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A new subgenus and two new species of Mymaridae (Hymenoptera, Chalcidoidea) from Kyushu, Japan

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Abstract: A new subgenus of *Omyomymar* Schauff, 1983 (Hymenoptera, Mymaridae), *O. (Kyushumymar)* Triapitsyn subgen. nov., with type species *O. (Kyushumymar) yamagishii* Triapitsyn sp. nov., is described from Saga Prefecture, Kyushu Island, Japan. Also described is another fairyfly, *Schizophragma mitai* Triapitsyn sp. nov., from Fukuoka City, Fukuoka Prefecture, Kyushu. Keys to females of the Palearctic species of *Omyomymar* and the Old World species of *Schizophragma* Ogloblin, 1949 are given. New, interesting records of some other species of Mymaridae as well as of Mymarommatidae (Hymenoptera, Mymarommatoidea), captured by a Malaise trap on the grounds of the Kyushu University Ito campus in Motooka, Nishi-ku, Fukuoka, and of some other Chalcidoidea from Kyushu are also provided. *Alaptus minimus* Westwood, 1839, *Camptoptera magna* Soyka, 1946, *Erythmelus (Erythmelus) flavovarius* (Walker, 1846) (Mymaridae), and *Mymaromella chaoi* (Lin, 1994) (Mymarommatidae) are newly recorded from Japan; Singapore, Thailand and Vietnam are new distribution records for *Schizophragma indica* Rehmat and Anis, 2015.

Key Word: fairyfly, taxonomy, biodiversity, Fukuoka, new record, Mymarommatidae, *Mymaromella chaoi*.

Introduction

While visiting insect collection of the Entomological Laboratory, Faculty of Agriculture, Kyushu University, Fukuoka, Japan, in October 2019 I sorted all available Mymaridae (Hymenoptera, Chalcidoidea) at least to genera, and some also to species. Among these fairyflies several specimens from Kyushu Island, Japan, caught my attention as they represented apparently two unknown species in two genera. Unfortunately, the specimens were badly shriveled being mounted air dried on points, so most of them had to be slide-mounted to be recognizable. I borrowed them and identified as belonging to the undescribed species of *Omyomymar* Schauff, 1983 and *Schizophragma* Ogloblin, 1949. In particular, the single female specimen of *Omyomymar* sp. did not fit well in the current concept of the genus (Schauff, 1983, 1984; Lin et al., 2007; Huber et al., 2020) as its clava is entire and not 2-segmented; thus, description of a new subgenus for it has been warranted, after discussing its proper placement with John T. Huber (personal communication). I have also seen unidentified specimens of the nominate subgenus of *Omyomymar* from Honshu, Kyushu, and Ryukyu Islands in Japan.

Using this opportunity, also provided herein are new, interesting records of some other Mymaridae as well as of Eulophidae (Chalcidoidea) and Mymarommatidae (Hymenoptera, Mymarommatoidea) from Kyushu. Most of these were either recently collected or identified, and some represent new generic and species records for Japan or Kyushu. In particular, I sorted, at least to genus level, numerous fairyfly specimens captured by a Malaise trap on the grounds of the Kyushu University Ito campus in Motooka, Nishi-ku, Fukuoka; these were critical point dried, point-mounted (and a few further slide-mounted), and labeled from ethanol-preserved samples received for identification.

Material and Methods

The morphological terms of Gibson (1997) were used, with slight modifications. All measurements (as length or length: width for the wings) are given in micrometres (μm). Abbreviations used in the descriptions, diagnoses and keys are:

F funicular segment of the female antenna;

mps multiporous plate sensillum or sensilla on the antennal flagellar segments (= longitudinal sensillum or sensilla, or sensory ridge(s)).

Specimens from ethanol were dried using a critical point drier, then point-mounted and labeled. Selected borrowed specimens were dissected and slide-mounted in Canada balsam following the technique described in Huber (2015), with some modifications. Slide mounts were examined under a Zeiss Axioskop 2 plus compound microscope (Carl Zeiss Microscopy, LLC, Thornwood, New York, USA) and photographed using the Auto-Montage[®] system (Syncroscopy, Princeton, New Jersey, USA). Photographs were retouched where necessary using Adobe Photoshop[®] (Adobe Systems, Inc., San Jose, California, USA).

Specimens examined are deposited in the collections with the following acronyms: Entomological Laboratory, Faculty of Agriculture, Kyushu University, Fukuoka, Japan (ELKU); Zoological Museum, Finnish Museum of Natural History, University of Helsinki, Helsinki, Finland (FMNH); Entomology Research Museum, Department of Entomology, University of California, Riverside, California, USA (UCRC).

Taxonomy

Genus *Omyomyar* Schauff, 1983

Omyomyar Schauff, 1983: 344-545. Type species: *Paranaphoidea silvana* Ogloblin, 1935, by original designation.

Omyomyar: Schauff, 1984: 44-45 (diagnosis, phylogeny); Yoshimoto, 1990: 48 (diagnosis, list of New World species); Lin and Chiappini, 1996: 301-302 (key to world species, taxonomic history, diagnosis, discussion); Triapitsyn and Huber, 2000: 604 (mentioned); Lin et al., 2007: 40 (diagnosis, distribution, hosts); Pricop, 2014: S62 (history); Anwar et al., 2015: 139-140 (list and distribution of world species); Gowriprakash and Manickavasagam, 2016: 1-3 (history, key to Oriental species), 7 (diagram for Old World species); Huber et al., 2020: 256-257 (brief diagnosis, discussion); Sankararaman and Manickavasagam, 2020: 17005 (key to Oriental species).

Caenomyar Yoshimoto, 1990: 4-50. Type species: *Caenomyar howdeni* Yoshimoto, 1990, by monotypy. Synonymized with *Omyomyar* by Aquino et al., 2016: 588.

