-YsH-YH. *ADib*, 1 ex., 1 (9♀); *SDp*, 7 exs., 2 (9♀), 1 (9), 3 (8), 1 (6); *SDu*, 3 exs., 3 (9♂); *Cs*, 2 exs., 2 (9♀). (Hagino, 2002[34]). [同郡黒羽町南方上南方]
116. Kizami, Kurobane-machi, 36° 54' 02" N, 140° 11' 58" E, 495 m, DB (QLs, Ctc) + EC (Psd), 14.VII.1994, KI-KF-KT-YsH. *Dr*, 6 exs., 4 (8♂), 1 (6♀), 1 (5); *AAI*, 1 ex., 1 (3); *ADib*, 2 exs., 1 (6), 1 (5); *Pr*, 3 exs., 1 (9♀), 1 (9), 1 (8); *SSpb*, 2 exs., 1 (9♂), 1 (9♀); *SDp*, 12 exs., 2 (9), 2 (8), 6 (5), 2 (3). (Hagino, 2002[1]). [同町木佐美]
117. Sakuyama, Ōtawara-shi, 36° 48' 15" N, 140° 00' 09" E, 240 m, DB (QLa, Ctc, QLs), 27.IX.1998, KI-KF-YsH. *ADif*, 2 exs., 1 (9♀), 1 (9). (Hagino, 2002[259]). [大田原市佐久山]
118. Koguchi, Batō-machi, 36° 46' 07" N, 140° 08' 45" E, 200 m, DB (QLa, Ctc, Cej, QLs, Swc), 12.XII.1998, KI-KF-HT-YK-YS-RI-HS-MM-TM-HH-KeI. *Adf*, 1 ex., 1 (9♀). (Hagino, 2002[276]). [那須郡馬頭町小口]
119. Ōnachi, Batō-machi, 36° 43' 07" N, 140° 16' 20" E, 190 m, DB (QLs, Ctc, Clb, Cej) + EC (Psd), 12.XII.1998, KI-KF-HT-YK-YS-RI-HS-MM-TM-HH-KeI. *Adf*, 1 ex., 1 (9♀); *ADib*, 4 exs., 1 (9♀), 3 (9); *ADl*, 2 exs., 2 (9); *ADtr*, 18 exs., 5 (9♂), 7 (9♀), 6 (9); *SSpb*, 2 exs., 1 (9♂), 1 (9); *SDu*, 1 ex., 1 (9♀). (Hagino, 2002[271-1]). [同町大那地]
120. Upper reaches of Yakiyama-zawa Stream, Nakamiyori, Fujihara-machi, 37° 03' 05" N, 139° 40' 59" E, 1020 m, EC (Tjd), 7.X.1995, KI-KF-HS-YsH-HH-MsH. *ADib*, 4 exs., 3 (9♀), 1 (9); *ADl*, 3 exs., 1 (9♀), 1 (8♀), 1 (6); *SSc*, 8 exs., 4 (9♂), 4 (9♀); *SDp*, 1 ex., 1 (9♂); *SDu*, 1 ex., 1 (8♂). (Hagino, 2002[103]). [塩谷郡藤原町中三依焼山沢上流]
121. Middle reaches of Yakiyama-zawa Stream, Nakamiyori, Fujihara-machi, 37° 00' 10" N, 139° 41' 35" E, 680 m, DB (Kxs, Ctc, Zks, Acp), 7.X.1995, KI-KF-HS-YsH-HH-MsH. *Ar*, 4 exs., 1 (8), 3 (5); *Dr*, 5 exs., 1 (6♀), 3 (6), 1 (3); *AAI*, 3 exs., 3 (6); *Adf*, 1 ex., 1 (9♀); *ADib*, 8 exs., 4 (9♀), 1 (8), 1 (6), 2 (5); *ADit*, 2 exs., 1 (5), 1 (3); *ADl*, 6 exs., 2 (9♀), 1 (8), 1 (6), 2 (5); *ADtr*, 1 ex., 1 (9♀); *Pr*, 1 ex., 1 (3); *SSpp*, 1 ex., 1 (8); *SDp*, 9 exs., 2 (9♂), 1 (9♀), 1 (8♂), 1 (8), 1 (6), 3 (5). (Hagino, 2002[104]). [同町中三依焼山沢中流]
122. Upper reaches of Shirataki-zawa Stream, Yunishigawa, Kuriyama-mura, 36° 59' 19" N, 139° 34' 42" E, 900 m, DB (Fgc, Fgj, Aet) + EC

- (Cph), 8.X.1995, KI-KF-HS-YsH-HH-MsH. *ADib*, 3 exs., 2 (9♀), 1 (8); *ADit*, 1 ex., 1 (9♀); *ADI*, 1 ex., 1 (8); *SSc*, 4 exs., 4 (9♂); *SDa*, 1 ex., 1 (9♂); *SDp*, 1 ex., 1 (9♂); *SDu*, 2 exs., 2 (9♀). (Hagino, 2002[107]). [同郡栗山村湯西川白滝沢上流]
123. Entrance of trail to Mt. Tashiro-yama, Yunishigawa, Kuriyama-mura, 36° 57' 23" N, 139° 31' 18" E, 1470 m, DB (Fgc, QLc, Kxs), 24.IX.1995, KI-KF-YS-RI-MH-MM-YsH. *ADib*, 11 exs., 10 (9♀), 1 (8); *SSc*, 2 exs., 1 (9♀), 1 (8♂); *SSpb*, 3 exs., 1 (8♂), 2 (8). (Hagino, 2002[92]). [同村湯西川田代林道田代山登山口]
124. Junction of Kurobe-Nishikawa line and Tashiro-rindô, Yunishigawa, Kuriyama-mura, 36° 54' 47" N, 139° 32' 44" E, 1220 m, DB (Fgc, QLc), 25.IX.1995, KI-KF-YS-RI-MH-MM. *ADib*, 79 exs., 1 (9♂), 55 (9♀), 3 (9), 1 (8♂), 8 (8), 4 (6), 7 (5); *ADI*, 3 exs., 3 (9♀); *SSc*, 2 exs., 2 (9♂); *SSpp*, 1 ex., 1 (8); *SDu*, 3 exs., 1 (9♂), 1 (9♀), 1 (8); *Cs*, 1 ex., 1 (9♀). (Hagino, 2002[96]). [同村湯西川黒部西川線・田代林道分岐]
125. Ishiyaki Tunnel, Hinata, Kuriyama-mura, 36° 53' 30" N, 139° 40' 12" E, 610 m, EC (Psd) + DB (QLs, Fgj, Kxs), 7.VII.1996, KI-KF-YsH. *AAI*, 1 ex., 1 (3); *ADib*, 5 exs., 5 (9♀); *SSc*, 7 exs., 3 (9♀), 4 (8); *SSpb*, 4 exs., 4 (9♀); *Cs*, 1 ex., 1 (6). (Hagino, 2002[134]). [同村日向石焼トンネル]
126. Okukinu-rindô Tunnel, Kawamata, Kuriyama-mura, 36° 53' 25" N, 139° 22' 40" E, 1770 m, EC (Tsd), 9.IX.1995, KI-KF-RI-YsH. *ADib*, 4 exs., 3 (9♀), 1 (8); *Pt*, 3 exs., 1 (9♀), 2 (8); *SSpp*, 1 ex., 1 (9♀); *SSpb*, 1 ex., 1 (9♀); *SDp*, 18 exs., 2 (9♂), 8 (9♀), 3 (8♂), 4 (8), 1 (3); *SDu*, 1 ex., 1 (8). (Hagino, 2002[83]). [同村川俣奥鬼怒林道トンネル上]
127. Usukubodaira, Kawamata, Kuriyama-mura, 36° 52' 31" N, 139° 25' 09" E, 1345 m, DB (Fgc, Aet) + EC (*Abies homolepis*), 9.IX.1995, KI-KF-RI-YsH. *AAI*, 2 exs., 2 (5); *ADib*, 19 exs., 6 (9♂), 7 (9♀), 1 (8), 3 (6), 2 (5); *ADI*, 9 exs., 4 (9♀), 4 (8), 1 (6); *ADtr*, 2 exs., 2 (6); *Pt*, 1 ex., 1 (9♂); *SSc*, 1 ex., 1 (3); *SSpp*, 5 exs., 1 (9♀), 1 (8♂), 2 (6), 1 (3); *SDu*, 1 ex., 1 (6). (Hagino, 2002[85]). [同村川俣ウスクボ平]
128. South side of Pond Kinu-numa, Kuriyama-mura, 36° 52' 06" N, 139° 21' 57" E, 1980 m, EC (Abm, Tsd), 30.VII.1995, YsH-HH. *ADib*, 1 ex., 1 (8♂); *SSpb*, 2 exs., 1 (9♀), 1 (6); *SDp*, 8 exs., 2 (9♂), 1 (8♂), 1 (8), 3 (6), 1 (5). (Hagino, 2002[80]). [同村川俣鬼怒沼下]
129. North side of Ôzasa-bokujô Pasture, Kamikuriyama, Kuriyama-mura, 36° 50' 53" N, 139° 36' 47" E, 1000 m, DB (Ctc, QLc), 25.IX.1995, KI-KF-YS-RI-MH-MM. *ADib*, 1 ex., 1 (9♀). (Hagino, 2002[100]). [同村上栗山大笹牧場下]
130. East ridge of Mt. Nyohô-zan, Kamikuriyama, Kuriyama-mura, 36° 49' 03" N, 139° 33' 11" E, 2240 m, DB (Bte, Sbc) + EC (Abv), 21.IX.1996, KI-KF-YS-RI-HS-TM-YsH-HO-HH. *SSpb*, 1 ex., 1 (8♂); *SDp*, 3 exs., 3 (9♂). (Hagino, 2002[141]). [同村上栗山女峰山東尾根]
131. North side, east ridge of Mt. Nyohô-zan, Kamikuriyama, Kuriyama-mura, 36° 49' 02" N, 139° 32' 55" E, 2290 m, EC (Psp) + EB (*Rhododendron (Hymenanthes)* sp.), 21.IX.1996, KI-KF-YS-RI-HS-TM-YsH-HO-HH. *SDp*, 2 exs., 1 (9♂), 1 (8♂). (Hagino, 2002[142-北]). [同村上栗山女峰山東尾根西]
132. Southeast slope of Mt. Kenga-mine, Shimoisano, Yaita-shi, 36° 54' 09" N, 139° 47' 43" E, 1590 m, EC (*Picea alcoquiana*), 12.XI.1994, KI-KF-HT-YS-KT-YsH-YH. *ADib*, 4 exs., 4 (9♀). (Hagino, 2002[53]). [矢板市下伊佐野剣が峰]
133. Beside Kinome-zawa Stream, Kamiisano, Yaita-shi, 36° 53' 00" N, 139° 53' 18" E, 350 m, DB (QLs) + EC (Psd), 9.IX.1994, KF-YsH-YH. *ADif*, 1 ex., 1 (9♀); *Pt*, 1 ex., 1 (8); *SSpp*, 1 ex., 1 (8). (Hagino, 2002[23]). [同市上伊佐野木ノ芽沢]
134. Nishinarita, Narita, Yaita-shi, 36° 48' 09" N, 139° 58' 17" E, 240 m, DB (QLs, Cej) + EC (Crj, Cho), 27.IX.1998, KI-KF-YsH. *AAI*, 1 ex., 1 (8♂); *ADif*, 1 ex., 1 (9♀). (Hagino, 2002[258]). [同市成田電波塔]
135. Higashigoya, Kamiterashima, Shioya-machi, 36° 49' 16" N, 139° 47' 55" E, 420 m, DB (QLs, Mgh, Msm, Cej) + EB (*Ilex crenata*), 25.IX.1998, YsH. *SSc*, 2 exs., 1 (8), 1 (6); *SDu*, 3 exs., 1 (9♂), 1 (9♀), 1 (8). (Hagino, 2002[254]). [塩谷郡塩谷町上寺島東古屋]
136. East of Minami Primary School, Ujiie, Ujiie-machi, 36° 39' 49" N, 139° 57' 50" E, 188 m, DB (QLs, Clb, *Gamblea innovans*) + EB (QCm, Au), 27.IX.1998, KI-KF-YsH. *ADif*, 1 ex., 1 (10♀). (Hagino, 2002[255]). [同郡氏家町氏家町立南小学校東]
137. Hongô, Machida, Motegi-machi, 36° 34' 07" N, 140° 09' 17" E, 150 m, DB (QLa, Ctc, QLs, Swc) + EC (Cho), 28.V.1998, KI-KF. *Dr*, 1 ex., 1 (6♀); *ADif*, 1 ex., 1 (10♀). (Hagino, 2002[234]). [芳賀郡茂木町町田本郷]
138. Sugoroku, Nishimizunuma, Haga-machi, 36° 31' 08" N, 140° 01' 01" E, 90 m, DB (QLs, Ctc), 28.V.1998, KI-KF. *ADif*, 1 ex., 1 (9♀). (Hagino, 2002[235]). [同郡芳賀町西水沼双六]

139. South of Research Farm, College of Agriculture, Utsunomiya University, Shimokomoriya, Mōka-shi, 36°29'08"N, 139°59'02"E, 90 m, DB (Ctc, QLs), 28.V.1998, KI-KF*ADif*, 2 exs., 2 (9♀); *Pt*, 1 ex., 1 (9♀). (Hagino, 2002[232]). [真岡市下籠谷宇都宮大学附属農場南]
140. Mt. Nemoto-yama, Nishidai, Mōka-shi, 36°26'31"N, 140°03'50"E, 150 m, DB (QLs, *Alnus hirsuta* var. *sibirica*, *Cej*, Ctc) + EC (Psd), 28.V.1998, KI-KF. *ADif*, 1 ex., 1 (10♀); *SSpp*, 1 ex., 1 (9♀); *SDu*, 1 ex., 1 (6). (Hagino, 2002[237]). [同市西田井根本山]
141. Southeast of Shrine Takao-jinja, Mitobe, Ninomiya-machi, 36°22'48"N, 140°01'52"E, 80 m, DB (QLs, *Carpinus* sp(p)., *Cej*, Lyo) + EC (Psd), 7.V.1998, KI-KF. *SDp*, 8 exs., 1 (9♂), 2 (9♀), 3 (9), 1 (8), 1 (5). (Hagino, 2002[229]). [芳賀郡二宮町水戸部高尾神社東]
142. Bank of Kinu-gawa River, northwest of Daidōzumi-bashi, Daidōzumi, Ninomiya-machi, 36°22'19"N, 139°55'07"E, 50 m, DB (QLa, *Robinia pseudoacacia*) + BM (Psb) + SS (Plc), 7.V.1998, KI-KF. *ADif*, 3 exs., 1 (10♀), 2 (9♀). (Hagino, 2002[228]). [同町大道泉大道路橋西]
143. Mt. Haguro-san, Imazato, Kamikawachi-machi, 36°42'36"N, 139°52'59"E, 380 m, DB (QLc, Hmj, Kxs, *Hydrangea hirta*, Ldu), 27.IX.1998, KI-KF-YsH. *ADif*, 1 ex., 1 (9); *ADp*, 1 ex., 1 (8); *Pt*, 1 ex., 1 (9♀). (Hagino, 2002[256]). [河内郡上河内町今里羽黒山]
144. Temple Tage-fudōson, Tage-machi, Utsunomiya-shi, 36°36'23"N, 139°48'24"E, 260 m, EB (QCa, Erj, Auj, *Camellia sinensis*, Caj), 3.VIII.1998, KI-KF-KK. *ADif*, 1 ex., 1 (9♀); *SSpb*, 1 ex., 1 (8). (Hagino, 2002[249]). [宇都宮市田下町多気不動尊]
145. East of Utsunomiya Junior College, Shimoarahari-machi, Utsunomiya-shi, 36°33'34"N, 139°49'49"E, 150 m, DB (QLs, QCm, Caj) + EC (Crj), 3.VIII.1998, KI-KF-KK. *ADi*, 1 ex., 1 (9♀); *SSpp*, 1 ex., 1 (8). (Hagino, 2002[247]). [同市下荒針町宇都宮短期大学東]
146. Sekiya, Takashitamachi, Utsunomiya-shi, 36°33'10"N, 139°58'27"E, 125 m, DB (QLs, Ctc), 28.V.1998, KI-KF. *SSpp*, 1 ex., 1 (9♀). (Hagino, 2002[236]). [同市竹下町岡谷]
147. Koyasudo Dam, Senō, Imaichi-shi, 36°48'46"N, 139°37'50"E, 780 m, DB (Ctc, QLc, Mgh, *Cej*, Clb), 2.XI.1998, KI-KF. *ADib*, 4 exs., 1 (9♀), 3 (9); *ADI*, 1 ex., 1 (9♀); *SSc*, 2 exs., 1 (9♀), 1 (8). (Hagino, 2002[262]). [今市市瀬尾小休戸ダム]
148. Mt. Atago-yama, Senō, Imaichi-shi, 36°44'21"N, 139°40'27"E, 460 m, DB (QLs, QLc, *Gamblea innovans*, *Rhus trichocarpa*) + EC (Psd), 2. XI. 1998, KI-KF. *Dr*, 4 exs., 4 (5); *AAI*, 9 exs., 9 (9); *ADib*, 20 exs., 4 (9♂), 16 (9♀); *ADif*, 6 exs., 1 (10), 2 (9), 2 (6), 1 (3); *ADI*, 64 exs., 27 (9♀), 36 (9), 1 (8); *ADTs*, 1 ex., 1 (9♀); *Pt*, 3 exs., 2 (9♀), 1 (6); *Cs*, 2 exs., 2 (9). (Hagino, 2002[261]). [同市瀬尾愛宕山]
149. East side of Lake Kirikomi-ko, Nikkō-shi, 36°49'22"N, 139°26'40"E, 1650 m, DB (Bte, *Alnus hirsuta* var. *hirsuta*) + EC (Tsd), 10.XI.1996, KI-KF-YsH-YH. *ADib*, 1 ex., 1 (9♀). (Hagino, 2002[149]). [日光市切込湖]
150. South side of Lake Karikomi-ko, Nikkō-shi, 36°49'17"N, 139°25'41"E, 1720 m, EC (Abm, Tjd, Tsd), 10.XI.1996, KI-KF-YsH-YH. *SDp*, 1 ex., 1 (9♀). (Hagino, 2002[150]). [同市刈込湖]
151. Konsei-tōge Pass, Nikkō-shi, 36°49'08"N, 139°23'42"E, 2000 m, EC (Tsd, Abm) + DB (Sbc), 13.IX.1997, KI-KF-RI-HS-YsH-HO-HH-KeI-YH. *ADib*, 7 exs., 2 (9♀), 1 (8♂), 1 (8), 1 (6), 2 (5); *ADr*, 6 exs., 3 (9♀), 2 (9), 1 (8); *SSc*, 2 exs., 1 (9♂), 1 (9♀); *SSpb*, 6 exs., 4 (9♂), 2 (9♀); *SDp*, 11 exs., 2 (9♂), 2 (9♀), 1 (9), 5 (6), 1 (3). (Hagino, 2002[188]). [同市金精峠]
152. South side, east ridge of Mt. Nyohō-zan, Nikkō, Nikkō-shi, 36°49'00"N, 139°32'54"E, 2290 m, EC (Tsd, Abv), 21.IX.1996, KI-KF-YS-RI-HS-TM-YsH-HO-HH. *AAI*, 1 ex., 1 (5); *SSpb*, 1 ex., 1 (9♂). (Hagino, 2002[142-南]). [同市日光女峰山東尾根西]
153. East side of Lake Tadenō-umi, Nikkō-shi, 36°48'49"N, 139°25'35"E, 1580 m, EC (Tjd, Tsd) + DB (Bte), 10.XI.1996, KI-KF-YsH-YH. *ADib*, 1 ex., 1 (9♀); *SDa*, 2 exs., 2 (9♂); *SDp*, 3 exs., 1 (9♀), 1 (8), 1 (6). (Hagino, 2002[151]). [同市湯元蓼ノ湖]
154. Shrine Akanagi-okusha, Mt. Akanagi-san, Nikkō-shi, 36°48'46"N, 139°33'38"E, 2203 m, EC (Tsd, Abm) + DB (Bte), 21.IX.1996, KI-KF-YS-RI-HS-TM-YsH-HO-HH. *SDp*, 1 ex., 1 (9♂). (Hagino, 2002[139]). [同市日光赤嶺山奥社跡]
155. Summit of Mt. Nyohō-zan, Nikkō-shi, 36°43'43"N, 139°32'14"E, 2560 m, EC (Psp) + DB (Bte) + EB (*Rhododendron (Hymenanthes)* sp.), 14. VI. 1997, KI-KF-YS-HS-HO-HH-KeI-YH. *SSpb*, 3 exs., 2 (9♀), 1 (6); *SDp*, 8 exs., 1 (9♂), 1 (9), 1 (8♂), 1 (8), 2 (6), 2 (5). (Hagino, 2002[157]). [同市女峰山山頂]
156. East slope of Mt. Akanagi-san, Tokorono, Nikkō-shi, 36°48'37"N, 139°34'25"E, 1830 m, DB (Bte), 21.IX.1996, KI-KF-YS-RI-HS-TM-YsH-HO-