Updated diagnosis. Female: mandibles reduced, often strongly as minute stubs, with apices not overlapping or extending to each other when closed; antenna with radicle fused with the rest of scape, funicle 6-segmented and clava either entire (in the new subgenus described herein, Fig. 2) or 2-segmented (in the nominate subgenus, *O.* (*Omyomyar* Schauff, 1983)), with or without a nipple-like apical projection which in one species apparently represents a third claval segment (Lin et al., 2007); in most species, ovipositor very long, with a large basal loop and markedly exerted beyond apex of gaster, but in a few species relatively short, without a large basal loop, and either just barely or not significantly exerted beyond apex of gaster. Male (known only for some species in the nominate subgenus): head often relatively larger than in conspecific females, gena usually markedly enlarged, mandibles overlapping and usually enlarged; antenna with scape usually with inner surface covered in spine-like projections (but rarely without such projections, just with rather strong, normal setae), flagellum 11-segmented.

Comments. *Omyomymar* belongs to the *Anagrus* Haliday, 1833 group of genera (Lin et al., 2007); its brief diagnoses, following the original description and a key to New World species by Schauff (1983), were provided by Schauff (1984), Lin et al. (2007) and Huber et al. (2020). Triapitsyn and Huber (2000) first recorded the genus from the Palearctic region without providing any details other than it was known from central Japan. Pricop (2014) first recorded it from Europe and described *O. andriescui* Pricop, 2014 from Romania in which the ovipositor is very short and just barely exerted beyond apex of the gaster (Pricop, 2014, p. S64, fig. 3f); the same species was also recently recorded from the Czech Republic (Samková et al., 2020). This genus has an almost worldwide distribution (Lin et al., 2007) and is rather common in the tropics.

Hosts of *Omyomymar* are unknown, but likely these could be of some insects, like Orthoptera, whose eggs have hard egg chorions, and perhaps some of these could be concealed somewhat deep in a substrate or soil. The reason for that is presence of a very long ovipositor in females of the majority of species within the genus and strongly reduced mandibles in females, which are minute stubs with apices not overlapping or extending to each other when closed (Huber et al., 2020, p. 256 and p. 258, fig. 678). In the sexually dimorphic males of most species, the head is relatively larger and the pronotum is relatively longer than in supposedly conspecific females and with markedly enlarged gena (Huber et al., 2020, pp. 256-257), the mandibles are enlarged and overlapping (Huber et al., 2020, p. 258, fig. 680), and the scape has its inner surface covered in spine-like projections (Huber et al., 2020, p. 256 and p. 260, fig. 685). The almost exact combination of features occurs in the Australasian and Oriental *Polynema* (*Dorypolynema*) *mendeli* Girault, 1913 (Mymaridae) (Triapitsyn, 2021) with the exception of female mandibles being not reduced and crossing over although relatively notably smaller than in conspecific males. *Polynema* (*Dorypolynema*) *mendeli* is a known egg parasitoid of an unidentified Tettigoniidae (Orthoptera) on rice in a paddy field in Peninsular Malaysia (Subba Rao, 1970). In the European *Platystethynium* (*Platystethynium*) *triclavatum* (Donev and Huber, 2002) (Mymaridae), female mandibles are strongly reduced and not crossing over and male ones are enlarged and crossing over (Ortis et al., 2020), like in many *Omyomymar* spp. In Italy, *P. (Platystethynium) triclavatum* is an egg parasitoid of the endemic pest *Barbitistes vicetinus* Galvagni and Fontana, 1993 (Orthoptera, Tettigoniidae) whose females lay eggs in the soil; enlarged mandibles of the megacephalous, strongly brachypterous males of this fairyfly are used to chew holes in the hard chorion of the host egg, allowing fully winged females to emerge through them after mating with the males (Ortis et al., 2020). Based on a very similar, strongly sexually dimorphic morphology of the mandibles, a similar biological trait (and emergence strategy) could also occur in at least some *Omyomymar* species.

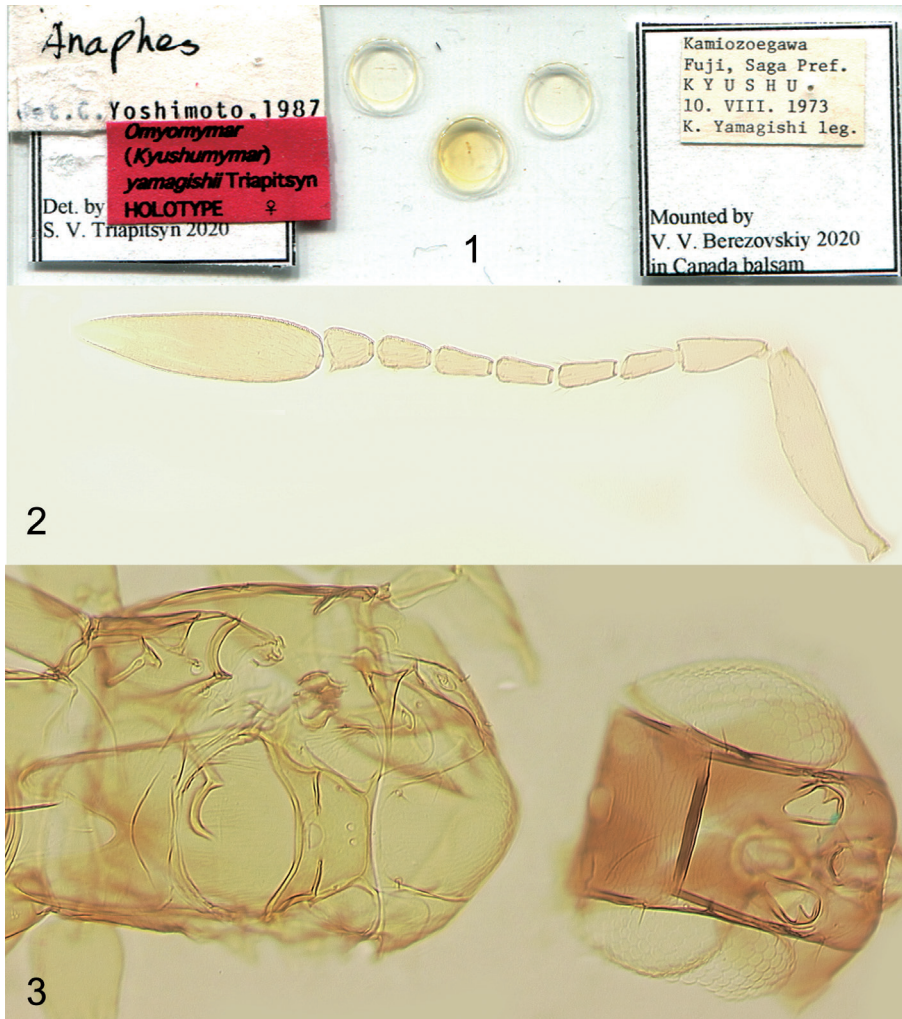
Manickavasagam et al. (2011) reported and illustrated the New World species *O. silvanum* (Ogloblin, 1935) from Tamil Nadu, India, and Anis and Rehmat (2013) also listed it from Andhra Pradesh, India even though from the biogeographical standpoint, its natural occurrence in the Oriental region of the Old World is highly unlikely. Gowriprakash and Manickavasagam (2016, p. 1) commented that its record by Manickavasagam et al. (2011) was based on a misidentification, and that it was identified as a new species which is close to *O. silvanum* (without indicating, however, to which of their two new species described in the same paper it corresponded to). Through comparison of the label data and the illustrations provided in Manickavasagam et al. (2011) and Gowriprakash and Manickavasagam (2016), I determined that the two females of *O. silvanum* of Manickavasagam et al. (2011) from Tamil Nadu correspond to *O. huberi* Manickavasagam and Gowriprakash, 2016. Yet, Manickavasagam and Athithya (2018, p. 1658) included, apparently by oversight, *O. silvanum* in their updated checklist of the Indian Mymaridae; however, Sankararaman and Manickavasagam (2020) did not include it in their key to the Oriental species of *Omyomymar*.

***Omyomymar* (*Kyushumymar* Triapitsyn subgen. nov.)**

urn:lsid:zoobank.org:act:A55968B5-AF40-4CBF-94DE-25276BA15973

Type species. *Omyomymar* (*Kyushumymar*) *yamagishii* Triapitsyn sp. nov., present designation.

Description. Female. Head (Figs. 3-4) a little narrower than mesosoma; toruli at level of lower eye margin; ocelli in an obtuse



Figs. 1-3. *Omyomyr (Kyushumyr) yamagishii* sp. nov. female (holotype). 1: Slide; 2: antenna; 3: head and mesosoma.

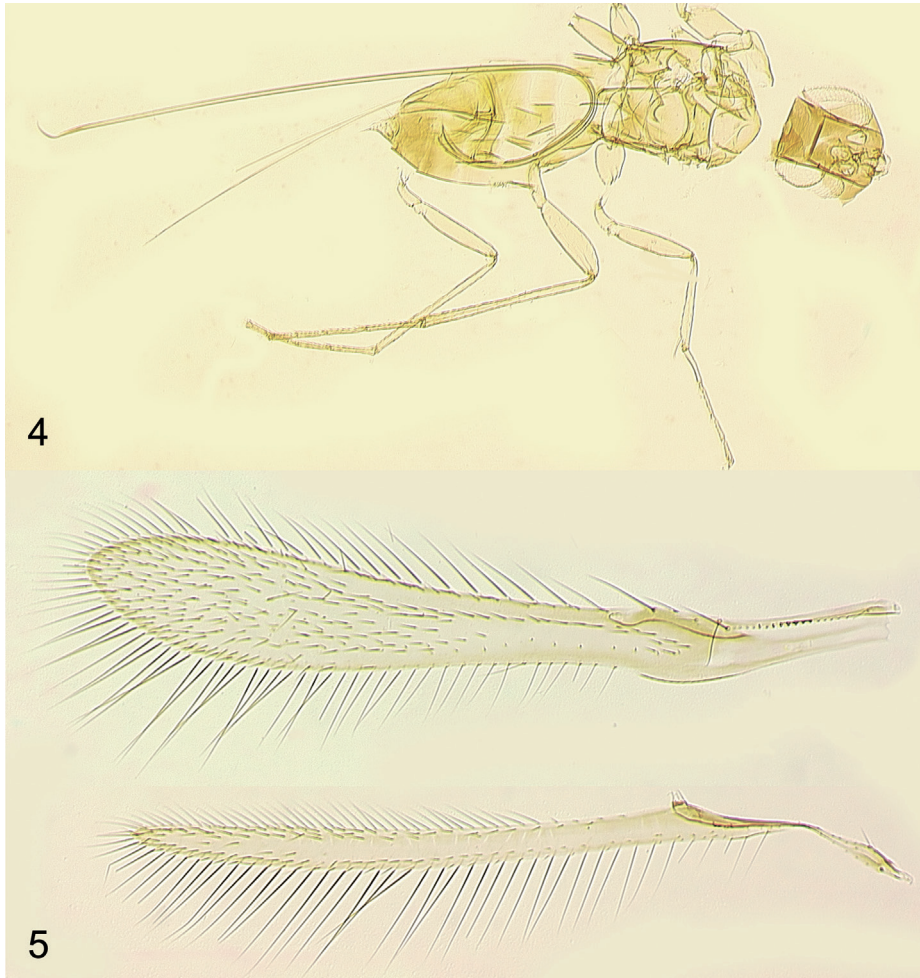
triangle, stemmaticum absent; mandibles reduced, not crossing over. Antenna (Fig. 2) with clava entire, without a nipple-like apical projection. Mesosoma (Figs. 3-4) shorter than metasoma; pronotum very short, particularly medially; frenum faintly mediolongitudinally divided; dorsellum rhomboidal; mesophragma deeply notched. Fore wing (Fig. 5) gradually slightly widening towards apex; venation extending to slightly more than one-third length of wing, with hypochaeta next (posterior to) proximal macrochaeta. Hind wing (Fig. 5) just a little shorter than fore wing, with membrane not extending to its base. Tarsi 4-segmented. Metasoma (Fig. 4) subsessile; ovipositor longer than body, with a large basal loop and markedly exerted beyond apex of gaster posteriorly.

Male. Unknown.

Diagnosis. *Omyomyr (Kyushumyr)* subgen. nov. differs from the nominate subgenus in having an entire clava (Fig. 2) and the toruli at the lower eye margin level (Fig. 3) whereas in *O. (Omyomyr)* the clava is 2-segmented and the toruli are usually above the lower eye margin (with some exceptions, like in *O. (Omyomyr) andriescui* (Pricop, 2014, p. S64, fig. 3d)), often more or less in the middle of face.