- HH. *ADib*, 1 ex., 1 (9♀); *SDp*, 1 ex., 1 (9♀); *SDu*, 1 ex., 1 (9♀). (Hagino, 2002[140]). [同市所野赤羅山中腹上]
157. Below summit of Mt. Akanagi-san, Nikkô-shi, 36° 48' 34" N, 139° 34' 16" E, 1915 m, EC (Tsd) + DB (Bte, Sbc), 21.IX.1996, KI-KF-YS-RI-HS-TM-YsH-HO-HH. *ADib*, 1 ex., 1 (9♀); *ADI*, 1 ex., 1 (9♀); *SSc*, 2 exs., 1 (9♂), 1 (9♀). (Hagino, 2002[136]). [同市赤羅山山頂下]
158. Summit of Mt. Akanagi-san, Tokorono, Nikkô-shi, 36° 48' 33" N, 139° 34' 08" E, 2010 m, EC (Tsd, Abm) + DB (Bte), 21.IX.1996, KI-KF-YS-RI-HS-TM-YsH-HO-HH. *ADib*, 10 exs., 2 (9♂), 6 (9♀), 2 (6); *ADy*, 1 ex., 1 (9♀); *SSpb*, 3 exs., 2 (9♂), 1 (9♀); *SDu*, 8 exs., 3 (9♂), 4 (9♀), 1 (5). (Hagino, 2002[137]). [同市所野赤羅山山頂]
159. East slope of Mt. Akanagi-san, Tokorono, Nikkô-shi, 36° 48' 28" N, 139° 34' 47" E, 1670 m, GR ("Sasa") + *Rhododendron* sp(p.), 21.IX.1996, KI-KF-YS-RI-HS-TM-YsH-HO-HH. *ADib*, 1 ex., 1 (9♀); *ADI*, 1 ex., 1 (6). (Hagino, 2002[135]). [同市所野赤羅山中腹]
160. Utsunomiya University Nikko Experimental Forests, Chûgûshi, Nikkô-shi, 36° 47' 32" N, 139° 28' 18" E, 1500 m, DC (Lxk) (plantation), 9.XI.1996, KI-KF-YsH-YH. *ADib*, 1 ex., 1 (9♀); *ADI*, 1 ex., 1 (9♀); *ADir*, 4 exs., 4 (9♀). (Hagino, 2002[147]). [同市男体山宇都宮大学演習林]
161. Gate of Shizu-rindô, Mt. Nantai-san, Nikkô-shi, 36° 47' 02" N, 139° 30' 50" E, 1720 m, DB (Bte) + EC (Tsd, Abv), 9.XI.1996, KI-KF-YsH-YH. *ADir*, 1 ex., 1 (9♀); *ADir*, 1 ex., 1 (9♀); *SDp*, 4 exs., 1 (9♂), 2 (9♀), 1 (8♂). (Hagino, 2002[145]). [同市男体山志津林道ゲート]
162. Shizu, Mt. Nantai-san, Nikkô-shi, 36° 46' 49" N, 139° 30' 10" E, 1800 m, EC (Tsd, Abv, Pih, Abm), 9.XI.1996, KI-KF-YsH-YH. *SDp*, 6 exs., 1 (9♂), 2 (9♀), 1 (8♂), 1 (6), 1 (5). (Hagino, 2002[144]). [同市男体山志津]
163. North slope of Mt. Nantai-san, Nikkô-shi, 36° 46' 27" N, 139° 29' 30" E, 2220 m, EC (Tsd, Abv) + EB (*Rhododendron degronianum*), 15.VI.1997, KI-YS-HS-YsH-HO-HH-KeI-YH. *Pr*, 1 ex., 1 (9); *SDp*, 7 exs., 1 (9♂), 2 (9♀), 1 (9), 3 (6). (Hagino, 2002[165]). [同市男体山北斜面]
164. East slope of Mt. Sasamekura-san, Minamiokorogawa, Nikkô-shi, 36° 39' 12" N, 139° 39' 04" E, 430 m, DB (QLs, *Quercus mongolica*, *Rhododendron dilatatum*, Clb), 3.VIII.1998, KI-KF-KK. *AAI*, 1 ex., 1 (6); *ADib*, 2 exs., 2 (6); *ADI*, 4 exs., 2 (8), 2 (6); *SSpb*, 2 exs., 2 (8). (Hagino, 2002[251]). [同市南小来川笹目倉山東]
165. Bank of Hon-zawa Stream, Kusagyû, Kanumashi, 36° 42' 03" N, 139° 33' 05" E, 700 m, EC (Abf) + DB (QLc, Msm, Hmj), 28.VI.1997, KI-KF-HT-YK-YS-RI-HS-YsH-YH. *ADib*, 19 exs., 1 (9♂), 5 (9♀), 1 (8♂), 3 (8), 3 (6), 4 (5), 2 (3); *ADI*, 10 exs., 4 (9♀), 1 (9), 2 (8), 1 (6), 1 (5), 1 (3); *ADir*, 2 exs., 2 (5); *Pr*, 7 exs., 1 (9♂), 4 (9♀), 1 (8♂), 1 (8); *SSc*, 31 exs., 13 (9♂), 9 (9♀), 4 (8♂), 2 (8), 2 (6), 1 (5); *SSpp*, 4 exs., 3 (9♀), 1 (5); *SDa*, 1 ex., 1 (8♂); *SDp*, 6 exs., 1 (9♂), 1 (9♀), 1 (9), 3 (8♂); *SDu*, 36 exs., 1 (9♀), 2 (9), 22 (6), 9 (5), 2 (3); *Ej*, 1 ex., 1 (9♀). (Hagino, 2002[169]). [鹿沼市草久東大芦川本沢]
166. Kurisawa-tôge Pass, Kaminanmamachi, Kanumashi, 36° 31' 54" N, 139° 40' 29" E, 180 m, DB (QLs, Ctc, Cej), 11.VI.1998, KI-KF. *Dr*, 2 exs., 1 (6♂), 1 (6♀); *AAI*, 13 exs., 1 (5), 12 (3); *ADI*, 6 exs., 5 (9♀), 1 (8); *ADp*, 14 exs., 2 (8♂), 1 (8), 10 (5), 1 (3); *ADir*, 2 exs., 1 (8♂), 1 (6); *Pr*, 4 exs., 2 (9♂), 1 (9♀), 1 (8♂); *SSc*, 1 ex., 1 (8♂); *SSpp*, 2 exs., 1 (9♂), 1 (5); *SSpb*, 6 exs., 1 (9♂), 2 (9♀), 3 (3); *SDp*, 4 exs., 1 (9♂), 2 (9♀), 1 (8♂); *SDu*, 9 exs., 8 (6), 1 (5); *Ej*, 3 exs., 3 (3). (Hagino, 2002[241]). [同市上南摩町栗沢峠]
167. Below summit of Mt. Sukai-san, Ashio-machi, 36° 41' 23" N, 139° 20' 14" E, 2140 m, EC (Abv, Abm, Pih) + DB (Bte), 11.VII.1998, YsH-HO-HH-KeI-YH. *AAI*, 8 exs., 2 (9♀), 3 (8♂), 1 (8), 1 (6), 1 (5); *SSc*, 1 ex., 1 (9♀); *SDp*, 13 exs., 1 (9♀), 2 (8), 10 (6). (Hagino, 2002[244]). [上都賀郡足尾町皇海山山頂下]
168. Summit of Mt. Maekesamaru-yama, Ashio-machi, 36° 37' 41" N, 139° 19' 46" E, 1878 m, EC (Tsd) + DB (Bte) + EB (Rnb), 19.X.1997, KI-KF-YK-RI-TM-YsH-KeI-YH. *ADib*, 2 exs., 2 (9♀); *ADI*, 8 exs., 3 (9♀), 3 (8), 1 (6), 1 (5); *SDp*, 1 ex., 1 (8♂); *SDu*, 1 ex., 1 (9♀). (Hagino, 2002[210]). [同町前袈裟丸山山頂]
169. Northwest side of Ido-shitsugen Swamp, Iriawano, Awano-machi, 36° 36' 53" N, 139° 31' 13" E, 1300 m, DB (Hmj, Clb, Bte, QLc), 29.VI.1997, KI-KF-HT-YK-YS-RI-HS-YsH-YH. *AAI*, 1 ex., 1 (8♂); *SDp*, 1 ex., 1 (6); *SDu*, 5 exs., 3 (9♀), 1 (8♂), 1 (8). (Hagino, 2002[172]). [同郡粟野町入粟野井戸湿原上]
170. Kasuo-tôge Pass, Kamikasuo, Awano-machi, 36° 36' 52" N, 139° 28' 39" E, 1150 m, DB (Clb, Els, *Acer argutum*), 29.VI.1997, KI-KF-HT-YK-YS-RI-HS-YsH-YH. *ADib*, 1 ex., 1 (9♂); *Pr*, 1 ex., 1 (8); *SSc*, 3 exs., 2 (9♂), 1 (8); *SSpp*, 1 ex., 1 (8); *SSpb*, 1 ex., 1 (9♀); *SDp*, 6 exs., 2 (9♂), 2 (9♀), 2 (8). (Hagino, 2002[174]). [同町上粕尾粕尾峠東]

171. Ido-shitsugen Swamp, Iriawano, Awano-machi, 36° 36' 48" N, 139° 31' 16" E, 1270 m, MS (*Sphagnum* sp(p).) + FR (Omc) + DB (*Rhododendron molle*) + DC (Lxk), 29.VI.1997, KI-KF-HT-YK-YS-RI-HS-YsH-YH. *Dr*, 1 ex., 1 (♂); *ADib*, 1 ex., 1 (♂); *SSpb*, 3 exs., 2 (♂), 1 (♂); *SDp*, 3 exs., 2 (♂), 1 (♀). (Hagino, 2002[171]). [同町入粟野井戸湿原]
172. Terasaka-tôge Pass, Shimonagano, Awano-machi, 36° 28' 54" N, 139° 36' 02" E, 300 m, EC (Psd) + DB (Ctc, QLS, Stj), 11.VI.1998, KI-KF. *ADi*, 2 exs., 1 (♀), 1 (♂); *SSc*, 2 exs., 1 (♂), 1 (♂); *SSpb*, 1 ex., 1 (♂); *SDp*, 3 exs., 1 (♂), 2 (♀); *SDu*, 5 exs., 1 (♀), 4 (♂). (Hagino, 2002[239]). [同町下永野寺坂峠北]
173. Akamidô, Kamiinaba, Mibu-machi, 36° 27' 07" N, 139° 47' 22" E, 70 m, DB (*Robinia pseudoacacia*, *Carpinus* sp(p)., QLS) + EB (QCm) + EC (Cho, Crj), 28.V.1998, KI-KF. *ADif*, 9 exs., 1 (10♀), 8 (♀); *ADtr*, 1 ex., 1 (♂); *SDu*, 1 ex., 1 (♂). (Hagino, 2002[231]). [下都賀郡壬生町上稲葉赤御堂]
174. Mt. Teruishi-san, Minagawajônaimachi, Tochigi-shi, 36° 21' 45" N, 139° 40' 53" E, 330 m, DB (QLs, Clb, Cej) + EC (Psd) + EB (QCg), 16.IV.1998, KI-KF. *SDp*, 1 ex., 1 (♂). (Hagino, 2002[218]). [栃木市皆川城内町晃石山東]
175. Shrine Washi-jinja, Tojô, Oyama-shi, 36° 18' 20" N, 139° 47' 11" E, 30 m, EB (QCm, Erj) + DB (Ctc) + EC (Crj, Cho), 7.V.1998, KI-KF. *ADif*, 1 ex., 1 (♀). (Hagino, 2002[226]). [小山市外城鷲神社]
176. Shrine Hachiman-jinja, Sagawano, Nogi-machi, 36° 13' 56" N, 139° 46' 21" E, 24 m, DB (Zks) + EB (Nls, QCm, Caj) + EC (Crj), 7.V.1998, KI-KF. *ADif*, 1 ex., 1 (10♀). (Hagino, 2002[225]). [下都賀郡野木町佐川野八幡神社]
177. Shrine Nogi-jinja, Nogi, Nogi-machi, 36° 12' 57" N, 139° 42' 26" E, 20 m, DB (Zks, Ginkgo biloba) + EB (Caj, QCm) + EC (Crj, Abf), 7.V.1998, KI-KF. *Dr*, 11 exs., 1 (♂), 10 (6♀); *ADif*, 1 ex., 1 (♂); *Pt*, 1 ex., 1 (♂). (Hagino, 2002[224]). [同町野木野木神社]
178. Ôniba-Kiurazawa rindô, Akiyama, Kuzuu-machi, 36° 33' 07" N, 139° 30' 18" E, 420 m, DB (QLs, Ctc, Clb, *Carpinus* sp(p).) + EC (Abf), 13.VII.1997, KI-KF-RI-MH-MM-YH. *ADib*, 1 ex., 1 (♂); *Pt*, 1 ex., 1 (♂); *SSc*, 1 ex., 1 (♂); *SSpb*, 3 exs., 3 (♂). (Hagino, 2002[185]). [安蘇郡葛生町秋山大荷場木浦沢林道2]
179. Shrine Hôraisan-jinja, Sakuhara, Tanuma-machi, 36° 31' 11" N, 139° 29' 17" E, 350 m, DB (*Acer* sp(p)., Msm, Vrf), 13.VII.1997, KI-KF-RI-MH-MM-YH. *ADtr*, 1 ex., 1 (♂); *SSpb*, 2 exs., 2 (♂); *SSpb*, 1 ex., 1 (♂); *SDp*, 1 ex., 1 (♂). (Hagino, 2002[183]). [同郡田沼町作原蓬萊山神社]
180. Temple Isoyama-benzaiten, Izuruhara-chô, Sano-shi, 36° 22' 01" N, 139° 32' 23" E, 120 m, EB (QCa, QCg), 13.VII.1997, KI-KF-RI-MH-MM-YH. *ADi*, 6 exs., 1 (♀), 1 (♂), 4 (♂); *SSpb*, 9 exs., 1 (♀), 1 (♂), 2 (♂), 4 (♂), 1 (♂); *SDnd*, 3 exs., 1 (♂), 1 (♀), 1 (♂). (Hagino, 2002[181]). [佐野市出流原町磯山弁財天]
181. Uppermost reaches of Matsuda-gawa River, Matsuda-chô, Ashikaga-shi, 36° 26' 10" N, 139° 25' 00" E, 340 m, DB (*Carpinus cordata*, Zks, QLa), 12.VII.1997, KI-KF-RI-MH-MM-YH. *AAI*, 1 ex., 1 (♂); *ADi*, 1 ex., 1 (♂); *SSpb*, 1 ex., 1 (♂); *SDp*, 1 ex., 1 (♂). (Hagino, 2002[178]). [足利市松田町松田川上流]
182. Temple Jôin-ji, Tsukiya-chô, Ashikaga-shi, 36° 22' 48" N, 139° 26' 31" E, 225 m, EC (Crj) (plantation), 12.VII.1997, KI-KF-RI-MH-MM-YH. *ADi*, 6 exs., 1 (♂), 1 (♀), 2 (♂), 1 (♂), 1 (♂); *SSpb*, 5 exs., 5 (♂); *SSpb*, 2 exs., 1 (♀), 1 (♂); *SDnd*, 2 exs., 1 (♂), 1 (♀). (Hagino, 2002[180]). [同市月谷町淨因寺]
183. Temple Chôrin-ji, Yamagawachô, Ashikaga-shi, 36° 19' 48" N, 139° 29' 05" E, 95 m, EC (Psd, Cph) + DB (QLs, Cej) + EB (Erj), 16.IV.1998, KI-KF. *Dr*, 2 exs., 2 (♂); *ADib*, 2 exs., 2 (♀); *ADtr*, 1 ex., 1 (♀). (Hagino, 2002[221]). [同市山川町長林寺北]

Gunma Prefecture [群馬県]

184. Southeast slope of Mt. Keizuru-yama, Katashinamura, 36° 57' 23" N, 139° 12' 50" E, 1920 m, EC (Abm) + SS (Ssk), 13.VII.1996, YS-KI-RI-HS-TM-HH-YH. *ADy*, 1 ex., 1 (♂); *SSc*, 1 ex., 1 (♀); *SSpb*, 20 exs., 5 (♂), 14 (♀), 1 (♂); *SDp*, 7 exs., 4 (♂), 1 (♀), 1 (♂), 1 (♂). (Hagino, 1998b[St. 35]). [利根郡片品村景鶴山南東斜面]
185. *Ibid.*, 36° 57' 05" N, 139° 13' 03" E, 1600 m, DB (Fgc) + SS (Ssk), 13.VII.1996, YS-KI-RI-HS-TM-HH-YH. *ADib*, 10 exs., 9 (♀), 1 (♂); *ADit*, 2 exs., 2 (♀); *ADi*, 2 exs., 2 (♀); *ADtr*, 4 exs., 3 (♀), 1 (♂); *Pt*, 1 ex., 1 (♂); *SSpb*, 29 exs., 8 (♂), 9 (♀), 1 (♂), 4 (♂), 6 (♂), 1 (♂); *SDu*, 10 exs., 4 (♀), 1 (♂), 1 (♂), 4 (♂). (Hagino, 1998b[St. 36]).
186. *Ibid.*, 36° 56' 46" N, 139° 13' 21" E, 1430 m, DB (Bte) + SS (Ssk), 13.VII.1996, YS-KI-RI-HS-TM-HH-YH. *ADib*, 1 ex., 1 (♀); *Pt*, 2 exs., 2 (♀); *SSc*, 1 ex., 1 (♂). (Hagino, 1998b[St. 37]).
187. *Ibid.*, 36° 56' 35" N, 139° 13' 27" E, 1400 m, DB (Pcr, Aet) + SS (Ssk) + *Urtica* sp(p). + FR (Omc), 13.VII.1996, YS-KI-RI-HS-TM-HH-YH. *SDp*, 5 exs., 3 (♂), 1 (♀), 1 (♂). (Hagino, 1998b[St. 38]).

- 188a. Beside Ryûgû-goya Hut, Ozegahara Moor, Katashina-mura, 36° 56' 03" N, 139° 14' 16" E, 1400 m, DB (QLc, Acd, Fgc, Pcr, Aet, Bte), 2.IX.1995, HT-YS-KI-RI-HS-ON-YH. *ADit*, 3 exs., 3 (9 ♀); *SSpb*, 1 ex., 1 (6). (Hagino, 1998b[St. 22]). [同村尾瀬ヶ原竜宮小屋東]
- 188b. *Ibid.*, 13.VII.1996, YS-KI-RI-HS-TM-HH-YH. *SDp*, 1 ex., 1 (9 ♀). (Hagino, 1998b[St. 39]).
- 188c. *Ibid.*, 7.IX.1996, YS-SY-KI-RI-HS-KF-ON-TM-SN-YsH-YH. *SSpb*, 1 ex., 1 (9 ♀); *SDp*, 2 exs., 2 (8 ♂). (Hagino, 1998b[St. 41]).
- 188d. *Ibid.*, 19.X.1996, YsH-HH-HO. *ADib*, 1 ex., 1 (9 ♀). (Hagino, 1998b[St. 49]).
189. Nakatashiro, Ozegahara Moor, Katashina-mura, 36° 55' 46" N, 139° 13' 56" E, 1440 m, DB (Bte) + SS ("Sasa") (shrub), 23.X.1994, HT-YS-KI-RI-HS. *ADi*, 1 ex., 1 (9 ♀); *SSpb*, 5 exs., 2 (9 ♂), 1 (8), 1 (6), 1 (5). (Hagino, 1998b[St. 6]). [同村尾瀬ヶ原中田代]
190. South of Ryûgû, Katashina-mura, 36° 55' 34" N, 139° 14' 33" E, 1450 m, DB (Fgc, QLc, *Acer* sp(p)), 23.X.1994, HT-YS-KI-RI-HS. *ADf*, 1 ex., 1 (9 ♀); *ADib*, 18 exs., 1 (9 ♂), 9 (9 ♀), 3 (8), 3 (6), 1 (5), 1 (3); *ADit*, 6 exs., 6 (9 ♀); *ADi*, 3 exs., 2 (9 ♀), 1 (8); *SSpb*, 3 exs., 2 (9 ♂), 1 (8 ♂); *SDp*, 5 exs., 4 (6), 1 (3); *SDu*, 4 exs., 2 (9 ♂), 2 (9 ♀). (Hagino, 1998b[St. 3]). [同村竜宮南]
191. South side of Shimonôhori-gawa Stream, Nakatashiro, Ozegahara Moor, Katashina-mura, 36° 55' 26" N, 139° 13' 27" E, 1400 m, DB (*Betula platyphylla* var. *japonica*, *Sbc*, *Menziesia multiflora*) + EB (Ixs) + FR (Omc) + SS ("Sasa"), 2.IX.1995, HT-YS-KI-RI-HS-ON-YH. *ADit*, 1 ex., 1 (9 ♀); *SSpb*, 3 exs., 1 (9 ♂), 1 (9 ♀), 1 (8). (Hagino, 1998b[St. 20]). [同村尾瀬ヶ原中田代下ノ大堀川南]
192. Ushikubi, Ozegahara Moor, Katashina-mura, 36° 55' 24" N, 139° 12' 43" E, 1400 m, MS (*Sphagnum* spp.) + GR (*Eriophorum vaginatum* ssp. *fauriei*), 13.VII.1996, YS-KI-RI-HS-TM-HH-YH. *ADib*, 1 ex., 1 (9 ♀). (Hagino, 1998b[St. 40]). [同村尾瀬ヶ原牛首]
193. Sanpei-tôge Pass, Katashina-mura, 36° 55' 04" N, 139° 18' 13" E, 1750 m, EC (Abm) + DB (Bte, Fgc, Vrf), 24.VII.1995, HT-KI-RI-HS-KnT-YH. *ADrs*, 1 ex., 1 (6); *SSpb*, 3 exs., 3 (9 ♀). (Hagino, 1998b[St. 12]). [同村三平峠]
194. Yamanohana, Katashina-mura, 36° 54' 54" N, 139° 11' 30" E, 1440 m, EC (Tjs) + SS ("Sasa"), 2.IX.1995, HT-YS-KI-RI-HS-ON-YH. *SDp*, 1 ex., 1 (9 ♀). (Hagino, 1998b[St. 29]). [同村山の鼻至仏山登り口]
195. Nagasawagashira, Katashina-mura, 36° 54' 51" N, 139° 14' 46" E, 1740 m, DB (Bte (dwarf) + Sbc) + EC (Abm), 25.VII.1995, HT-KI-RI-HS-KnT-YH. *SSpb*, 1 ex., 1 (9 ♂). (Hagino, 1998b[St. 16]). [同村長沢頭]
196. Northeast slope of Mt. Shibutu-san, Katashina-mura, 36° 54' 45" N, 139° 11' 20" E, 1580 m, EC (Psv, Tjs, Tsd) + DB (QLc var. *horikawae*) + EB (Rnb, Ixs) + SS ("Sasa"), 8.IX.1996, YS-SY-KI-RI-HS-KF-ON-TM-SN-YsH-YH. *SDp*, 2 exs., 2 (9 ♂). (Hagino, 1998b[St. 42]). [同村山ノ鼻~至仏山]
197. Northeast slope of Mt. Shibutu-san, Katashina-mura, 36° 54' 34" N, 139° 10' 59" E, 1770 m, EC (Psp, Tjs) + DB (QLc var. *horikawae*) + Sbc, *Spiraea nipponica* var. *nipponica*) + EB (Ixs) + SS ("Sasa"), 8.IX.1996, YS-SY-KI-RI-HS-KF-ON-TM-SN-YsH-YH. *SSc*, 3 exs., 2 (9 ♀), 1 (6). (Hagino, 1998b[St. 43]). [同村山ノ鼻~至仏山]
198. Between Hatomachi-tôge Pass and Yamanohana, Katashina-mura, 36° 54' 33" N, 139° 11' 52" E, 1450 m, DB (Fgc, QLc, Bte), 22.X.1994, HT-YS-KI-RI-HS. *ADib*, 1 ex., 1 (9 ♂); *SSpb*, 10 exs., 5 (9 ♂), 3 (9 ♀), 1 (8), 1 (5); *SDp*, 6 exs., 1 (8), 4 (6), 1 (5); *SDu*, 2 exs., 2 (9 ♀). (Hagino, 1998b[St. 2]). [同村鳩待峠~山の鼻]
199. Between Ichinose and Sanpei-tôge Pass, Katashina-mura, 36° 54' 24" N, 139° 17' 57" E, 1590 m, DB (Fgc, Bte, Vrf), 24.VII.1995, HT-KI-RI-HS-KnT-YH. *SSpb*, 1 ex., 1 (9 ♀). (Hagino, 1998b[St. 11]). [同村一ノ瀬~三平峠]
200. Northeast slope of Mt. Shibutu-san, Katashina-mura, 36° 54' 23" N, 139° 10' 45" E, 2000 m, EC (Psp, Tsd, Tjs) + EB (Rnb) + DB (*Alnus matsumurae*, *Elliottia paniculata*, Bte), 8.IX.1996, YS-SY-KI-RI-HS-KF-ON-TM-SN-YsH-YH. *SSpb*, 1 ex., 1 (9 ♂); *SDp*, 1 ex., 1 (9 ♂). (Hagino, 1998b[St. 44]). [同村山ノ鼻~至仏山]
201. Summit of Mt. Shibutu-san, Katashina-mura, 36° 54' 13" N, 139° 10' 26" E, 2255 m, EC (Psp, Abm) + EB (Rnb) + DB (Sbc) + SS ("Sasa"), 8.IX.1996, YS-SY-KI-RI-HS-KF-ON-TM-SN-YsH-YH. *SSpb*, 2 exs., 1 (9 ♀), 1 (8); *SDp*, 7 exs., 2 (9 ♂), 2 (9 ♀), 2 (8), 1 (6). (Hagino, 1998b[St. 45]). [同村至仏山山頂付近]
202. Fujimitashiro, Katashina-mura, 36° 54' 12" N, 139° 15' 02" E, 1890 m, EC (Abm) + DB (Bte, Sbc), 25.VII.1995, HT-KI-RI-HS-KnT-YH. *SSpb*, 20 exs., 3 (9 ♂), 13 (9 ♀), 1 (8 ♂), 2 (8), 1 (6). (Hagino, 1998b[St. 17]). [同村富士見田代]
203. Ayamedaira, Katashina-mura, 36° 54' 02" N, 139° 14' 43" E, 1950 m, EC (Abm) + SS (Ssk), 23.X.1994, HT-YS-KI-RI-HS. *SSpb*, 3 exs., 1 (9 ♀).