Etymology. The subgeneric name is composed of the word “Kyushu”, referring to Kyushu Island, and “myr”, a common ending of many genera and some subgenera of Mymaridae. Gender: neuter.

Comments. Subdivision of *Omyomyr* into two subgenera follows the recent, well-justified practical trend to define subgenera in some more or less definitely congeneric Mymaridae based on claval segmentation of the female antenna, for instance in *Anaphes*



Figs. 4-5. *Omyomymar (Kyushumymar) yamagishii* sp. nov. female (holotype). 4: Body; 5: fore and hind wings.

Haliday, 1833 (Huber and Thuróczy, 2018) and *Platystethynium* Ogloblin, 1946 (Huber et al., 2020). Molecular data, which for now is unavailable, potentially might test this approach though, but not necessarily prove it being wrong. Indeed, creating a separate genus for this rare and unusual type species of *O.* (*Kyushumymar*) would be inadvisable as most its other morphological features, particularly the reduced female mandibles, structure of the mesosoma, the typical fore wing, and a very long, basally strongly looped ovipositor fit well in *Omyomymar*.

***Omyomymar (Kyushumymar) yamagishii* Triapitsyn sp. nov.**

urn:lsid:zoobank.org:act: act:359993ED-D9B1-415C-829A-B0E95067AACC

Type material. Holotype female, deposited in ELKU, on slide (Fig. 1) labeled: 1. “Kamiozoe-gawa Fuji, Saga Pref. KYUSHU 10. VIII. 1973 K. Yamagishi leg.”; 2. “Mounted by V. V. Berezovskiy 2020 in Canada balsam”; 3. [red] “*Omyomymar (Kyushumymar) yamagishii* Triapitsyn HOLOTYPE ♀”; 4. “Det. by S. V. Triapitsyn 2020”; 5. [misidentification] “*Anaphes* det. C. Yoshimoto, 1987”. The holotype (Figs. 2-5) is in fair condition, almost complete (missing one hind wing and three apical tarsomeres of one middle leg), dissected under 3 coverslips; it was remounted from a point.

Diagnosis. The new species is the only one in the genus whose clava of the female antenna is entire.

Description. Female (holotype). Face and vertex dark brown (Figs. 3-4), rest of head and apex of gaster brown, mesosoma and

base of gaster light brown; scape and pedicel light brown, flagellum brown; legs light brown; wings (Fig. 5) notably infumate. Head (Fig. 3) about as high as wide; vertex transversely striate. Antenna (Fig. 2) with scape 4.7× as long as wide, faintly longitudinally striate; funicular segments more or less subequal in length (F1 and F6 the shortest and F2 the longest), F3-F6 each progressively slightly shorter than the preceding segment, F1-F5 cylindrical and without mps, F6 wider apically than basally and with 1 mps; clava 3.6× as long as wide, with 5 mps, slightly longer than combined length of F3-F6. Mesosoma (Figs. 3-4) with mesoscutum and frenum faintly longitudinally striate, midlobe of mesoscutum with a pair of short adnotaular setae close to its posterior margin. Fore wing (Fig. 5) 7.0× as long as wide, longest marginal seta 1.3× maximum wing width; distal macrochaeta 1.5× length of proximal macrochaeta; disc densely setose in apical half or so and sparsely setose basally, with just 1 complete row just beyond venation and with 8-10 setae behind venation. Hind wing (Fig. 5) 18.6× as long as wide, longest marginal seta 3.2× maximum wing width; disc mostly bare except for admarginal rows of setae and a few scattered setae at apex. Ovipositor (Fig. 4) extending anteriorly almost to base of gaster as a large basal loop and exerted beyond apex of gaster posteriorly by 0.6× total ovipositor length, 3.3× length of metatibia.

Measurements (µm) of the holotype (as length or length: width). Mesosoma 308; gaster 523; ovipositor 1168. Antennal segments: scape 179; pedicel 70; F1 39; F2 46; F3 43; F4 43; F5 41; F6 39; clava 194. Fore wing 817: 117; longest marginal seta 154. Hind wing 780: 42; longest marginal seta 136.

Male. Unknown.

Etymology. This new species is named after the collector, Kenzo Yamagishi (Laboratory of Entomology, Faculty of Agriculture, Meijo University, Tempaku, Nagoya, Japan), a hymenopterist who over the years captured many interesting fairyflies in Japan.

Distribution. Palaearctic region: Japan (Kyushu Island).

Key to subgenera and the Palaearctic species of *Omyomymar* (females)

- 1 Clava 2-segmented (subgenus *O.* (*Omyomymar* Schauff, 1983)) (Czech Republic, Romania)
 *O.* (*Omyomymar*) *andriescui* Pricop, 2014
 – Clava entire (Fig. 2) (subgenus *O.* (*Kyushumymar* Triapitsyn subgen. nov.)) (Japan)
 *O.* (*Kyushumymar*) *yamagishii* Triapitsyn sp. nov.

Genus *Schizophragma* Ogloblin, 1949

Schizophragma Ogloblin, 1949: 345-346. Type species: *Schizophragma basalis* Ogloblin, 1949, by original designation.

Patasson (*Schizophragma*): Annecke and Doutt, 1961: 23 (as a subgenus of *Patasson* Walker, 1846).

Schizophragma: Huber, 1987: 832-834 (taxonomic history, diagnosis, redescription, discussion, key to New World species); Yoshimoto, 1990: 54-55 (diagnosis, list of New World species); Triapitsyn and Huber, 2000: 604 (mentioned); Lin et al., 2007: 48 (diagnosis, distribution, hosts); Rehmat and Anis, 2015: 306-308 (taxonomic history, diagnosis, hosts, distribution, discussion, checklist of world species); Huber et al., 2020: 317 (brief diagnosis, discussion).