- 2 (6); *SDp*, 1 ex., 1 (8). (Hagino, 1998b[St. 10]). [同村アヤマ平]
204. Ayamedaira, Katashina-mura, 36° 54' 00" N, 139° 14' 29" E, 1980 m, EC (Abm) + DB (Sbc), 25.VII.1995, HT-KI-RI-HS-KnT-YH. *SSpb*, 5 exs., 2 (8♂), 3 (8). (Hagino, 1998b[St. 18]). [同村アヤマ平]
205. Yokotashiro, Katashina-mura, 36° 53' 51" N, 139° 13' 41" E, 1840 m, EC (Abm) + DB (Bte) + SS (Ssk), 23.X.1994, HT-YS-KI-RI-HS. *SSpb*, 2 exs., 1 (9♀), 1 (5); *SDp*, 3 exs., 1 (9♂), 1 (6), 1 (5). (Hagino, 1998b[St. 9]). [同村横田代]
206. Mt. Koshibutu-san, Katashina-mura, 36° 53' 49" N, 139° 10' 18" E, 2130 m, EC (Psp, Tjs, Abm) + EB (Rnb), 8.IX.1996, YS-SY-KI-RI-HS-KF-ON-TM-SN-YsH-YH. *SSpb*, 1 ex., 1 (8). (Hagino, 1998b[St. 46]). [同村小至仏山]
207. Between Hatomachi-tôge Pass and Yamanohana, Katashina-mura, 36° 53' 43" N, 139° 11' 51" E, 1500 m, EC (Tsd, Abm, Tjs) + DB (Bte) + SS ("Sasa") + FR (*Huperzia serrata*), 22.X.1994, HT-YS-KI-RI-HS. *ADib*, 3 exs., 2 (9♂), 1 (9♀); *ADy*, 1 ex., 1 (8); *SSpb*, 1 ex., 1 (9♂); *SDu*, 1 ex., 1 (9♀). (Hagino, 1998b[St. 1]). [同村鳩待峠～山の鼻]
208. Beside Hatomachi-sansô Hut, Hatomachi-tôge Pass, Katashina-mura, 36° 53' 32" N, 139° 12' 01" E, 1590 m, DB (Fgc, Bte), 23.X.1994, HT-YS-KI-RI-HS. *ADf*, 1 ex., 1 (9♀); *ADib*, 2 exs., 1 (9♂), 1 (6); *SSpb*, 7 exs., 2 (9♂), 1 (9♀), 1 (9), 2 (8), 1 (6); *SDp*, 3 exs., 1 (9♀), 2 (6). (Hagino, 1998b[St. 8]). [同村鳩待峠下]
209. Above Hatomachi-tôge, Katashina-mura, 36° 53' 27" N, 139° 12' 16" E, 1700 m, DB (Fgc, Bte, Acj) + EC (Abm), 25.VII.1995, HT-KI-RI-HS-KnT-YH. *ADib*, 3 exs., 1 (9♂), 1 (9♀), 1 (8♂); *SSc*, 1 ex., 1 (9♀); *SSpb*, 1 ex., 1 (6); *SDp*, 15 exs., 2 (9♂), 1 (8♂), 4 (8), 8 (6). (Hagino, 1998b[St. 19]). [同村鳩待峠上]
210. Above Oyamazawatashiro, Mt. Warusawa-dake, Katashina-mura, 36° 53' 25" N, 139° 10' 24" E, 2040 m, EC (Abm, Psp) + DB (Sbc, Acu, Bte, Act) + EB (Ixs, Rnb) + SS ("Sasa"), 8.IX.1996, YS-SY-KI-RI-HS-KF-ON-TM-SN-YsH-YH. *SSpb*, 8 exs., 2 (9♂), 2 (9♀), 2 (5), 2 (3); *SDp*, 46 exs., 4 (9♂), 21 (9♀), 4 (9), 3 (8♂), 6 (8), 7 (6), 1 (3). (Hagino, 1998b[St. 47]). [同村悪沢岳オヤマ沢田代上]
211. Hatomachi-tôge Pass, Katashina-mura, 36° 53' 19" N, 139° 11' 50" E, 1600 m, DB (Fgc, *Populus suaveolens*, Acs) + SS ("Sasa"), 3.IX.1995, HT-YS-KI-RI-HS-ON-YH. *SDp*, 5 exs., 1 (8♂), 1 (8), 1 (6), 2 (3). (Hagino, 1998b[St. 33]). [同村鳩待峠]
212. Between Mt. Warusawa-dake and Hatomachi-tôge Pass, Katashina-mura, 36° 53' 05" N, 139° 11' 22" E, 1750 m, DB (Fgc, Bte, Sbc) + EC (Abm) + SS ("Sasa"), 3.IX.1995, HT-YS-KI-RI-HS-ON-YH. *Pr*, 1 ex., 1 (9♀). (Hagino, 1998b[St. 32]). [同村悪沢岳～鳩待峠]
213. Below Oyamazawatashiro, Mt. Warusawa-dake, Katashina-mura, 36° 53' 12" N, 139° 10' 36" E, 1960 m, EC (Abv, Abm) + DB (Bte) + SS ("Sasa"), 8.IX.1996, YS-SY-KI-RI-HS-KF-ON-TM-SN-YsH-YH. *SSpb*, 28 exs., 8 (9♂), 4 (9♀), 1 (8♂), 4 (8), 3 (6), 1 (5), 7 (3); *SDp*, 16 exs., 4 (9♂), 3 (9♀), 1 (8♂), 8 (5). (Hagino, 1998b[St. 48]). [同村至仏山オヤマ沢田代下]
214. Between Mt. Warusawa-dake and Hatomachi-tôge Pass, Katashina-mura, 36° 53' 05" N, 139° 10' 56" E, 1870 m, EC (Abm) + DB (Acu, Vrf) + SS ("Sasa"), 3.IX.1995, HT-YS-KI-RI-HS-ON-YH. *SSpb*, 12 exs., 5 (9♂), 6 (9♀), 1 (5); *SDp*, 3 exs., 1 (9♀), 1 (8♂), 1 (5). (Hagino, 1998b[St. 30]). [同村悪沢岳～鳩待峠]
215. Between Mt. Warusawa-dake and Hatomachi-tôge Pass, Katashina-mura, 36° 53' 04" N, 139° 11' 12" E, 1800 m, DB (Bte, Sbc, Acu) + EC (Abm) + SS ("Sasa"), 3.IX.1995, HT-YS-KI-RI-HS-ON-YH. *SSpb*, 2 exs., 1 (9♀), 1 (8); *SDp*, 4 exs., 2 (9♀), 2 (8). (Hagino, 1998b[St. 31]). [同村悪沢岳～鳩待峠]
- 216a. Dôwa national forest, Kamiyuhara, Naganohara-machi, 36° 32' 24" N, 138° 40' 48" E, 575 m, DB (QLa, QLc, Zks) + EC (Psd), 16.VI.1991, HT-KI-HS. *ADib*, 3 exs., 2 (9♀), 1 (3); *ADl*, 1 ex., 1 (9♀); *SSpp*, 2 exs., 2 (9♀). (Hagino, 1993c[D1]). [吾妻郡長野原町上湯原堂巖国有林]
- 216b. *Ibid.*, *24.XI.1991, HT-KI-HS-KT. *ADib*, 14 exs., 12 (9♀), 1 (8), 1 (6); *ADl*, 20 exs., 19 (9♀), 1 (5); *ADtr*, 1 ex., 1 (9♀). (Hagino, 1993c[D2]).
- 217a. East slope opposite to Route 406 at Mt. Maruiwa, Yokokabe, Naganohara-machi, 36° 31' 37" N, 138° 39' 29" E, 860 m, DB (QLc, QLa, Udj, Acr, Fgc), 16.VI.1991, HT-KI-HS. *Dr*, 4 exs., 2 (8♂), 2 (6♀); *ADib*, 2 exs., 1 (9♂), 1 (8); *ADl*, 3 exs., 3 (9♀); *SSpp*, 2 exs., 1 (9♀), 1 (8); *SSpb*, 6 exs., 5 (9♀), 1 (8). (Hagino, 1993c[M1]). [同町横壁丸岩向かい]
- 217b. *Ibid.*, *24.XI.1991, HT-KI-HS-KT. *AAI*, 1 ex., 1 (9♀); *ADf*, 1 ex., 1 (9♀); *ADib*, 1 ex., 1 (9♂); *ADl*, 1 ex., 1 (9♂); *SSpp*, 1 ex., 1 (9♀); *SDa*, 1 ex., 1 (9♂). (Hagino, 1993c[M2]).
218. Komaga-take, Mt. Akagi-san, Fujumi-mura, 36° 33' 04" N, 139° 11' 37" E, 1700 m, DB (*Alnus crispa*

- ssp. *maximowiczii*, Bte) + *Rhododendron* sp., 18.VII.1983, YH. *SSpb*, 1 ex., 1 (5). (Hagino, 1992). [勢多郡富士見村赤城山駒ヶ岳]
219. Higashiogawara, Fujumi-mura, 36° 28' 53" N, 139° 06' 45" E, 450 m, DB (QLc, Bte, Pcr), 18.VII.1983, YH. *ADib*, 1 ex., 1 (5); *ADit*, 1 ex., 1 (9♀); *ADl*, 1 ex., 1 (6). (Hagino, 1992). [同村東小河原]
220. Mt. Chausu-yama, Kiryū-shi, 36° 22' 45" N, 139° 19' 40" E, 250 m. In rotten wood, 13.X.1985, YH. *Ej*, 3 exs., 1 (9♂), 2 (8). (Hagino, 1992). [桐生市八王子丘陵茶白山]
- Saitama Prefecture [埼玉県]**
221. Daijū, Shimoaguhara, Kamiizumi-mura, 36° 08' 55" N, 139° 04' 14" E, 250 m, DB (Ctc), 24.VIII.1993, ON. *Dr*, 1 ex., 1 (8♂). (Nakamura, 1999). [児玉郡神泉村下阿久原大重]
222. Shirakidachi, Kamiaguhara, Kamiizumi-mura, 36° 08' 28" N, 139° 02' 38" E, 220 m, DB (Ctc, QLs, Acr) + SS ("Sasa"), 24.VIII.1993, ON. *Dr*, 6 exs., 1 (8♂), 1 (8), 1 (6♀), 3 (5); *AAd*, 2 exs., 2 (3). (Nakamura, 1999). [同村上阿久原白木立]
223. Sumaino-tōge Pass, Kamiaguhara, Kamiizumi-mura, 36° 07' 26" N, 139° 03' 09" E, 435 m, DB (QLs, *Carpinus* sp(p).., *Acer* sp(p).), 10.VI.1994, ON. *Dr*, 2 exs., 2 (8♂); *ADif*, 3 exs., 1 (10), 2 (9♀). (Nakamura, 1999). [同村上阿久原住居野峠]
224. Mukaidaira, Yanō, Kamiizumi-mura, 36° 07' 22" N, 138° 59' 43" E, 345 m, DB (QLs, *Acer* sp(p).., *Cerasus* sp(p).), 10.VI.1994, ON. *At*, 1 ex., 1 (8♀); *Dr*, 1 ex., 1 (8♂); *AAd*, 5 exs., 1 (9♀), 1 (8), 1 (6), 2 (5); *ADib*, 3 exs., 3 (9♀); *ADl*, 7 exs., 7 (9♀); *ADrs*, 1 ex., 1 (9♀); *SSpb*, 1 ex., 1 (3); *SDp*, 1 ex., 1 (5); *Cs*, 3 exs., 1 (9♀), 2 (5);. (Nakamura, 1999). [同村矢納向平]
225. Mansho, Yanō, Kamiizumi-mura, 36° 07' 12" N, 139° 01' 14" E, 450 m, EB (QCm), 24.VIII.1993, ON. *ADif*, 1 ex., 1 (10); *ADl*, 3 exs., 3 (9♀). (Nakamura, 1999). [同村矢納満所]
226. Zoromeki, Yanō, Kamiizumi-mura, 36° 06' 56" N, 139° 02' 25" E, 490 m, DB (Ctc, Clb, QLs, *Acer* sp(p).), 10.VI.1994, ON. *Dr*, 6 exs., 3 (8♂), 2 (6♀), 1 (5); *ADl*, 4 exs., 4 (9♀); *SSpb*, 1 ex., 1 (9♀). (Nakamura, 1999). [同村矢納候女鬼]
227. Near Bussekisan-shōnyūdō Cave, Nakasōri, Ōtaki-mura, 35° 59' 44" N, 138° 49' 30" E, 740 m, DB (*Euptelea polyandra*, Pcr), 13.XI.1986, ON. *SDp*, 1 ex., 1 (9♀). (Nakamura, 1993). [秩父郡大滝村中双里仏石山鍾乳洞付近]
228. Jūmonji-tōge Pass, Ōyama, Ōtaki-mura, 35° 56' 25" N, 138° 44' 18" E, 2060 m, EC (Tsd), 5.VII.1984, ON. *ADib*, 1 ex., 1 (9♂); *Pr*, 1 ex., 1 (9♂); *SDp*, 5 exs., 3 (9♂), 2 (9♀); *SDu*, 2 exs., 1 (9♂), 1 (8). (Nakamura, 1993). [同村大山十文字峠]
229. Akazawa, Ōtaki-mura, 35° 56' 07" N, 138° 47' 55" E, 1000 m, DB (Fgc), 6.VII.1984, ON. *ADl*, 2 exs., 2 (9♀); *SSc*, 3 exs., 1 (9♂), 1 (8), 1 (5); *SSpp*, 2 exs., 1 (8), 1 (5). (Nakamura, 1993). [同村赤沢 I]
230. Akazawa, Ōtaki-mura, 35° 56' 06" N, 138° 47' 54" E, 980 m, DB (Fgj), 6.VII.1984, ON. *Dr*, 2 exs., 1 (8♂), 1 (6♀); *Pr*, 1 ex., 1 (5). (Nakamura, 1993). [同村赤沢 II]
231. Akazawa, Ōtaki-mura, 35° 56' 05" N, 138° 47' 52" E, 920 m, DB (Fgc, Fgj) + SS (Ssb), 13.XI.1984, ON. *ADib*, 6 exs., 1 (9♂), 2 (9♀), 2 (8), 1 (6). (Nakamura, 1993). [同村赤沢]
232. Akazawanokoshi, Ōtaki-mura, 35° 56' 05" N, 138° 47' 51" E, 1000 m, DB (Fgc) + EC (*Tsuga sieboldii*), 17.V.1985, ON. *Dr*, 4 exs., 3 (8♂), 1 (6♀); *AAI*, 1 ex., 1 (8♂); *ADib*, 20 exs., 5 (9♂), 3 (9♀), 8 (8♂), 3 (6), 1 (5); *ADy*, 1 ex., 1 (9♂); *Pr*, 1 ex., 1 (9♀); *SSc*, 4 exs., 1 (9♂), 2 (9♀), 1 (6); *SSpp*, 7 exs., 2 (9♂), 3 (9♀), 2 (8); *SDp*, 1 ex., 1 (9♀); *Ej*, 2 exs., 1 (9♀), 1 (8). (Nakamura, 1993). [同村赤沢乗越]
233. Junction of Kanayama-zawa Stream and Irikawa River, Ōtaki-mura, 35° 55' 53" N, 138° 46' 50" E, 1200 m, EC (*Tsuga sieboldii*) + DB (Fgc), 25.VIII.1981, ON. *ADib*, 11 exs., 1 (9♂), 5 (9♀), 2 (8♂), 2 (8), 1 (6). (Nakamura, 1993). [同村金山沢入口]
234. Near Karisaka-goya Hut, Karisaka-tōge Pass, Ōtaki-mura, 35° 54' 28" N, 138° 47' 30" E, 2000 m, DB, 12.VIII.1986, MtM. *AAI*, 3 exs., 1 (8♂), 1 (6), 1 (5); *ADib*, 5 exs., 1 (9♂), 2 (9♀), 2 (8); *SDp*, 1 ex., 1 (6). (Nakamura, 1993). [同村雁坂峠雁坂小屋近く台風崩落跡地]
235. Kuroiwa-tozandō, Ōtaki-mura, 35° 53' 56" N, 138° 49' 31" E, 1650 m, DC (Lxk), 23.V.1986, ON. *ADib*, 1 ex., 1 (8♂); *Cs*, 1 ex., 1 (9♀). (Nakamura, 1993). [同村黒岩登山道(雁坂峠への道)]
- Chiba Prefecture [千葉県]**
236. Sekiyadodaimachi, Noda-shi [Daimachi, Sekiyadomachi], 36° 04' 38" N, 139° 47' 37" E, 15 m, EB (QCm, Nls) + EC (Crj, Cho) + SS (Plc), 29.VII.1999, YH. *ADif*, 4 exs., 1 (9♀ä) [CBM-ZU 588], 1 (8) [CBM-ZU 587], 1 (6) [CBM-ZU 586], 1 (5) [CBM-ZU 585]. (Hagino, 2003c[1]). [野田市関宿台町[東葛飾郡関宿台町]]
237. Kimagase, Noda-shi [Sekiyado-machi], 36° 02' 12" N, 139° 50' 04" E, 20 m, BM (Psh) + EB (Auj) + EC (Crj), 29.VII.1999, YH. *ADif*, 1 ex., 1 (9♀) [CBM-ZU 589]. (Hagino, 2003c[2]). [同市[同町]木間ヶ瀬]