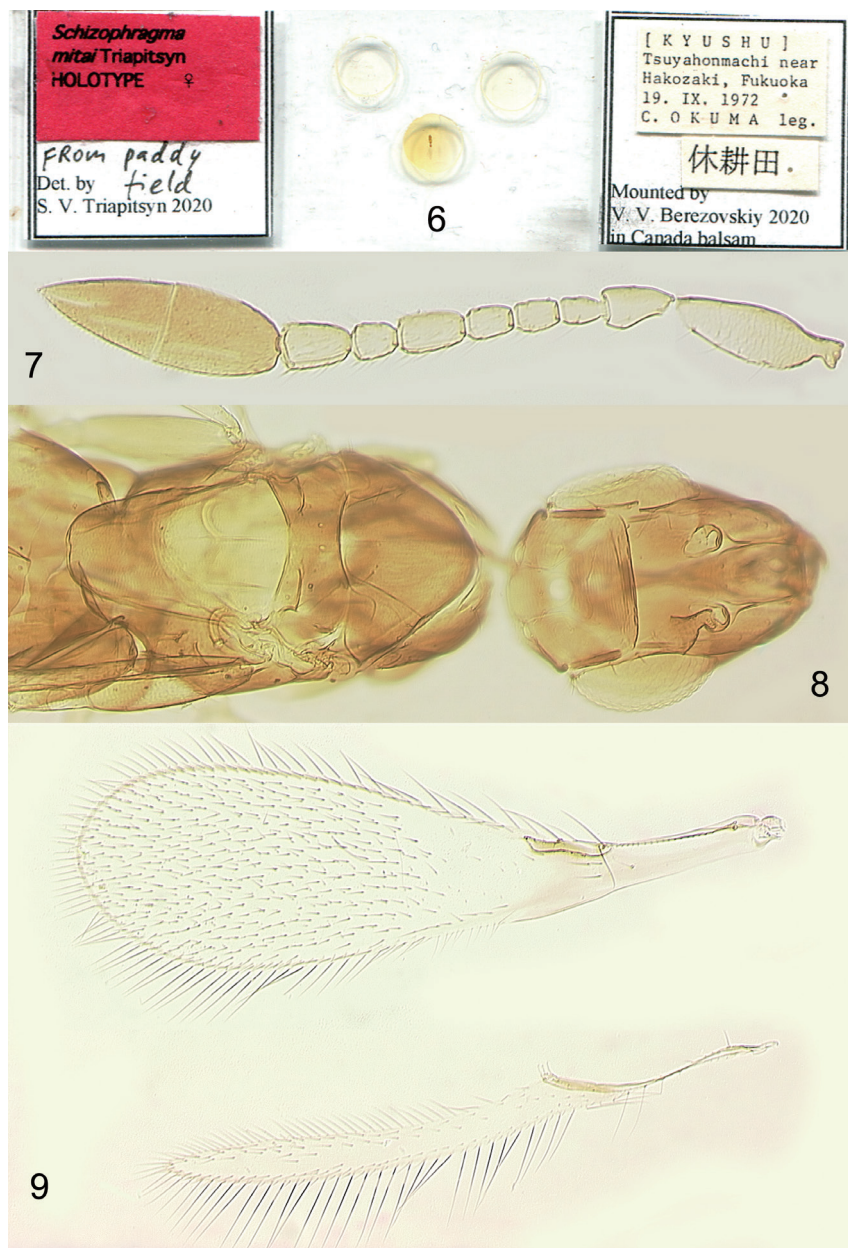
Comments. *Schizophragma* belongs to the *Anagrus* group of genera (Lin et al., 2007); its diagnoses were provided by Huber (1987), Lin et al. (2007), Rehmat and Anis (2015), and Huber et al. (2020). Triapitsyn (2018) transferred the Neotropical species, *S. saltensis* Ogloblin, 1949, which has an entire clava of the female antenna, to *Anagrus*, so all known species of *Schizophragma* have a 2-segmented clava in females. Triapitsyn and Huber (2000) first recorded the genus from the Palaearctic region without providing any details other than that it was known from southern Japan. This genus is known from the Afrotropical (new record), Nearctic (including Bermuda [new record]), Neotropical, Oriental, and Eastern and Western (Canary Islands) Palaearctic regions as well as from Australia,

Fiji and the Hawaiian Islands (Huber, 1987; Lin et al., 2007; Koponen and Triapitsyn, 2016). Its greatest diversity is in the Neotropical region, where it is not uncommon. Hosts of *Schizophragma* are unknown in the Old World but some species in the New World parasitize eggs of Membracidae (Hemiptera) (Ogloblin, 1949; Huber, 1987).

***Schizophragma mitai* Triapitsyn sp. nov.**

urn:lsid:zoobank.org:act:025CE2D8-2420-4EAF-9F92-AA48DC610D65

Type material. Holotype female, deposited in ELKU, on slide (Fig. 6) labeled: 1. “[KYUSHU] Tsuyahonmachi near Hakozaki, Fukuoka 19. IX. 1972 C. OKUMA leg.”; 2. [fallow rice field (Kyuukouden)] “休耕田”; 3. “Mounted by V. V. Berezovskiy 2020 in Canada balsam”; 3. [red] “*Schizophragma mitai* Triapitsyn HOLOTYPE ♀”; 4. “From paddy field Det. by S. V. Triapitsyn 2020”. The holotype (Figs. 7-10) is in good condition, complete, dissected under 3 coverslips; it was remounted from a point. Paratypes: same