238. Shrine Moro-jinja, Miwanoyama, Nagareyama-shi, 35° 52' 14" N, 139° 54' 31" E, 20 m, EB (QCm, *Ligustrum japonicum*) + EC (Crj) + DB (Acp) + BM (Psb), 29.VII.1999, YH. *ADif*, 1 ex., 1 (♂) [CBM-ZU 590]. (Hagino, 2003c[3]). [流山市三輪野山茂侶神社]
239. Moromochi-chô, Chôshi-shi, 35° 48' 27" N, 140° 42' 17" E, 40 m, EB (Css, QC sp(p)), *Pittosporum tobira*, Auj) + SS (Plc), 28.XII.1997, KI. *ADib*, 4 exs., 4 (9♀) [CBM-ZU 591-594]. (Hagino, 2003c[4]). [銚子市諸持町]
240. Shrine Tokai-jinja, Takagaminishimachi, Chôshi-shi, 35° 42' 19" N, 140° 50' 50" E, 40 m, EB (Mlt, Css), 28.XII.1997, KI. *ADif*, 6 exs., 4 (9♀) [CBM-ZU 597-600], 1 (9) [CBM-ZU 595], 1 (8) [CBM-ZU 596]. (Hagino, 2003c[5]). [同市高神西町渡海神社]
- 241a. Aoba-chô, Chûh-ku, Chiba-shi, 35° 35' 51" N, 140° 08' 34" E, 20 m, DB (Ctc, QLs, Cts, Rsj, Sms, Clj) + EB (Nls, Auj), 31.I.1994, YH. *ADf*, 1 ex., 1 (9♀) [CBM-ZU 581]. (Hagino, 2003c[6a]). [千葉市中央区青葉町]
- 241b. *Ibid.*, 6.II.1994, YH. *ADI*, 3 exs., 2 (9♀) [CBM-ZU 582, 584], 1 (9) [CBM-ZU 583]. (Hagino, 2003c[6b]).
242. Gongenmori, Nagara-machi, 35° 26' 51" N, 140° 12' 20" E, 170 m, EB (Mlt, Erj) + SS (Plc), 14.III.1988, KI. *Dr*, 3 exs., 3 (8♂) [CBM-ZU 291, 298, 299]; *ADf*, 1 ex., 1 (9♀) [CBM-ZU 296]; *ADib*, 8 exs., 3 (9♂), 5 (9♀) [CBM-ZU 292-295, 297]; *Fi*, 2 exs., 2 (9♀) [2 paratypes, CBM-ZU 39, coll. Hagino]. (Hagino, 1991b, 1992, 2003c[7]). [長生郡長柄町権現森]
243. Temple Kasamori-kan'on, Chôn-an-machi, 35° 23' 59" N, 140° 12' 04" E, 80 m, EB (Css, Erj, Caj), 15.V.1988, KI. *AAI*, 1 ex., 1 (5) [CBM-ZU 264]; *ADif*, 20 exs., 6 (10♀) [CBM-ZU 268, 272, 277, 280, 283, 287], 1 (10) [CBM-ZU 282], 10 (9♀) [CBM-ZU 266, 271, 273, 274, 276, 278, 279, 284-286], 3 (9) [CBM-ZU 270, 275, 281]; *ADI*, 3 exs., 3 (9♀) [CBM-ZU 263, 265, 267]; *ADrs*, 1 ex., 1 (9) [CBM-ZU 269]; *Fi*, 6 exs., 4 (9♀) [holotype, CBM-ZU 37; 1 paratype, CBM-ZU 38; CBM-ZU 288, 289]; 2 (9) [CBM-ZU 290]. (Hagino, 1991b, 1992, 2003c[8]). [同郡長南町笠森観音]
244. Shrine Takemine-jinja, Kasamori, Chôn-an-machi, 35° 23' 55" N, 140° 11' 58" E, 100 m, DB (QLs) + EB (QC sp(p)) + SS (Plc), 3.XII.1997, KI. *ADI*, 1 ex., 1 (9♀) [CBM-ZU 601]; *Cs*, 1 ex., 1 (9♀) [CBM-ZU 602]. (Hagino, 2003c[9]). [同町笠森武峰神社]
245. Shrine Takataki-jinja, Ichihara-shi, 35° 20' 51" N, 140° 09' 15" E, 90 m, EB (Mlt, Erj) + DB (QLs) + SS (Plc), 15.V.1988, KI. *At*, 1 ex., 1 (6) [CBM-ZU 533]; *Dr*, 14 exs., 5 (8♂) [CBM-ZU 539, 561, 563-565], 3 (6♀) [CBM-ZU 524, 528, 562], 4 (6) [CBM-ZU 525-527, 559], 2 (5) [CBM-ZU 558, 560]; *ADib*, 9 exs., 8 (9♀) [CBM-ZU 540, 544, 546, 549, 553, 555, 557, 572], 1 (6) [CBM-ZU 567]; *ADif*, 1 ex., 1 (9♀) [CBM-ZU 535]; *ADit*, 4 exs., 3 (9♀) [CBM-ZU 530-532], 1 (8) [CBM-ZU 529]; *ADI*, 16 exs., 13 (9♀) [CBM-ZU 522, 534, 542, 543, 545, 547, 548, 550-552, 554, 568, 569], 1 (9) [CBM-ZU 571], 2 (3) [CBM-ZU 566, 570]; *SSpp*, 7 exs., 5 (9♀) [CBM-ZU 523, 575, 577, 579, 580], 1 (9) [CBM-ZU 576], 1(?) [CBM-ZU 541]; *SDnd*, 7 exs., 3 (9♂) [CBM-ZU 538, 556, 578], 1 (9♀) [CBM-ZU 574], 2 (8♂) [CBM-ZU 536, 537], 1 (8) [CBM-ZU 573]. (Hagino, 2003c[10]). [市原市高滝神社]
246. Kaisho-tunnel, Kamiueno, Katsuura-shi, 35° 10' 54" N, 140° 12' 07" E, 200 m, EC (Cho), 13.III.1988, KI. *ADib*, 5 exs., 5 (9♀) [CBM-ZU 347, 353, 354, 356, 358]; *ADI*, 26 exs., 23 (9♀) [CBM-ZU 322, 323, 325-339, 342, 343, 348, 349, 351, 357], 3 (9) [CBM-ZU 324, 340, 350]; *SSc*, 1 ex., 1 (9) [CBM-ZU 352]; *Cs*, 4 exs., 2 (9♀) [CBM-ZU 346, 355], 2 (9) [CBM-ZU 341, 345]; *Fi*, 1 ex., 1 (9) [CBM-ZU 344]. (Hagino, 2003c[11]). [勝浦市上植野会所トンネル南]
247. Yosôbeta, Kamiueno, Katsuura-shi, 35° 08' 59" N, 140° 13' 34" E, 130 m, EB (Mlt, Caj) + EC (Crj), 13.III.1988, KI. *AAI*, 1 ex., 1 (8) [CBM-ZU 310]; *ADf*, 1 ex., 1 (9♀) [CBM-ZU 308]; *ADI*, 11 exs., 9 (9♀) [CBM-ZU 300-302, 304-307, 311, 312], 1 (9) [CBM-ZU 309], 1 (6) [CBM-ZU 303]; *Fi*, 4 exs., 1 (9♀) [paratype, coll. Hagino], 3 (9) [CBM-ZU 313-315]. (Hagino, 1991b, 1992, 2003c[15]). [同市上植野与惣部田]
248. Seiwa Kenmin-no-Mori, Kimitsu-shi, 35° 12' 16" N, 140° 02' 10" E, 210 m, EB (Css, QC sp(p)) + DB (Ctc, QLa), 25.V.1997, KI. *ADif*, 1 ex., 1 (9♀) [CBM-ZU 605]; *ADI*, 1 ex., 1 (9♀) [CBM-ZU 606]. (Hagino, 2003c[13]). [君津市清和県民の森]
249. Summit of Mt. Ôtsuka-yama, Seiwa Kenmin-no-Mori, Kimitsu-shi, 35° 10' 21" N, 140° 00' 17" E, 298 m, EB (Css, QC sp(p)), Cit, Erj), 26.V.1997, KI. *SSc*, 2 exs., 2 (9♀) [CBM-ZU 603, 604]. (Hagino, 2003c[14]). [同市清和県民の森大塚山山頂]
250. Mt. Takago-yama, Futtsu-shi, 35° 11' 26" N, 139° 58' 18" E, 140 m, DB (QLs) + EB (QC sp(p)), Cms, Auj) + EC (Crj, Psd, Cho), 16.XII.1997, KI. *ADI*, 1 ex., 1 (9♀) [CBM-ZU 607]. (Hagino, 2003c[12]).

[富津市高宕山]

- 251a. Daifusa-misaki, Tomiura-machi, 35° 02' 22" N, 139° 48' 46" E, 80 m, EB (Css, Caj, Auj), 15.IV.1988, KI. *AAd*, 1 ex., 1 (8) [CBM-ZU 403]; *ADd*, 96 exs., 62 (9♀) [holotype, CBM-ZU 52; 4 paratypes, CBM-ZU 53, 54, 2 coll. Hagino; CBM-ZU 362, 363, 366, 369, 371, 372, 376, 377, 380, 382, 383, 385, 386, 388, 393, 394, 400-402, 406-411, 413-417, 419-423, 426-429, 432, 436-442, 444, 445, 447-451, 453, 454], 15 (9) [CBM-ZU 364, 365, 375, 378, 381, 384, 389, 399, 405, 412, 418, 431, 433, 435, 443], 19 (6) [CBM-ZU 367, 368, 373, 374, 379, 387, 390-392, 395-398, 424, 425, 430, 434, 446, 452]; *ADif*, 9 exs., 2 (10♀) [CBM-ZU 455, 458], 1 (10) [CBM-ZU 370], 3 (9♀) [CBM-ZU 360, 456, 457], 1 (9) [CBM-ZU 404], 2 (6) [CBM-ZU 359, 361]; *ADy*, 1 ex., 1 (9♂). (Hagino, 1993b, 2003c[16-1]). [安房郡富浦町大房岬]
- 251b. *Ibid.*, EB (Lce, Erj, Auj), 15.IV.1988, KI. *ADd*, 55 exs., 45 (9♀) [CBM-ZU 461, 462, 465, 466, 468-471, 473-475, 477-479, 481-487, 492, 493, 496-498, 501-518, 521], 2 (9) [CBM-ZU 463, 480], 7 (6) [CBM-ZU 472, 476, 491, 499, 500, 519, 520], 1 (?) [CBM-ZU 467]; *ADif*, 7 exs., 1 (10♀) [CBM-ZU 490], 2 (9♀) [CBM-ZU 464, 489], 1 (9) [CBM-ZU 488], 2 (8) [CBM-ZU 460, 494], 1 (6) [CBM-ZU 495]; *SDp*, 1 ex., 1 (9♂) [CBM-ZU 459]. (Hagino, 2003c[16-2]).
252. Heisaura Coast, Tateyama-shi, 34° 56' 58" N, 139° 48' 21" E, 20 m, EC (Pst) + EB (Dpm), 15. XII.1997, KI. *ADi*, 1 ex., 1 (9) [CBM-ZU 608]. (Hagino, 2003c[17]). [館山市平砂浦海岸]
253. Shrine Awa-jinja, Tateyama-shi, 34° 55' 17" N, 139° 50' 14" E, 70 m, EB (Css) + SS (Plc), 15.IV.1988, KI. *AAd*, 4 exs., 2 (9) [CBM-ZU 318, 319], 1 (5) [CBM-ZU 316], 1 (3) [CBM-ZU 317]; *ADib*, 2 exs., 2 (9♀) [CBM-ZU 320, 321]; *ADp*, 1 ex., 1 (9♂). (Hagino, 2003c[18]). [同市安房神社]
- Tōkyō Prefecture [東京都]**
254. West corner of Fukiage-ōmiya Goshō, Fukiage, Imperial Palace, Chiyoda, Chiyoda-ku, Tōkyō Pref. 35° 41' 14" N, 139° 45' 08" E, 20 m, EB (QCa, Css, Mlt) + SS (Plc), 7.I.1998, KI-RI. *ADib*, 1 ex., 1 (9♀). (Hagino, 2000b). [千代田区千代田皇居吹上大宮御所奥東]
255. Dailhon'e-i-ato, Fukiage, Imperial Palace, Chiyoda, Chiyoda-ku, Tōkyō Pref. 35° 41' 13" N, 139° 44' 54" E, 20 m, EB (Css, QCa, Auj) + DB (Zks), 14.X.1998, KI-RI. *SDnd*, 1 ex., 1 (9♀). (Hagino, 2000b). [同区千代田皇居吹上大宮御所東]
- 256a. Fukiage-ōmiya Goshō Seimon, Fukiage, Imperial Palace, Chiyoda, Chiyoda-ku, Tōkyō Pref. 35° 41' 09" N, 139° 45' 01" E, 20 m, EB (Css, QCa, Auj, Cit) + DB (*Acer* sp(p), Zks) + SS (Plc), 3.IX.1997, KI-RI. *Dr*, 1 ex., 1 (5); *SDnd*, 1 ex., 1 (8). (Hagino, 2000b). [同区千代田皇居吹上大宮御所正門]
- 256b. *Ibid.*, 7.I.1998, KI-RI. *ADi*, 15 exs., 15 (9♀). (Hagino, 2000b).
- 256c. *Ibid.*, 14.X.1998, KI-RI. *AAd*, 2 exs., 2 (9♀). (Hagino, 2000b).
- 257a. Sakura-bayashi, Fukiage, Imperial Palace, Chiyoda, Chiyoda-ku, Tōkyō Pref. 35° 41' 07" N, 139° 44' 50" E, 20 m, DB (*Cerasus* spp.) + EB (Css) + SS ("Sasa"), 3.IX.1997, KI-RI. *SSpb*, 1 ex., 1 (9♂). (Hagino, 2000b). [同区千代田皇居吹上桜林]
- 257b. *Ibid.*, 11.III.1998, KI-RI. *ADi*, 1 ex., 1 (9♀). (Hagino, 2000b).
258. Bamboo stands, Goshō, Imperial Palace, Chiyoda, Chiyoda-ku, Tōkyō Pref., 35° 41' 03" N, 139° 44' 46" E, 20 m, BM (Psh), 9.VII.1997, KI-RI. *ADi*, 1 ex., 1 (9♀). (Hagino, 2000b). [同区千代田皇居御所竹林]
- 259a. Evergreen forest, Goshō, Imperial Palace, Chiyoda, Chiyoda-ku, Tōkyō Pref. 35° 41' 02" N, 139° 44' 51" E, 20 m, EB (Lce), 9.VII.1997, KI-RI. *Dr*, 1 ex., 1 (6♀); *ADi*, 1 ex., 1 (9♀). (Hagino, 2000b). [同区千代田皇居御所照葉樹林]
- 259b. *Ibid.*, 14.X.1998, KI-RI. *ADi*, 1 ex., 1 (9♀). (Hagino, 2000b).
260. Kami-Dōkanbori Moat, Imperial Palace, Chiyoda, Chiyoda-ku, Tōkyō Pref. 35° 40' 54" N, 139° 45' 03" E, 20 m, EB (Lce, Caj, Auj) + DB (Ctc), 11. III.1998, KI-RI. *ADi*, 1 ex., 1 (9♀); *ADi*, 1 ex., 1 (9♀). (Hagino, 2000b). [同区千代田皇居上道灌壕]
- 261a. Mt. Takao-zan, Hachijōji-shi, Tokyo Pref. 35° 37' 53" N, 139° 15' 18" E, 500 m, DB (Fgj, Cej) + EC (Abf), 17.IV.1984, HbS. *Pt*, 4 exs., 2 (9♂), 2 (9♀); *SSpb*, 3 exs., 3 (9♀); *SDp*, 1 ex., 1 (9♂). (Hagino, 1992). [八王子市高尾山]
- 261b. *Ibid.*, 18.V.1984, HbS. *SSc*, 2 exs., 1 (9♂), 1 (6); *SSpb*, 1 ex., 1 (9♀); *SDa*, 1 ex., 1 (9♀). (Hagino, 1992).
- Hachijō-jima Island [八丈島]
262. Jinda, Hahijō-machi, Tokyo Pref., 33° 07' 21" N, 139° 44' 46" E, 80 m, EB (Caj, Mlt), 7.XI.1983, ON-YH. *AAd*, 1 ex., 1 (6). (Hagino, 1992). [八丈町甚大]
263. Noboryū-tōge Pass, Hahijō-machi, Tokyo Pref. 33° 06' 51" N, 139° 50' 11" E, 220 m, EB (Caj), 7.XI.1983, ON-YH. *ADib*, 1 ex., 1 (9♀); *ADi*, 6 exs., 4 (9♀), 1 (8), 1 (5). (Hagino, 1992). [同町登竜]

- 峠]
264. Nakanogô, Hachijô-machi, Tokyo Pref. 33° 03' 53"N, 139° 49' 28"E, 240 m, EB (Css), 7.XI.1983, ON-YH. *AAd*, 1 ex., 1 (♂). (Hagino, 1992). [同町中ノ郷]
- Kanagawa Prefecture [神奈川県]**
265. Matsudasôryô, Matsuda-machi, 35° 21' 05" N, 139° 08' 47" E, 120 m, DB, 22.XI.1981, ST. *ADI*, 3 exs., 3 (9♀); *Pr*, 1 ex., 1 (9♀); *SDu*, 4 exs., 3 (9♀), 1 (♂). (Hagino, 1992). [足柄上郡松田町松田惣領]
- 266a. Temple Jinmu-ji, Numama, Zushi-shi, 35° 18' 22" N, 139° 36' 18" E, 40 m, EB (Css, Lce), 4.III.1984, HbS. *Pr*, 1 ex., 1 (9♀); *Cs*, 2 exs., 2 (9♀). (Hagino, 1992). [逗子市沼間神武寺]
- 266b. *Ibid.*, 8.IV.1984, HbS. *Dr*, 3 exs., 3 (8♂); *ADI*, 3 exs., 3 (9♀); *SDp*, 6 exs., 2 (9♂), 4 (9♀); *Cs*, 4 exs., 1 (9♂), 3 (9♀). (Hagino, 1992).
- Niigata Prefecture [新潟県]**
267. North slope just below summit of Mt. Keizuruyama, Uonuma-shi [Yunotani-mura], 36° 57' 25" N, 139° 12' 37" E, 2000 m, EC (Abm, Tsd, Psp) + DB (Act, Bte, *Betula corylifolia*) + *Rhododendron (Hymenantes)* sp(p.) + SS (Ssk), 13.VII.1996, YS-KI-RI-HS-TM-HH-YH. *ADib*, 2 exs., 1 (9♀), 1 (6); *Pr*, 5 exs., 2 (9♂), 1 (9♀), 1 (8♂), 1 (8); *SSpb*, 5 exs., 1 (9♂), 1 (9♀), 1 (8♂), 1 (8), 1 (6); *SDnd*, 1 ex., 1 (8); *SDp*, 6 exs., 3 (9♀), 3 (8). (Hagino, 1998b[St. 34]). [魚沼市 [北魚沼郡湯之谷村]景鶴山山頂直下北側斜面]
268. Bottom of southeast ridge of Mt. Yosaku-dake, Uonuma-shi [Yunotani-mura] 36° 56' 37" N, 139° 14' 21" E, 1430 m, DB (Fgc, QLc, Acj) + SS ("Sasa"), 2.IX.1995, HT-YS-KI-RI-HS-ON-YH. *SSpb*, 23 exs., 4 (9♂), 5 (9♀), 6 (8♂), 1 (8), 4 (6), 3 (5); *SDu*, 1 ex., 1 (8). (Hagino, 1998b[St. 26]). [同市 [同村]与作尾根下]
- Toyama Prefecture [富山県]**
269. Bunadaira, Mt. Iburi-yama, Asahi-machi, 36° 50' 21" N, 137° 40' 53" E, 1305 m, DB (Fgc), 10.VII.1996, YkH. *ADp*, 1 ex., 1 (9♀). (Hirauchi, 1997). [下新川郡朝日町朝日岳イブリ山ブナ平]
270. Tengudaira, Tateyama, Tateyama-machi, 36° 34' 57" N, 137° 34' 39" E, 2300 m, EC (Psp), 4.VIII.1997, YkH-NN-TkO. *SDp*, 1 ex., 1 (9♂). (Nunomura et al, 1999). [中新川郡立山町立山天狗平]
271. Bunadaira, Tateyama, Tateyama-machi, 36° 34' 47" N, 137° 28' 32" E, 1180 m, DB (Fgc), 30.VIII.1997, YkH-NN-TkO. *SDp*, 1 ex., 1 (8♂). (Nunomura et al, 1999). [同町立山ぶな平]
272. Beside Pond Midoriga-ike, Murodôdaira, Tateyama, Tateyama-machi, 36° 34' 45" N, 137° 36' 03" E, 2414 m, EC (Psp), 26.VII.1997, YkH-NN-TkO. *SDp*, 2 exs., 2 (9♀). (Nunomura et al, 1999). [同町立山室堂平ミドリガ池畔]
273. Oiwake, Midagahara, Tateyama, Tateyama-machi, 36° 34' 07" N, 137° 32' 54" E, 1870 m, GR (Ssk), 4.VIII.1997, YkH-NN-TkO. *SDp*, 1 ex., 1 (6). (Nunomura et al, 1999). [同町立山弥陀ヶ原追分]
274. Shimonokodaira, Tateyama, Tateyama-machi, 36° 34' 44" N, 137° 29' 13" E, 1230 m, EC (Crr), 30.VIII.1997, YkH-NN-TkO. *SDp*, 1 ex., 1 (8♂). (Nunomura et al, 1999). [同町立山下ノ小平]
- 275a. Mt. Setokura-yama, Ôyama-machi, 36° 33' 29" N, 137° 26' 28" E, 1240 m, DB (Fgc), 23.VII.1994, YkH. *SDp*, 2 exs., 1 (9♀), 1 (8). (Sato et al, 1995; Hirauchi, 1997). [上新川郡大山町瀬戸蔵山]
- 275b. Mt. Setokura-yama, Ôyama-machi, 36° 33' 29" N, 137° 26' 28" E, 1240 m, DB (Fgc), 15.IX.1994, YkH. *SDu*, 1 ex., 1 (8). (Sato et al, 1995; Hirauchi, 1997). [同町瀬戸蔵山]
276. Usagidani, Tateyama, Ôyama-machi, 36° 33' 07" N, 137° 33' 23" E, 1470 m, DB (Fgc), 8.X.1994, YkH. *AAI*, 1 ex., 1 (9♀); *ADib*, 2 exs., 1 (9♂), 1 (9♀); *SDu*, 1 ex., 1 (9♀). (Hirauchi et al, 1995; Hirauchi, 1997). [同町立山兎谷]
277. Sukenobe-tôge Pass, Arimine, Ôyama-machi, 36° 29' 26" N, 137° 24' 44" E, 1510 m, EC (*Pinus parviflora* var. *pentaphylla*, Tjs), 14.VIII.1994, NN. *SDp*, 1 ex., 1 (6). (Nunomura and Hirauchi, 1996). [同町有峰祐延峠]
278. Minamidani, Arimine, Ôyama-machi, 36° 27' 06" N, 137° 26' 34" E, 1160 m, DB (Fgc), 9.IX.1994, HdH-HN. *SDp*, 3 exs., 1 (8♂), 1 (8), 1 (6). (Nunomura and Hirauchi, 1996). [同町有峰南谷]
- 279a. Nishitani, Arimine, Ôyama-machi, 36° 26' 31" N, 137° 24' 53" E, 1220 m, DB (Fgc, QLc, Aet), 6.VII.1990, YkH. *SDp*, 3 exs., 1 (9♂), 1 (9♀), 1 (8). (Hirauchi, 1993, 1997; Nunomura and Hirauchi, 1996; Nunomura et al, 1999). [同町有峰西谷]
- 279b. *Ibid.*, 16.X.1990, YkH. *ADib*, 5 exs., 5 (9♀); *ADts*, 2 exs., 1 (9♀), 1 (6). (Hirauchi, 1993, 1997; Nunomura and Hirauchi, 1996; Nunomura et al, 1999).
- Fukui Prefecture [福井県]**
280. Ryûzen, Obama-shi, 35° 27' 59" N, 135° 46' 40" E, 20 m, EB, 11.V.1981, ST. *Ej*, 1 ex., 1 (8). (Hagino, 1992). [小浜市龍前]
- Yamanashi Prefecture [山梨県]**
- 281a. *Mt. Daibosatsu-rei, *Tabayama-mura, 35° 44' 55" N, 138° 50' 45" E, 2000 m, EC (Tsd, Abv), 22.IV.1984, HbS. *ADI*, 4 exs., 4 (9♀); *Pr*, 2 exs., 1 (9♂), 1 (8); *SSpb*, 1 ex., 1 (9♀); *SDp*, 1 ex., 1 (6).