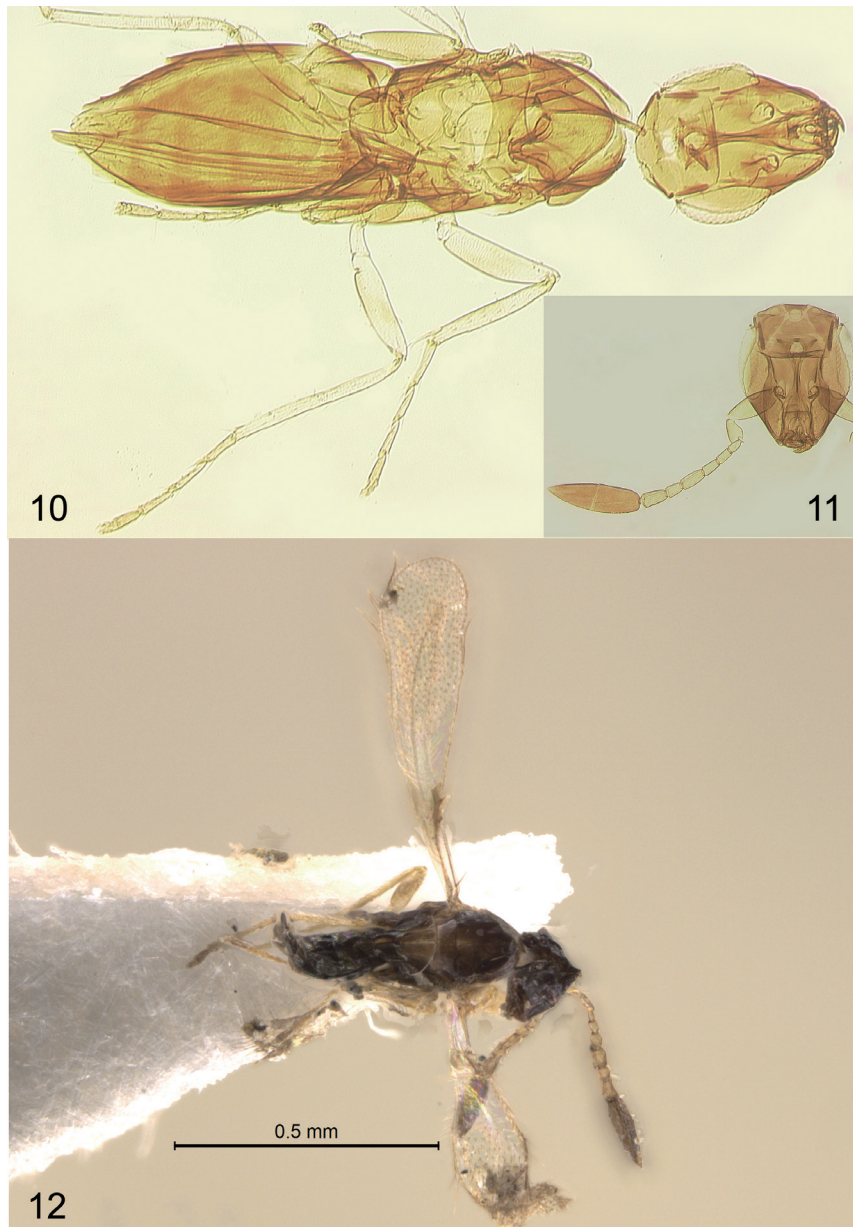


Figs. 6-9. *Schizophragma mitai* sp. nov. female (holotype). 6: Slide; 7: antenna; 8: head and mesosoma; 9: fore and hind wings.

original label data as the holotype except: 2. [paddy field] “水田” [1 female on slide, ELKU] and 2. [waterway 1] “水路1” [1 female on slide, ELKU (Fig. 11)]; 1. “2. X. 1972”, 2. [paddy field] “水田” [1 female on point (Fig. 12), ELKU]. Also 1 female on slide [ELKU] labeled: 1. “[KYUSHU] Gokokujinja, Fukuoka-city (Fukuoka)”; 2. “12. IX. 1969 M. Miyazaki”; 3. [misidentification] “*Stethynium* det. C. Yoshimoto, 1987”.

Diagnosis. Morphologically, *S. mitai* sp. nov. differs from the Oriental and Australian species, *S. indica* Rehmat and Anis, 2015 (Figs. 13-14), in having mps on F4 and F6 of the female antenna (2 on each) (Fig. 7), whereas the latter species (Figs. 14) has mps on F3 and F5 (1 on each) (Rehmat and Anis, 2015), as indicated in the key below to the Old World species of the genus. Also, the head in frontal view is notably higher than wide (about 1.2×), in *S. mitai* (Figs. 8, 10-11) but about as high as wide in *S. indica* (Rehmat and Anis, 2015, p. 309, fig. 1). None of the described New World species of *Schizophragma*, revised and keyed by Huber (1987), has this unique combination of distribution and number of mps (only on F4 and F6 of the female antenna).

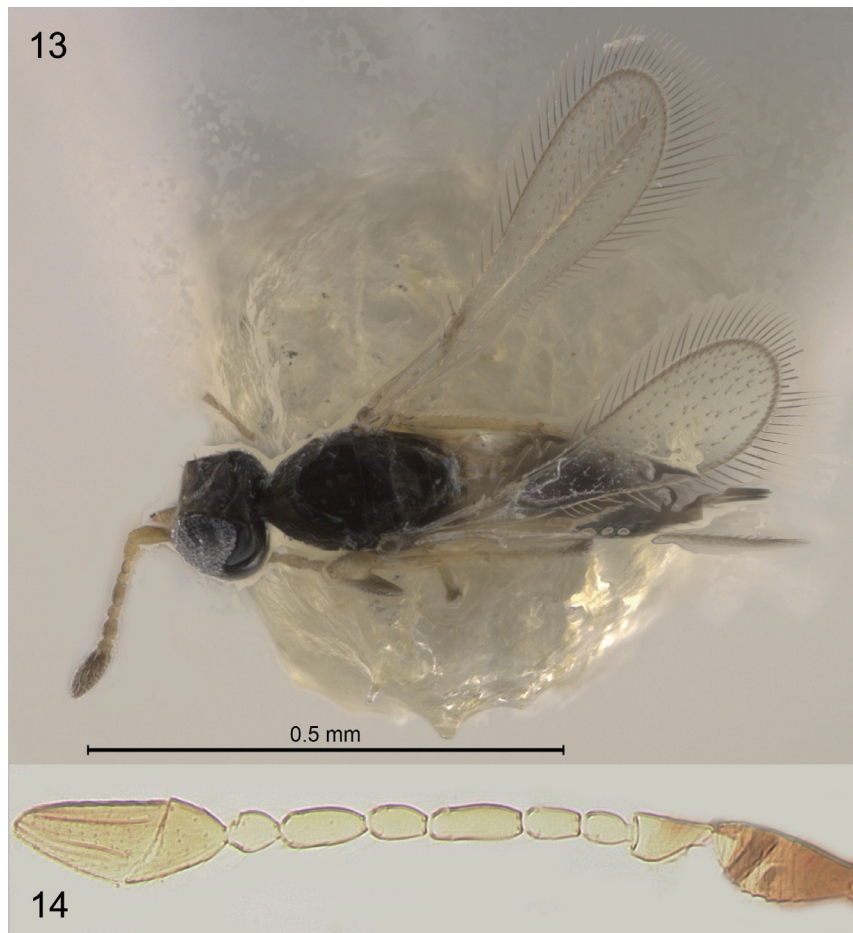
Description. Female (holotype and paratypes). Body length of dry-mounted, shriveled paratype about 600 µm. Body (Figs. 10,



Figs. 10-12. *Schizophragma mitai* sp. nov. female. 10: Body (holotype); 11: head and antenna (paratype); 12: habitus (paratype).

12) mostly dark brown except scutellum a little lighter (brown) and frenum pale brownish; scape and pedicel light brown, funicle light brown to brown, clava brown (darker than funicle); fore wing slightly infumate, more so behind venation, hind wing almost hyaline; legs mostly light brown except meso- and metacoxa dark brown and metafemur mostly brown. Head (Figs. 8, 10-11) in frontal view about 1.2× higher than wide; toruli at and below lower eye margin, subtorular grooves present; ocellar triangle with 2 pairs of setae. Antenna (Figs. 7, 11) with scape 2.5-3.1× as long as wide (3.0× in the holotype), with cross-ridges, pedicel longer than F1; all funicular segments at least a little longer than wide, F4 and F6 longer than other funicular segments (F6 the longest), mps on F4 (2) and F6 (2); clava 3.1-3.5× as long as wide (3.1× in the holotype), slightly longer than combined length of F3-F6, basal claval segment (with 2 mps) about as long as apical segment (with 5 mps). Mesosoma (Figs. 8, 10) shorter than gaster; mesophragma barely notched. Fore wing (Fig. 9) 3.3-3.4× as long as wide (3.4× in the holotype), longest marginal seta about 0.4× maximum wing width; distal macrochaeta 1.2× length of proximal macrochaeta; disc densely setose in apical half, with 4-6 setae (6 in the holotype) behind venation and almost bare just beyond venation. Hind wing (Fig. 9) 13.6-15.9× as long as wide (13.6× in the holotype), longest marginal seta 2.1-2.4× maximum wing width (2.1× in the holotype); disc mostly bare except for admarginal rows of setae and an additional complete row of setae along anterior margin and a few scattered setae. Ovipositor (Fig. 10) extending anteriorly almost to anterior margin of propodeum and barely exerted beyond apex of gaster posteriorly (by 0.04× total ovipositor length in the holotype), 2.0-2.1× length of metatibia (2.0× in the holotype).

Measurements (µm) of the holotype (as length or length: width). Mesosoma 350; gaster 450; ovipositor 522. Antennal segments: scape 127; pedicel 51; F1 28; F2 30; F3 33; F4 48; F5 32; F6 51; clava 185. Fore wing 772: 230; longest marginal seta 99. Hind wing



Figs. 13-14. *Schizophragma indica* Rehmat and Anis, 2015 female (Forest Research Station, Khao Chong, Trang, Thailand). 13: Habitus; 14: antenna.

707: 52; longest marginal seta 107.

Male. Unknown.

Etymology. This new species is named after Toshiharu Mita, a hymenopterist and curator of ELKU, who kindly loaned me specimens of the new species.

Distribution. Palaearctic region: Japan (Kyushu Island).

Hosts. Unknown.

Comments. The following specimens of *S. indica* were examined: Singapore, Central Region, Rifle Range Road, Bukit Timah Reserve, 1°21'18"N 103°47'49"E, 45 m, 8.vii.2010, J. Mottern [1 female, UCRC]. Thailand: Phetchabun, Kaeng Krachan National Park, 16.x.1982, M. Hämäläinen (light trap) [1 female, FMNH]. Trang, Khao Chong, Forest Research Station, 7°33'02"N 99°47'23"E, 75 m: 20-21.i.2005, D. Lohman (Malaise trap) [1 female, UCRC]; 4-9.ii.2005, D. Yanega (UV light at laboratory) [1 female, UCRC] (Figs. 13-14). Vietnam, Cát Tiên National Park, xii.2011, Z. A. Yefremova, V. D. Kravchenko (Malaise trap) [1 female, UCRC]. These are new country distribution records; earlier, Triapitsyn (2014) reported a *Schizophragma* sp. from Thailand, which turned out to be *S. indica*. The following specimens apparently also belong to *S. indica*: Thailand, Surat Thani, Sok River, 8°54'26"N 98°31'59"E, 75 m, 20-21.ii.2005, D. Yanega [3 males, UCRC]. The same species was reported, as a *Schizophragma* sp., from several states in India by Anis and Rehmat (2013) and Rameshkumar et al. (2015), and also as *S. indica* by Athithya et al. (2020).

Rehmat and Anis (2015, p. 307) commented that the undetermined *Schizophragma* species from Queensland, Australia, illustrated by Lin et al. (2007, p. 105, figs. 242-246), appeared to be conspecific with *S. indica* from India. Indeed, having examined the following specimens: Australia, Queensland, Brisbane Forest Park, Mount Glorious, Mount Nebo Road, 27°20'28"S 152°46'12"E, 517 m, 5-6.xii.2002, J. George, J. Munro, A. Owen (sweeping in rainforest) [3 females, 2 males, UCRC], I came to the same conclusion. I have also seen a female of another, undescribed species of *Schizophragma* from Queensland (specimen in UCRC) that does not fit either *S. indica* or *S. mitai* sp. nov. *Schizophragma indica* has the same distribution of mps on segments of the female antennal funicle as *S. parvula* Ogloblin, 1949 from Argentina, from which it differs by the morphological features indicated in Rehmat and Anis (2015, p. 310), and also as the undescribed Afrotropical species known to me from four females from the Republic of the Congo (specimens in UCRC), in which funicular segments are relatively longer than in *S. indica*. I examined the following non-type specimen of *S. parvula* from its type locality: Argentina, Buenos Aires, Tigre, 34°23'50"S 58°34'32"W, 5 m, 3-10.i.2006, G. Logarzo (Malaise trap near stream) [1 female, UCRC].