- (Hagino, 1992). [北都留郡*丹波山村*大菩薩嶺]
- 281b. *Ibid.*, 30.V.1984, HbS. *SSpb*, 5 exs., 3 (9♀), 2 (8); *SDp*, 10 exs., 2 (9♂), 7 (9♀), 1 (8♂). (Hagino, 1992).
- 281c. *Ibid.*, 24.VI.1984, HbS. *AAI*, 5 exs., 3 (9♂), 1 (9♀), 1 (8); *SSpb*, 1 ex., 1 (6); *SDp*, 5 exs., 2 (9♀), 1 (8♂), 1 (8), 1 (5). (Hagino, 1992).
- 281d. *Ibid.*, 14.VII.1984, HbS. *ADib*, 1 ex., 1 (9♀); *SSpb*, 1 ex., 1 (8♂); *SDp*, 5 exs., 1 (9♀), 2 (8♂), 2 (6); *SDu*, 1 ex., 1 (8). (Hagino, 1992).
- 281e. *Ibid.*, 12.VIII.1984, HbS. *SDp*, 2 exs., 1 (9♂), 1 (8); *SDu*, 1 ex., 1 (8). (Hagino, 1992).
- 281f. *Ibid.*, 17.IX.1984, HbS. *SDp*, 5 exs., 1 (9♂), 3 (9♀), 1 (8); *SDu*, 6 exs., 2 (9♂), 1 (9♀), 1 (8), 1 (6), 1 (5). (Hagino, 1992).
- 281g. *Ibid.*, 18.X.1984, HbS. *ADib*, 1 ex., 1 (9♂); *SDp*, 5 exs., 3 (9♂), 1 (9♀), 1 (3); *SDu*, 1 ex., 1 (9♀). (Hagino, 1992).
282. *Marukawa-tôge Pass, Kosuge-mura, 35° 45' 10"N, 138° 49' 37"E, 1500 m, DB (Fgc, QLc) + SS (Ssb), 22.IV.1984, HbS. *SDu*, 2 exs., 1 (9♂), 1 (9♀). (Hagino, 1992). [同郡小菅村*丸川峠]
- 283a. Mt. Ôgi-yama, Ôtsuki-shi, 35° 38' 05"N, 139° 01' 05"E, 1000 m, DB (Fgc, QLc, Cnj) + EC (Psd), 15.VI.1984, HbS. *At*, 1 ex., 1 (8♀); *ADf*, 1 ex., 1 (9♀); *SSpb*, 12 exs., 5 (9♂), 7 (9♀). (Hagino, 1992). [大月市富浜町扇山]
- 283b. *Ibid.*, 10.VII.1984, HbS. *SDu*, 1 ex., 1 (8♂). (Hagino, 1992).
- 283c. *Ibid.*, 14.VIII.1984, HbS. *AAd*, 1 ex., 1 (3); *SDu*, 2 exs., 2 (8♂). (Hagino, 1992).
- 283d. *Ibid.*, 12.IX.1984, HbS. *At*, 1 ex., 1 (8♂); *AAI*, 2 exs., 1 (8), 1 (5); *SDp*, 1 ex., 1 (5); *Cs*, 2 exs., 1 (9♀), 1 (6). (Hagino, 1992).
- 283e. *Ibid.*, 10.X.1984, HbS. *AAI*, 8 exs., 3 (8), 4 (6), 1 (5); *ADl*, 1 ex., 1 (6); *Pr*, 1 ex., 1 (9♀); *SDu*, 2 exs., 2 (9♀); *Cs*, 1 ex., 1 (9♀). (Hagino, 1992).
284. Yanagisawa-tôge Pass, Enzan-shi, 35° 46' 16" N, 138° 48' 10" E, 1500 m, DB (Fgc, QLc) + SS (Ssb), 3.V.1984, HbS. *SDp*, 1 ex., 1 (9♀); *SDu*, 11 exs., 2 (9♂), 9 (9♀). (Hagino, 1992). [塩山市柳沢峠]
285. *Sakeishi, Enzan-shi, 35° 44' 27" N, 138° 48' 39" E, 1000 m, DB (Fgc, *Cercidiphyllum japonicum*, Ldu), 22.IV.1984, HbS. *ADl*, 3 exs., 3 (9♀); *Pr*, 1 ex., 1 (9♂). (Hagino, 1992). [同市*裂石]
- 286a. Near Yoshidatrainai lava cave, Fujiyoshida-shi, 35° 26' 57" N, 138° 45' 36" E, 1030 m, EC (Psd), 22.IX.2001, RI-KI. *ADIs*, 3 exs., 3 (9♀); *SDu*, 1 ex., 1 (9). (Hagino, 2003a[St. 6-1]). [富士吉田市吉田胎内そば]
- 286b. *Ibid.*, 25.IV.2002, YsH-YkK. *ADIs*, 2 exs., 2 (9♀); *Pr*, 1 ex., 1 (6). (Hagino, 2003a[St. 6-2]).
287. Nashigahara, Fujiyoshida-shi, 35° 24' 51" N, 138° 48' 44" E, 1220 m, GR (Mcs), 7.X.2001, YsH. *SSc*, 1 ex., 1 (9♀). (Hagino, 2003a[St. 7-1]). [同市梨ヶ原]
288. North slope of Mt. Fuji, Fujiyoshida-shi, 35° 23' 29" N, 138° 44' 01" E, 2400 m, GR (*Aconogonon weyrichii* var. *alpinum*), 11.V.2002, YsH-YkK. *ADtr*, 1 ex., 1 (9♂). (Hagino, 2003a[St. 1-2]). [同市富士山北斜面]
- 289a. North slope of Mt. Fuji, Narusawa-mura, 35° 23' 30" N, 138° 42' 52" E, 2200 m, DC (Lxk), 22.IX.2001, RI-KI. *ADib*, 7 exs., 3 (9♂), 2 (9♀), 1 (9), 1 (8); *Pr*, 1 ex., 1 (6); *SSc*, 3 exs., 1 (9♂), 1 (9♀), 1 (6); *SDp*, 1 ex., 1 (6). (Hagino, 2003a[St. 2-1]). [南都留郡鳴沢村富士山北斜面]
- 289b. *Ibid.*, RI-YsH-YkK. *SSpb*, 1 ex., 1 (9♂); *SDp*, 1 ex., 1 (9♂). (Hagino, 2003a[St. 2-2]).
290. Northwest slope of Mt. Fuji, Narusawa-mura, 35° 23' 01" N, 138° 41' 45" E, 2200 m, EC (Abv), 22.IX.2001, RI-KI. *AAI*, 2 exs., 2 (3); *ADib*, 9 exs., 2 (9♂), 6 (9♀), 1 (8♂); *ADl*, 3 exs., 1 (9♀), 1 (9), 1 (6); *Cs*, 6 exs., 1 (9♀), 3 (9), 2 (6). (Hagino, 2003a[St. 3-1]). [同村富士山北西斜面]
- 291a. North slope of Mt. Ômuro-yama, Kamikuishiki-mura, 35° 26' 47" N, 138° 39' 04" E, 1180 m, DB (Fgc, QLc), 23.IX.2001, RI-KI. *ADit*, 2 exs., 1 (9♀), 1 (8); *ADl*, 2 exs., 2 (6); *ADp*, 1 ex., 1 (8); *Pr*, 5 exs., 1 (9), 1 (8), 1 (6), 1 (5), 1 (3); *SSc*, 4 exs., 3 (9♂), 1 (9♀); *SSpb*, 2 exs., 1 (9♀), 1 (6); *SDa*, 1 ex., 1 (8♂); *SDu*, 11 exs., 6 (9♂), 5 (9). (Hagino, 2003a[St. 4-1]). [西八代郡上九一色村大室山]
- 291b. *Ibid.*, 18.IV.2002, RI-YsH-YkK. *ADib*, 1 ex., 1 (6); *ADl*, 9 exs., 7 (9♀), 1 (9), 1 (6); *ADtr*, 1 ex., 1 (9♀); *ADy*, 1 ex., 1 (3); *Pr*, 10 exs., 8 (9♂), 2 (9♀); *SSpp*, 2 exs., 2 (9♀). (Hagino, 2003a[St. 4-2]).

Gifu Prefecture [岐阜県]

292. Temple Yamamotohachiman-gû, Hida-shi [Furukawa-chô], ca. 36° 14' N, ca. 137° 12' E, 520 m, DB + EC (Crj), 26.X.1980, GI. *ADib*, 1 ex., 1 (9♀); *SDp*, 1 ex., 1 (9♀). (Hagino, 1992). [飛騨市[吉城郡古川町]山本八幡宮]
293. Okamoto, Takayama-shi, ca. 36° 08' N, ca. 137° 14' E, 580 m, DB, 26.X.1980, GI. *ADl*, 2 exs., 2 (9♀); *SDu*, 2 exs., 1 (9♂), 1 (9♀). (Hagino, 1992). [高山市岡本]
294. Hachiman, Kuguno-chô, ca. 36° 03' N, ca. 137° 16' E, 720 m, EC (Crj), 27.X.1980, GI. *SDu*, 5 exs., 3 (9♂), 2 (9♀). (Hagino, 1992). [大野郡久々野町八幡]

Shizuoka Prefecture [静岡県]

295. Jôrennotaki, Izu-shi [Amagiugashima-chô],

- 34° 52' 23" N, 138° 55' 26" E, 300 m, EB, 23.XI.1981, ST. *ADf*, 1 ex., 1 (9 ♀); *SDp*, 1 ex., 1 (9 ♀). (Hagino, 1992). [伊豆市[田方郡天城湯ヶ島町]浄蓮の滝]
296. Namesawa-keikoku, Izu-shi [Amagi-yugashima-chô], 34° 50' 58" N, 138° 55' 09" E, 460 m, DB, 23. XI.1981, ST. *SDp*, 1 ex., 1 (9 ♀); *Cs*, 2 exs., 2 (9 ♀). (Hagino, 1992). [同市[同町]滑沢溪谷]
297. Nabeta, Shimoda-shi, 34° 39' 45" N, 138° 56' 03" E, 80 m, EB (Lce, *Css*), 11.V.1985, YH. *ADts*, 1 ex., 1 (9 ♀). (Hagino, 1992). [下田市鍋田]
- Okayama Prefecture [岡山県]**
298. Taga, *Akasaka-chô, 34° 49' 39" N, 134° 00' 10" E, 60 m, EC (Psd), 29.V.1985, ON. *SDnk*, 5 exs., 3 (9 ♂) [holotype, CBM-ZU 49; 2 paratypes, coll. Hagino], 2 (9 ♀) [2 paratypes, CBM-ZU 50, 51]. (Hagino, 1993a). [赤磐郡赤坂町多賀]
- Yamaguchi Prefecture [山口県]**
299. Enokidani-tunnel, Misumi-chô, 34° 21' 13" N, 131° 19' 25" E, 220 m, EB, 13.X.1984, ST. *ADit*, 1 ex., 1 (9 ♀). (Hagino, 1992). [大津郡三隅町榎谷トンネル]
300. Kaerimizu, Akiyoshidai, Mitô-chô, 34° 16' 04" N, 131° 18' 51" E, 220 m, GR (Mcs), 20.XI.1983, ST. *ADit*, 1 ex., 1 (8); *SDit*, 5 exs., 2 (9 ♂), 2 (9 ♀), 1 (8). (Hagino, 1992). [美祿郡美東町秋吉台帰水]
- Ehime Prefecture [愛媛県]**
301. Omogo-kei, Kumakôgen-chô [Omogo-mura], 33° 43' 11" N, 133° 05' 50" E, 680 m, EC (Abf) + DB (*Acer* sp.), 26.V.1985, YH. *SSpb*, 1 ex., 1 (9 ♂). (Hagino, 1992). [上浮穴郡久万高原町[面河村]面河溪]
302. Omogo-kei, Kumakôgen-chô [Omogo-mura], 33° 43' 04" N, 133° 05' 46" E, 680 m, MF, 26.V.1985, YH. *Dr*, 11 exs., 10 (6), 1 (5); *ADib*, 1 ex., 1 (9 ♀); *ADi*, 1 ex., 1 (9 ♀); *ADts*, 1 ex., 1 (9 ♀); *SSpb*, 2 exs., 1 (9 ♂), 1 (9 ♀); *SDp*, 4 exs., 4 (5). (Hagino, 1992). [同町[同村]面河溪]
303. *Temple Iwaya-dera, Kumakôgen-chô [Mikawa-mura], 33° 39' 43" N, 132° 59' 01" E, 450 m, DB (Aet), 26.V.1985, ST. *At*, 3 exs., 3 (8 ♀) [holotype, NSMT-My 202; 2 paratypes, NSMT-My 203, coll. Hagino]; *Cs*, 1 ex., 1 (9 ♀) [paratype, coll. Hagino]. (Hagino, 1989, 1991a, 1992). [同町[同郡美川村]岩屋寺]
304. Miyatanoti, Oda-chô, 33° 35' 19" N, 132° 47' 25" E, 400 m, EB (QCg), 22.VI.1997, EY. *ADi*, 3 exs., 1 (9 ♀), 1 (6), 1 (5); *SSc*, 2 exs., 1 (8 ♂), 1 (5); *SDnd*, 1 ex., 1 (9 ♂); *SDp*, 5 exs., 5 (3). (Hagino, 2000a). [同郡小田町宮之谷]
305. Miyatanoti, Oda-chô, 33° 35' 09" N, 132° 47' 38" E, 550 m, DB (QLa, QLs), 22.VI.1997, EY. *Dr*, 2 exs., 1 (8 ♂), 1 (6 ♀); *ADi*, 9 exs., 4 (6), 3 (5), 2 (3); *SSc*, 1 ex., 1 (9 ♀); *SDp*, 37 exs., 37 (3). (Hagino, 2000a). [同町宮之谷]
306. Namakusadani, Odamiyama, Oda-chô, 33° 33' 45" N, 132° 55' 01" E, 1250 m, DB (Aet, Pcr, *Acer* sp(p), Fgc), 18.X.1994, EY. *SDp*, 2 exs., 1 (9 ♂), 1 (5). (Hagino, 2000a). [同町小田深山生草谷]
307. Namakusadani, Odamiyama, Oda-chô, 33° 33' 38" N, 132° 55' 06" E, 1240 m, DB (Fgc, *Betula grossa*, Clb, *Acer* sp(p).) + SS (*Sasa nipponica*), *23.VIII.1995, *HT-RI. *AAI*, 6 exs., 5 (8), 1 (6); *SSc*, 1 ex., 1 (8). (Hagino, 2000a). [同町小田深山生草谷]
308. Odamiyama-keikoku, Odamiyama, Oda-chô, 33° 31' 59" N, 132° 53' 38" E, 850 m, In leaf mould accumulated in a trunk hollow of DB (*Acer* sp.), 12. VIII.1994, EY. *ADf*, 1 ex., 1 (6); *SSc*, 1 ex., 1 (6). (Hagino, 2000a). [同町小田深山小田深山溪谷]
309. Odamiyama-keikoku, Odamiyama, Oda-chô, 33° 31' 43" N, 132° 53' 38" E, 800 m, EC (Crj), 22.VIII.1995, HT-RI. *ADi*, 1 ex., 1 (8); *SSc*, 1 ex., 1 (9 ♂). (Hagino, 2000a). [同町小田深山小田深山溪谷]
310. Koyayama, Odamiyama, Oda-chô, 33° 30' 11" N, 132° 52' 06" E, 1250 m, DB (Fgc, QLc, *Symplocos coreana*, Acr, *Viburnum phlebotrichum*), 23.VIII. 1995, HT-RI. *AAI*, 14 exs., 6 (8 ♂), 5 (8), 3 (6); *SSc*, 1 ex., 1 (9 ♀); *SDp*, 1 ex., 1 (6). (Hagino, 2000a). [同町小田深山小屋山]
311. Shrine Michô-jinja, Ôse, Uchiko-chô, 33° 37' 02" N, 132° 45' 11" E, 300 m, EB (*Quercus gilva*, *Litsea coreana*), 22.VI.1997, EY. *ADi*, 4 exs., 1 (9 ♀), 2 (6), 1 (5); *SDp*, 1 ex., 1 (3). (Hagino, 2000a). [喜多郡内子町大瀬御調神社]
- Fukuoka Prefecture [福岡県]**
312. Hiraodai-Doline, Kokuraminami-ku, Kitakyûshû-shi, 33° 45' 44" N, 130° 54' 06" E, 400 m, EB, 21.XI. 1983, ST. *ADf*, 1 ex., 1 (9 ♀); *ADi*, 6 exs., 6 (9 ♀); *SDa*, 22 exs., 4 (9 ♂), 18 (9 ♀); *SDu*, 32 exs., 7 (9 ♂), 22 (9 ♀), 1 (8), 2 (6). (Hagino, 1992). [北九州市小倉南区平尾台ドリーネ]
313. Shikanoshima, Higashi-ku, Fukuoka-shi, 33° 39' 58" N, 130° 18' 36" E, 120 m, EB (*Css*, Mlt), 24.V. 1977, ST. *SDu*, 1 ex., 1 (9 ♂). (Hagino, 1992). [福岡市東区志賀島]
- Kumamoto Prefecture [熊本県]**
314. Fukaba, Nishiyounoura, Aso-machi, 33° 00' 38" N, 130° 58' 07" E, 780 m, GR (Mcs), 8.IX.1979, ST. *ADit*, 1 ex., 1 (8). (Hagino, 1992). [阿蘇郡阿蘇町西湯浦深菜]
315. Kuratani, Ashikita-machi, 32° 14' 51" N, 130° 29' 56" E, 150 m, EB, 23.VII.1983, ST. *AAI*, 1 ex., 1 (9

- ♀). (Hagino, 1992). [*葦北郡芦北町倉谷]
- Ôita Prefecture [大分県]**
316. Akagawa, Mt. Kujû-san, Kujû-machi, 33° 03' 22" N, 131° 13' 43" E, 1040 m, GR (Mcs), 15.X.1979, ST. *AAd*, 1 ex., 1 (9♀); *SDu*, 1 ex., 1 (9♀). (Hagino, 1992). [直入郡久住町久住山赤川]
- Miyazaki Prefecture [宮崎県]**
317. Mitatedani, Hinokage-chô, ca. 32° 48' N, ca. 131° 27' E, 1000 m, DB, 22.XI.1984, JN. *ADf*, 2 exs., 2 (9♀). (Hagino, 1992). [西臼杵郡日之影町見立谷]
318. Mt. Sobo-san, Takachiho-chô, ca. 32° 49' N, ca. 131° 20' E, 1400 m, DB, 23.XI.1984, JN. *ADf*, 2 exs., 1 (9♂), 1 (9♀); *ADib*, 1 ex., 1 (9♀); *ADl*, 5 exs., 4 (9♀), 1 (6). (Hagino, 1992). [同郡高千穂町祖母山]
319. Torigawa, Tôgô-chô, 32° 21' 16" N, 131° 34' 13" E, 60 m, EB, 14.III.1980, ST. *Ej*, 2 exs., 2 (9♂). (Hagino, 1992). [東臼杵郡東郷町鳥川]
- Kagoshima Prefecture [鹿児島県]**
- Amami-ôshima Island [奄美大島]
320. Sude, Setouchi-chô, 28° 09' 06" N, 129° 17' 59" E, 60 m, EB, 18.III.1980, ST. *ADp*, 1 ex., 1 (9♀). (Hagino, 1992). [大島郡瀬戸内町須手]
- Acknowledgements**
- I thank those listed in "Abbreviations: D. Collector's name", who kindly collected and provided me with pauropod specimens. I also thank Mr. Eiji Yamamoto, Mr. Hidebumi Sato, Mr. Hiroshi Sakayori, Dr. Hiroshi Tamura, Mr. Katsuhisa Furuno, Dr. Kenji Fukuyama, Dr. Kiyoshi Ishii, Mr. Noboru Nunomura, Mr. Osami Nakamura, Dr. Ryosaku Itoh, Mr. Shingo Tanaka, Mr. Toshiharu Miyata, Dr. Yasuo Hagiwara, Mr. Yohei Suganami, and Ms. Yoshiko Hirauchi, for their kind cooperation for supplementing collecting data. I am grateful to Dr. Hiroshi Tamura, emeritus professor of Ibaraki University, for reading of the manuscript, and to Dr. Ulf Scheller, Häggesled, Järpås, Sweden, for his strong proposal to enumerate Japanese pauropod records in English.
- References**
- Chalupsky, J. 1964. Study on the *Stylopauropus*' species in Europe. *Acta Soc. Zool. Bohemoslov.* 28: 326-337.
- Geographical Survey Institute. 2004a. Altitudes of 1003 mountains in Japan.
<<http://www.gsi.go.jp/KOKUJYOHO/MOUNTAIN/mountain.html>>. (In Japanese) [国土地理院. 2004a. 日本の山岳標高一覧 - 1003山 -]
- Geographical Survey Institute. 2004b. Map browsing service. <<http://watchizu.gsi.go.jp/>>. (In Japanese) [国土地理院. 2004b. ウォッチズ 地図閲覧サービス (試験公開).]
- Hagino, Y. 1989. Two new species of the family Brachypauropodidae (Pauropoda) from Japan. *Can. Ent.* 121 (3): 301-307.
- Hagino, Y. 1991a. New species of the family Pauropodidae (Pauropoda) from central Japan. *Can. Ent.* 123 (5): 1009-1045.
- Hagino, Y. 1991b. A new species of the genus *Fagepauropus* (Pauropoda, Pauropodidae, Polypauropodinae) from central Japan. *Edaphologia* (47): 11-15.
- Hagino, Y. 1991c. A new species of the genus *Stylopauropus* (Pauropoda, Pauropodidae) from central Japan. *Publ. Itako Hydrobiol. St.* 5: 1-4.
- Hagino, Y. 1992. New localities and new records of Pauropoda from Japan. *Takakuwaia* (24): 85-97. (In Japanese) [萩野康則. 1992. 日本産エダヒゲムシ類 (Pauropoda) の新産地と新記録種. *Takakuwaia* (24): 85-97.]
- Hagino, Y. 1993a. Taxonomic study on the genus *Stylopauropus* (Pauropoda, Pauropodidae) of Japan. I. Descriptions of two new species of the subgenus *Donzelotauropus* Remy. *Edaphologia*, (49): 33-42.
- Hagino, Y. 1993b. A new species of the genus *Allopauropus* (Pauropoda, Pauropodidae) from the Boso Peninsula, central Japan. *Nat. Hist. Res.* 2 (2): 175-177.
- Hagino, Y. 1993c. Pauropoda. In *The Yanba Dam Area Nature Survey Group* (ed.), *Nature of Naganohara-machi*, pp. 443-447. Naganohara-machi, Gunma Prefecture. (In Japanese) [萩野康則. 1993c. エダヒゲムシ類. In *ハツ場ダム地域自然調査会* (編), *ハツ場ダムダム湖予定地及び関連地域文化財調査報告書 長野原町の自然*, pp. 443-447. 群馬県長野原町.]
- Hagino, Y. 1994. Taxonomic study on the genus *Stylopauropus* (Pauropoda, Pauropodidae) of Japan. II. Description of a new species of the subgenus *Stylotauropus* s. str. *Edaphologia*, (51): 7-11.
- Hagino, Y. 1998a. Pauropoda. In *Soil Animals of Mt. Tsukuba*, The 1st general research report of the Ibaraki Nature Museum - Nature in the prefectural southern district including Mt. Tsukuba and Lake Kasumigaura - (1994-1996), pp. 311-317. Ibaraki Nature Museum. (In Japanese) [萩野康則. 1998a. エダヒゲムシ類. In *筑波山の土壌動物*. 茨城県自然博物館第1次総合調査報告書: 311-317. ミュージアムパーク茨城県自然博物館.]
- Hagino, Y. 1998b. Pauropoda of Oze. In *Oze Scientific Research Group* (eds.), *Scientific Research of the Oze Area in central Japan*, pp. 645-650. Oze Scientific Research Group. (In Japanese) [萩野康則. 1998b. 尾瀬のエダヒゲムシ類. In *尾瀬の総合研究*: 645-650. 尾瀬総合学術調査団.]
- Hagino, Y. 2000a. Pauropoda from Odamiyama and its vicinity, Ehime Prefecture, Shikoku, Japan. In *Nature of*

- Odamiyama, I. pp. 847-854. (In Japanese) [萩野康則. 2000a. 小田深山およびその周辺のエダヒゲムシ類. *In* 小田深山の自然, pp. 847-854. 愛媛県小田町教育委員会.]
- Hagino, Y. 2000b. A list of Paupodopa from the Imperial Palace, Tokyo, Japan. *Mem. Natn. Sci. Mus., Tokyo* (35): 115-121. (In Japanese) [萩野康則. 2000b. 皇居のエダヒゲムシ類. *国立科学博物館専報* (35): 115-121.]
- Hagino, Y. 2001. Paupodopa. *In* Soil Animals of the central district of Ibaraki Prefecture. The 2nd general research report of the Ibaraki Nature Museum - Nature in the prefectural central district including the Keisoku Mts., Lake Hinuma and the central coast - (1997-1999), pp. 349-355. Ibaraki Nature Museum. (In Japanese) [萩野康則. 2001. エダヒゲムシ類. *In* 茨城県央域の土壤動物. 茨城県自然博物館第2次総合調査報告書:349-355. ミュージアムパーク茨城県自然博物館.]
- Hagino, Y. 2002. Paupodopa. *In* Ishii, K. and K. Furuno (eds.), Soil Animals of Tochigi. A Comprehensive Investigation into Tochigi Prefecture's Natural Environment, pp. 159-172. Tochigi Prefecture. (In Japanese) [萩野康則. 2002. エダヒゲムシ類. *In* とちぎの土壤動物. 栃木県自然環境課基礎調査, pp. 159-172. 栃木県林務部自然環境課.]
- Hagino, Y. 2003a. Paupodopa. *In* Shinoda, S. (ed.), Survey Reports on Biodiversity in the Northern Regional Ecosystem of Mt. Fuji (1st edition), pp. 195-199. Yamanashi Institute of Environmental Sciences. (In Japanese) [萩野康則. 2003a. エダヒゲムシ綱. *In* 篠田授樹 (編), 生態系多様性地域調査 (富士北麓地域) 報告書 (非公開版), pp. 195-199. 山梨県環境科学研究所・富士北麓生態系調査会.]
- Hagino, Y. 2003b. Paupodopa. *In* Maehara, T. et al, Soil animals from Rishiri Island, northern Hokkaido. *Rishiri Studies* (22): 64-65. (In Japanese) [萩野康則. 2003b. エダヒゲムシ類. *In* 前原忠ら, 利尻島の土壤動物. 利尻研究 (22): 64-65. 利尻町立博物館.]
- Hagino, Y. 2003c. A preliminary list of paupodopa collected from Chiba prefecture. *Takakuwaia* (32):1-4. (In Japanese) [萩野康則. 2003c. 千葉県のエダヒゲムシ類 (第1報). *Takakuwaia*, (32):1-4.]
- Hagino, Y. and U. Scheller. 1985. A new species of the genus *Eurypaupopus* (Paupodopa, Eurypaupodidae) from central Japan. *Proc. Jpn. Soc. Syst. Zool.* (31): 38-43.
- Hansen, H. J. 1902. On the genera and species of the order Paupodopa. *Vidensk Meddr. dansk naturh. Foren.* 1901: 323-424.
- Hirauchi, Y. 1993. Paupodopa of beech forest in Arimine. *Proceedings of Biology Division, Association of High School Teachers in Toyama Prefecture* (16): 31-32. (In Japanese) [平内好子. 1993. 有峰ブナ林のエダヒゲムシ類. 富山県高等学校教育研究会生物部会報 (16): 31-32.]
- Hirauchi, Y. 1997. Soil animals in beech forests. *In* Beech forests and creatures in Toyama Prefecture, pp. 37-54. Beech Forest Study Group, Toyama. (In Japanese) [平内好子. 1997. ブナ林の土壤動物. *In* 富山のブナ林と生き物たち, pp. 37-54. ブナ林研究グループ, 富山.]
- Hirauchi, Y., T. Sato, T. Matsumura, T. Ogawa and Y. Sinsei. 1995. A comparison of the soil animals, especially oribatid mite communities, under different vegetations in Tateyama Caldera. *Bulletin of the Toyama Biological Society* (34): 20-28. (In Japanese) [平内好子・佐藤卓・松村勉・小川徳重・信清義和. 1995. 立山カルデラ内の異植生下における土壤動物群集 (特にササラダニ群集) の比較. *富山の生物* (34): 20-28.]
- Japan Post. 2004. Postal Code Searching Service. <<http://www.post.japanpost.jp/zipcode/>>. (In Japanese) [日本郵政公社. 2004. 郵便番号検索.]
- Kadokawa Shoten. 1978-1990. *Kadokawa Japanese Geographical Encyclopedia*. 47+2 vols. Kadokawa Shoten, Tokyo. (In Japanese) [角川書店. 1978-1990. 角川日本地名大辞典. 47+2 巻. 角川書店, 東京.]
- Lubbock, J. 1867. On *Paupopus*, a new type of centipeds. *Trans. Linn. Soc. Lond.* 26: 181-190.
- Nakamura, O. 1993. Soil Animals of University Forest in Chichibu, the University of Tokyo. I. Paupodopa. *Saitama Meeting of Zoologists News* (13): 1-4. (In Japanese) [中村修美. 1993. 東京大学農学部附属秩父演習林の土壤動物 I. エダヒゲムシ類. *埼玉動物研通信* (13): 1-4.]
- Nakamura, O. 1999. Soil animals of Kamiizumi-mura. *In* Nature of Kamiizumi mura, Appendix. List of animal and plant species recorded from Kamiizumi-mura, pp. 139-145. Kamiizumi-mura, Saitama Prefecture. (In Japanese) [中村修美. 1999. 神泉村の土壤動物. *In* 神泉村誌自然編目録, pp. 139-145. 埼玉県神泉村.]
- Nunomura, N. and Y. Hirauchi. 1996. Soil animals of Arimine Area, Toyama Prefecture, Middle Japan. *In* Report on the survey of nature and environments of Arimine Area, the basin of the River Joganji, Toyama Prefecture, pp. 233-267. Toyama Science Museum. (In Japanese) [布村昇・平内好子. 1996. 有峰の土壤動物. *In* 常願寺川流域 (有峰地域) 自然環境調査報告, pp. 233-267. 富山市科学文化センター.]
- Nunomura, N., N. Miyamoto, Y. Hirauchi and T. Ogawa. 1999. Soil animals including land snails of Tateyama Area. *In* Report on the survey of animal and plant species diversity in Tateyama Route Area in the Japan Northern Alps, Toyama Prefecture, pp. 147-200. Toyama Prefecture. (In Japanese) [布村昇・宮本望・平内好子・小川徳重. 1999. 立山の土壤動物と貝類. *In* 立山地区動植物種多様性調査報告書, pp. 147-200. 富山県.]
- Remy, P. A. 1956. Pauroodes de Madagascar. *Mém. Inst. scient. Madagascar, Sér. A* 10: 101-229.
- Sato, T., Y. Hirauchi and T. Matsumura. 1995. Forest structures and fauna of soil animals in beech forest on Mt. Setokurayama, Toyama Prefecture, Japan. *Bulletin of the Toyama Science Museum* (18): 19-29. (In Japanese) [佐藤卓・平内好子・松村勉. 1995. 瀬戸蔵山ブナ

林の森林構造と土壤動物相. 富山市科学文化センター研究報告 (18): 19-29.]