A new distribution record for *S. bicolor* (Dozier, 1932) is: Bermuda, Southampton Parish, 4 Munro Lane, 9.ix-24.x.2001, J. & M. Munro (Malaise trap) [2 females, UCRC].

Key to described Old World species of *Schizophragma* (females)

- 1 Mps only on F3 (1) (fig. 890, p. 320 in Huber et al. (2020)) (Canary Islands; Nearctic [including Bermuda] and Neotropical regions, Fiji, Hawaiian Islands) *S. bicolor* (Dozier, 1932)
- Mps on more than one funicular segment 2
- 2 Mps on F3 (1) and F5 (1) (Fig. 14) (India, Singapore, Thailand, Vietnam; Australia) *S. indica* Rehmat and Anis, 2015
- Mps on F4 (2) and F6 (2) (Figs. 7, 11) (Japan) *S. mitai* Triapitsyn sp. nov.

Other new, interesting records of various Chalcidoidea and Mymarommatoidea (Hymenoptera) recently identified from Kyushu, Japan

Material examined (all in ELKU). The following specimens were identified from Japan, Kyushu Island, Fukuoka Prefecture,

Fukuoka City, Nishi-ku, Motoooka, Fukuoka, Kyushu University Ito campus, 33.597°N 130.214°E, 42 m, Entomological Laboratory, Faculty of Agriculture, Kyushu University personnel, Malaise trap:

Mymaridae (Chalcidoidea):

Alaptus minimus Westwood, 1839, 12-26.vi.2019, 1 female (new record for Japan).

Anagrus (*Anagrus*) *takeyanus* Gordh, 1977, 12-26.vi.2019, 1 female (new record for Kyushu Island).

Erythmelus (*Erythmelus*) *flavovarius* (Walker, 1846), 12-26.vi.2019, 1 female (new record for Japan).

Litus cynipseus Haliday, 1833: 29.v-11.vi.2019, 1 female; 12-26.vi.2019, 2 females; 18.ix-2.x.2019, 1 female.

Mymarommatidae (Mymarommatoidea): *Mymaromella chaoi* (Lin, 1994), 12-26.vi.2019, 1 female (new record for Japan).

Eulophidae (Chalcidoidea):

Ceranisus menes (Walker, 1839): Japan, Kyushu Island, Saga Prefecture, Fuji, Kamiozoegawa, 10.viii-9.x.1973, K. Yamagishi [8 females, ELKU].

Other Mymaridae:

Alaptus minimus Westwood, 1839: Japan, Kyushu Island, Fukuoka Prefecture, Mt. Hiko, Hikosan Biological Laboratory, Kyushu University, 33°28'57"N 130°54'33"E, 685 m, 14.x.2019, S. V. Triapitsyn, yellow pan traps [1 female, UCRC] (new record for Japan).

Anagrus (*Anagrella*) *hirashimai* Sahad, 1982: Japan, Kyushu Island, Miyazaki Prefecture, Miyazaki, University of Miyazaki Kibana campus, 31°49'46"N 131°24'46"E, 37 m, 7-8.ix.2019, S. V. Triapitsyn, D. Ando, T. Minami, T. Adachi-Hagimori, yellow pan traps in *Imperata cylindrica* (L.) Palisot de Beauvois (Poaceae) patch [1 female, 1 male, UCRC].

Anagrus (*Paranagrus*) *optabilis* (Perkins, 1905): Japan, Kyushu Island, Miyazaki Prefecture, Miyazaki, University of Miyazaki Kibana campus, 31°49'46"N 131°24'46"E, 37 m, 3-6.ix.2019, T. Adachi-Hagimori, S. V. Triapitsyn, emerged from *Imperata cylindrica* plants [7 females, UCRC].

Camptoptera magna Soyka, 1946: Japan, Kyushu Island, Fukuoka Prefecture, Fukuoka: Tsuyahonmachi (near Hakozaeki), waterway 1, 13.i.1973, C. Okuma [1 female, ELKU] (new record for Japan).

Lymaenon aureus (Girault, 1911): Japan, Kyushu Island, Fukuoka Prefecture, Fukuoka: Hakozaeki, 18.vi.1982, K. A. Sahad (2 females, ELKU); Tsuyahonmachi (near Hakozaeki), 22.viii.1972, C. Okuma [1 female, ELKU].

Eubroncus ? *tibetanus* Jin & Li, 2014: Japan, Kyushu Island, Fukuoka Prefecture, Mt. Hiko, 8.vii.1970, K. Nozato [1 female, ELKU].

Nepolynema grande (Taguchi, 1971): Japan, Kyushu Island, Fukuoka Prefecture, Mt. Hiko, 10.vii.1970, K. Nozato [2 females, ELKU].

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九州産ホソハネコバチ科の1新亜属と2新種

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要旨：九州の佐賀県で得られた個体に基づいて *O. (Kyushumymar) yamagishii* Triapitsyn sp. nov. を新種として記載し、本種をタイプ種として *Omyomymar* 属（ハチ目、ホソハネコバチ科）の新亜属（*O. (Kyushumymar) Triapitsyn* subgen. nov.）を設立した。また、同科の新種として、福岡県福岡市より得られた個体に基づいて *Schizophragma mitai* Triapitsyn sp. nov. を記載し、旧北区の *Omyomymar* 属と旧世界の *Schizophragma* 属のメスに基づく検索表を作成した。これらに加えて、福岡市西区元岡に位置する九州大学伊都キャンパス構内に設置したマレーゼトラップで得られたホソハネコバチ科及びムカシホソハネコバチ科、九州各地より得られたいくつかのコバチ上科の注目すべき種について記録した。*Alaptus minimus* Westwood, 1839、*Camptoptera magna* Soyka, 1946、*Erythmelus (Erythmelus) flavovarius* (Walker, 1846)（ホソハネコバチ科）、及び *Mymaromella chaoi* (Lin, 1994)（ムカシホソハネコバチ科）を新たに日本から記録した。また、*Schizophragma indica* Rehm and Anis, 2015はシンガポール、タイ及びベトナムからの初記録となる。