Scheller, U. 1979. Pauropodidae (Myriapoda, Pauropoda) from the Canary Islands. *Ent. Scand.* 10: 177-186.

Yonekura, K. and T. Kajita. 2003. BG Plants - YList: Japanese plant name index. <http://ginkgo.bg.s.u-tokyo.ac.jp/bgplants/ylist_main.html>. (In Japanese) [米倉浩司・梶田忠. 2003. BG Plants 和名-学名インデックス (YList).]

(Accepted 15 February 2005)

日本産エダヒゲムシ類相に関する知見 I. 1985 年から 2003 年に種名が確定した 日本産エダヒゲムシ類のリスト

萩野 康 則

千葉県立中央博物館
〒260-8682 千葉市中央区青葉町 955-2
E-mail: hagino@chiba-muse.or.jp

1985 年から 2003 年にかけて 27 報の日本産エダヒゲムシ類に関する報文が出版されているが、これらは新種の原記載か、日本語で書かれた国内の限定的な地域でのエダヒゲムシのリストのいずれかであった。そのため、日本産エダヒゲムシ類に関して、外国人研究者にも利用可能な出現種およびその採集データを英文でまとめることが求められていた。そこで、私は 27 報文を精査し、種名が確定した個体についての採集情報を整理した。種のレベルで同定・報告されているのは 318 地点延べ 381 回の調査により得られた 3 科 8 属 26 種 4077 個体のエダヒゲムシ類であったので、これら全個体を網羅した英文リストを作成した。また、これらの調査データについて、元の報文には含まれていなかった情報も補完して、詳細な英文採集記録としてまとめた。

Errata

In case an original report was written in Japanese, its English translation is given in square brackets.

Hagino, Y. and U. Scheller. 1985. A new species of the genus *Eurypauropus* (Pauropoda, Eurypauropodidae) from central Japan. *Proc. Jpn. Soc. syst. Zool.* (31): 38-43.

P. 39, fig. 1-B, "p'" should be put near the seta to the right of seta p'.

P. 39, fig. 1, "B-E" should be put right of 25 μ m scale.

P. 42, l. 16, "H. WATANABE leg." read

"T. YANAGIBASHI and H. WATANABE leg."

Hagino, Y. 1989. Two new species of the family

Brachypauropodidae (Pauropoda) from Japan. *Can. Ent.* 121 (3): 301-307.

P. 301, l. 25, "Temple Iwaya-ji" read "Temple Iwayadera".

Hagino, Y. 1991. New species of the family Pauropodidae (Pauropoda) from central Japan. *Can. Ent.* 123 (5): 1009-1045.

P. 1009, l. 53, "36° 80' N" read "36° 56' N".

P. 1011, the following should be inserted between ll. 7 and 8:

2H: *Prunus-Castanea-Quercus* forest, Inohana-toge, Daigo-machi, 36° 44' N, 140° 28' E, alt. 380 m. 19.XII.1984, leg. Y. Hagino.

P. 1011, l. 11, "190 m" read "290 m".

P. 1011, l. 24, "10" and "2.II.1985" read "10A" and "1.II.1985", respectively.

P. 1011, the following should be inserted between ll. 24 and 25:

10B: Ibid., 2.II.1985, leg. K. Ishii.

P. 1011, l. 32, "Hiroshi Sakayori" read "Hiroshi Tamura".

P. 1013, l. 54, "10" read "10B".

P. 1015, l. 4, "10A" read "2H".

P. 1021, ll. 21 and 22, "20B" read "9B".

P. 1021, l. 22, "2♂, 3♀" read "2♂, 2♀".

P. 1029, l. 4, "10" read "10A".

Hagino, Y. 1992. New localities and new records of Pauropoda from Japan. *Takakuwaia* (24): 85-97. (In Japanese) [萩野康則. 1992. 日本産エダヒゲムシ類 (Pauropoda) の新産地と新記録種. *Takakuwaia* (24): 85-97.]

P. 85, l. 32, "1984.11.13, lex. (5)" read "1984.11.13, lex. (6)".

P. 86, ll. 26-27; p. 92, l. 17; and p. 93, l. 29, "福島県二本松市安達太良山金剛清水, 750m [Kongôshimizu, Mt. Adatarayama, Nihonmatsu-shi, Fukushima Pref., 750m]" read "福島県二本松市安達太良山金剛清水, 850m [Kongôshimizu, Mt. Adatarayama, Nihonmatsu-shi, Fukushima Pref., 850m]".

P. 86, ll. 17-18, "熊本県芦北郡芦北町倉谷 [Kuratani, Ashikita-machi, Kumamoto Pref.]" read "熊本県葦北郡芦北町倉谷 [Kuratani, Ashikita-machi, Kumamoto Pref.]".

P. 86, l. 35; p. 88, l. 6; p. 89, l. 30; p. 91, l. 16; p. 93, l. 5; and p. 94, ll. 3-4 and ll. 25-26, "山梨県北都留郡小菅村大菩薩峠, 2000m [Mt. Daibosatsu-tôge, Kosuge-mura, Yamanashi pref., 2000m]" read "山梨県北都留郡丹波山村大菩薩嶺, 2000m [Mt. Daibosatsu-rei, Tabayama-mura, Yamanashi Pref., 2000m]".

- P. 86, l. 37, "1ex. (8♂), 3exx.(8), 4exx.(6), 1ex. (5)" read "3exx.(8), 4exx.(6), 1ex. (5)".
- P. 87, l. 19, "1ex. (9♂)" read "1ex. (9♀)".
- P. 87, l. 31, "坂寄廣 [Hiroshi Sakayori]" read "田村浩志 [Hiroshi Tamura]".
- P. 87, l. 35; p. 89, ll. 14-15; p. 91, l. 12; and p. 92, ll. 18-19 and 36, "茨城県北茨城市花園水沢ダム [Mizusawa Dam, Hanazono, Kitaibaraki-shi, Ibaraki Pref.]" read "茨城県北茨城市花園水沼ダム [Mizunuma Dam, Hanazono, Kitaibaraki-shi, Ibaraki Pref.]".
- P. 88, ll. 6-7; and p. 94, l. 8 and l. 29, "山梨県塩山市大菩薩嶺, 2000m [Mt. Daibosatsu-rei, Enzan-shi, Yamanashi pref., 2000m]" read "山梨県北都留郡丹波山村大菩薩嶺, 2000m [Mt. Daibosatsu-rei, Tabayama-mura, Yamanashi Pref., 2000m]".
- P. 89, l. 20, "1984.11.2" read "1984.11.8".
- P. 89, l. 31, "同, 1000m [ditto. (= Mt. Daibosatsu-tôge, Kosuge-mura, Yamanashi pref.), 1000m]" read "山梨県塩山市裂石, 1000m [Sakeishi, Enzan-shi, Yamanashi Pref., 1000m]".
- P. 89, ll. 31-32, "山梨県大月市扇山, 1000m, 1984. 6.15, 佐藤英文, 1ex. (9♀); 同 [Mt. Ôgi-yama, Ôtsuki-shi, Yamanashi pref., 1000m, 1984. 6.15, Hidebumi Sato, 1ex. (9♀); ditto.]" read "山梨県大月市扇山, 1000m [Mt. Ôgi-yama, Ôtsuki-shi, Yamanashi pref., 1000m]".
- P. 90, l. 4, "2 exx. (9♂), 4 exx. (9♀)" read "3 exx. (9♂), 2 exx. (9♀)".
- P. 90, l. 6; p. 95, l. 4; and p. 96, l. 1, "茨城県東茨城郡御前山村光戸, 赤沢林道, 80m [Akazawa-rindô, Kôto, Gozenyama-mura, Ibaraki pref., 80m]" read "茨城県東茨城郡御前山村光戸, 皇都川河岸崖の斜面, 75m [Hillside near the Kôto River, Kôto, Gozenyama-mura, Ibaraki pref., 75m]".
- P. 90, l. 34, "1985.2.2" read "1985.2.1".
- P. 91, ll. 28-29, "青森県上北郡十和田湖町蔦沼 [Tobinuma, Towadako-machi, Aomori Pref.]" read "青森県上北郡十和田湖町蔦温泉 [Tsutanssen, Towadako-machi, Aomori Pref.]".
- P. 92, l. 22, "620m, 1985.5.19, 2exx. (9♂), 1ex. (8♂)" read "620m, 1985.5.19, 2exx. (9♀)".
- P. 92, l. 22, "650m, 1985.5.19, 2exx. (9♀)" read "650m, 1985.5.19, 3exx. (9♂)".
- P. 92, ll. 30-31, "田中真悟 [Shingo Tanaka], 1ex. (9♀)" read "田中真悟 [Shingo Tanaka], 1ex. (8)".
- P. 92, ll. 34, "1983.7.18, 1ex. (9♂)" read "1983.7.18, 1ex. (5)".
- P. 93, l. 1, "八溝山頂上付近 [Around the summit of Mt. Yamizo-san]" read "八溝山 [Mt. Yamizo-san]".
- P. 93, l. 18, "19 exx. (9♀)" read "18 exx. (9♀)".
- P. 93, ll. 25-26, "1ex. (9♂), 1ex. (9♀), 1ex. (8)" read "1ex. (8)".
- P. 93, l. 26, "今立源太良 [Gentaro Imadaté], 1ex. (8)" read "今立源太良 [Gentaro Imadaté], 1ex. (9♀), 2exx. (6)".
- P. 93, l. 32, "2exx. (8), 1ex. (6), 1ex. (5)" read "1ex. (9♀), 2exx. (8), 1ex. (6), 1ex. (5)".
- P. 94, l. 27, "同, 1500m [ditto. (= Mt. Daibosatsu-tôge, Kosuge-mura, Yamanashi pref.), 1500m]" read "山梨県北都留郡小菅村丸川峠, 1500m [Marukawa-tôge, Kosuge-mura, Yamanashi Pref., 1500m]".
- P. 95, l. 30, "渡辺秀明 [Hideaki Watanabe]" read "柳橋卓美・渡辺秀明 [Takumi Yanagibashi and Hideaki Watanabe]".
- Hagino, Y. 1993. Taxonomic study on the genus *Stylopauropus* (Pauropoda, Pauropodidae) of Japan. I. Descriptions of two new species of the subgenus *Donzelotauropus* Remy. *Edaphologia*, (49): 33-42.
- P. 35, l. 34, "Akasaka-machi" read "Akasaka-chô".
- Hagino, Y. 1993. Pauropoda. In The Yanba Dam Area Nature Survey Group (ed.), *Nature of Naganohara-machi*, pp. 443-447. Naganohara-machi, Gunma Prefecture. (In Japanese) [萩野康則. 1993. エダヒゲムシ類. In ハツ場ダム地域自然調査会 (編), ハツ場ダムダム湖予定地及び関連地域文化財調査報告書 長野原町の自然. pp. 443-447. 群馬県長野原町.]
- P. 443, l. 10 and l. 14 "1991年11月23日 [23 November, 1991]" read "1991年11月24日 [24 November, 1991]".
- P. 443, ll. 10-11, "116 個体 [116 individuals]" read "117 個体 [117 individuals]".
- P. 445, l. 29, "M1⑦, 1♀ (9)" read "M1⑦, 2♀ (9)".
- Hagino, Y. 1998. Pauropoda of Oze. In Oze Scientific Research Group (eds.), *Scientific Research of the Oze Area in central Japan*, pp. 645-650. Oze Scientific Research Group. (In Japanese) [萩野康則. 1998. 尾瀬のエダヒゲムシ類. In 尾瀬の総合研究: 645-650. 尾瀬総合学術調査団.]
- P. 649b, ll. 12-13, "St. 8, 2exx. (9♀), 1ex. (6)" read "St. 8, 1ex. (9♀), 2exx. (6)".
- P. 649b, l. 21, "2exx. (3); St. 39" read "2exx. (3); St. 34, 3exx. (9♀), 3exx. (8); St. 35, 4exx. (9♂), 1ex. (9♀), 1ex. (8♂), 1ex. (8); St. 38, 3exx. (9♂), 1ex. (9♀), 1ex. (9); St. 39".
- P. 649b, ll. 37-39, "St. 34, 3exx. (9♀), 3exx. (8); St. 35, 4exx. (9♂), 1ex. (9♀), 1ex. (8♂), 1ex. (8);" should be deleted.
- P. 649b, l. 40-p.650a, l. 1, "St. 38, 3exx. (9♂), 1ex. (9♀), 1ex. (9);" should be deleted.

- Hagino, Y. 2000. Pauropoda from Odamiyama and its vicinity, Ehime Prefecture, Shikoku, Japan. *In* Nature of Odamiyama, I, pp. 847-854. (In Japanese) [萩野康則. 2000. 小田深山およびその周辺のエダヒゲムシ類. *In* 小田深山の自然, pp. 847-854. 愛媛県小田町教育委員会.]
- P. 848, l. 28; p. 849, l. 5 and l. 35; p. 851, ll. 10-11, 19, 24 and 34; p. 852, l. 22; and p. 853, l. 17 and l. 24, "18.X.1994, 山本 [18.X.1994, Yamamoto]" read "23.VIII.1995, 田村・伊藤 [23.VIII.1995, Tamura and Itoh]".
- Hagino, Y. 2002. Pauropoda. *In* Ishii, K. and K. Furuno (eds.), Soil Animals of Tochigi. A Comprehensive Investigation into Tochigi Prefecture's Natural Environment, pp. 159-172. Tochigi Prefecture. (In Japanese) [萩野康則. 2002. エダヒゲムシ類. *In* とちぎの土壤動物. 栃木県自然環境課基礎調査, pp. 159-172. 栃木県林務部自然環境課.]
- P. 161, l. 13, "11exs. [6], (224)" read "10exs. [6♀], 1ex. [6♂], (224)".
- P. 161, ll. 39-40, "馬頭町 大那地, 190m, 1998.12.12, 2exs. [9♀], (271-1) [Ônachi, Batô-machi, 190m, 1998.12.12, 2exs. [9♀], (271-1)]" read "馬頭町 大那地, 190m, 1998.12.12, 1ex. [9♀], (271-1); 小口, 200m, 1998.12.12, 1 ex[9♀], (276) [Ônachi, Batô-machi, 190m, 1998.12.12, 1ex. [9♀], (271-1); Koguchi, Batô-machi, 200m, 1998.12.12, 1ex. [9♀], (276)]".
- P. 162, l. 1, "11exs. [8], (92)" read "10exs. [9♀], 1ex. [8], (92)".
- P. 163, l. 26, "11exs. [3], (241)" read "10exs. [5], 1ex. [3], (241)". P. 163, ll. 37-38, "壬生町 上稲葉赤御堂, 70m, 1998.5.28, 2exs. [6], (231) [Akamidô, Kamiinaba, Mibu-machi, 70m, 1998.5.28, 2exs. [6], (231)]" read "壬生町 上稲葉赤御堂, 70m, 1998.5.28, 1ex. [6], (231); 田沼町 作原蓬菜山神社, 350m, 1997.7.13, 1ex. [6], (183) [Akamidô, Kamiinaba, Mibu-machi, 70m, 1998.5.28, 1ex. [6], (231); Shrine Hôraisan-jinja, Sakuhara, Tanumamachi, 350m, 1997.7.13, 1ex. [6], (183)]".
- P. 169, l. 28, "(241)" read "(241). 二宮町 水戸部高尾神社東, 80m, 1998.5.7, 2 exs. [9♀], 1 ex. [9♂], 3 exs. [9], 1 ex. [8], 1 ex. [5], (229)".
- P. 169, ll. 28-29, "1997.10.19, 2 exs. [9♀], 1 ex. [9♂], 3 exs. [9], 1 ex. [8♂], 1 ex. [8], 1 ex. [5], (210)" read "1997.10.19, 1 ex. [8♂], (210)".
- Hagino, Y. 2003. A preliminary list of pauropods collected from Chiba prefecture. Takakuwaia (32):1-4. (In Japanese) [萩野康則. 2003. 千葉県のエダヒゲムシ類 (第1報). Takakuwaia, (32):1-4.]
- P. 1, l. 19; and p. 3, l. 1, "関宿町 (現在は野田市) 台町 [Daimachi, Sekiyado-machi [presently Noda-shi]]" read "関宿町台町 (現在は野田市関宿台町) [Daimachi, Sekiyado-machi [presently Sekiyado-daimachi, Noda-shi]]".