

**Three new species of Phylini
(Hemiptera: Heteroptera: Miridae: Phylinae)
from Central Asia**

Fedor V. KONSTANTINOV

Department of Entomology, Faculty of Biology and Soil Sciences, St. Petersburg State University,
Universitetskaya nab. 7/9, 199034 St Petersburg, Russia; e-mail: fkonstantinov@hotmail.com

Abstract. Three new species of Phylini, *Pleuroxonotus stysi* sp. nov. (Eastern Kazakhstan), *Macrotylus subattenuatus* sp. nov. (Northern Kazakhstan), and *Lepidargyrus fasciatus* sp. nov. (Uzbekistan) are described. Illustrations of the male genitalia, tarsus and pretarsus, photographs of the dorsal habitus, hosts, and distributional records are provided for each species.

Keywords. Heteroptera, Miridae, Phylini, *Pleuroxonotus*, *Macrotylus*, *Lepidargyrus*, taxonomy, new species, Kazakhstan, Uzbekistan

Introduction

The present paper represents part of a larger effort to improve our knowledge of the still poorly known Central Asian fauna. Examination of specimens retained in the Zoological Institute, Russian Academy of Sciences, revealed three new species of the plant bug genera *Pleuroxonotus* Reuter, 1903, *Macrotylus* Fieber, 1858, and *Lepidargyrus* Muminov, 1962.

Pleuroxonotus is a small group currently containing three species of Mediterranean or Central Asian distribution. The genus is well defined, undoubtedly monophyletic, and closely related to the monotypic *Pronototropis* Reuter, 1879 (LINNAVUORI 1971, 1988).

The genus *Macrotylus* numbers slightly less than 70 described species, about three quarters of those have been described from the Palaearctic. The size and coloration of *Macrotylus* are quite variable but the genus can be unequivocally recognized by the structure of pretarsus with strongly curved, basally wide claw and free pulvillus reaching apex of claw. Eight species of *Macrotylus* were known from Central Asia prior to this study (KERZHNER & JOSIFOV 1999; KONSTANTINOV & NAMYATOVA, in press).

Lepidargyrus was originally described by MUMINOV (1962) to accommodate two species from Central Asia and Iran. DRAPOLYUK (1993) transferred *Psallus ancorifer* group of species to

Lepidargyrus, described two new species, provided a key, descriptions, distributional records, and figures of male genitalia for all species. *Lepidargyrus* in its modern concept contains 13 species (KERZHNER & JOSIFOV 1999) mainly distributed in Central Asia, Mediterranean Region, Iran and Caucasus, while *L. ancorifer* (Fieber, 1858) is also known from Central Europe and was introduced to the Nearctic (WHEELER & HENRY 1992, SCHUH 2000).

The paper is dedicated to Pavel Štys, who during a long and distinguished career has made inestimable contributions to hemipterology.

Material and methods

Bar code labels were attached to the specimens and are referred to as unique specimen identifiers (USIs). Generally each USI label corresponds to a single specimen; however, some USI labels correspond to two or three specimens in cases when several specimens are mounted on one pin. As a way of accessing additional information, such as color photographs, specimens dissected, notes, and specimens photographed for specimens examined in the Planetary Biodiversity Inventories Project on Plant Bugs and the present paper please refer to the www.discoverlife.org website. Appendix 1 shows the USI for the given illustration.

All measurements are in millimeters (see Table 1). All scale bars are 0.05 mm. All specimens examined in the course of this study, including types, are retained at the Zoological Institute, St. Petersburg, Russia.

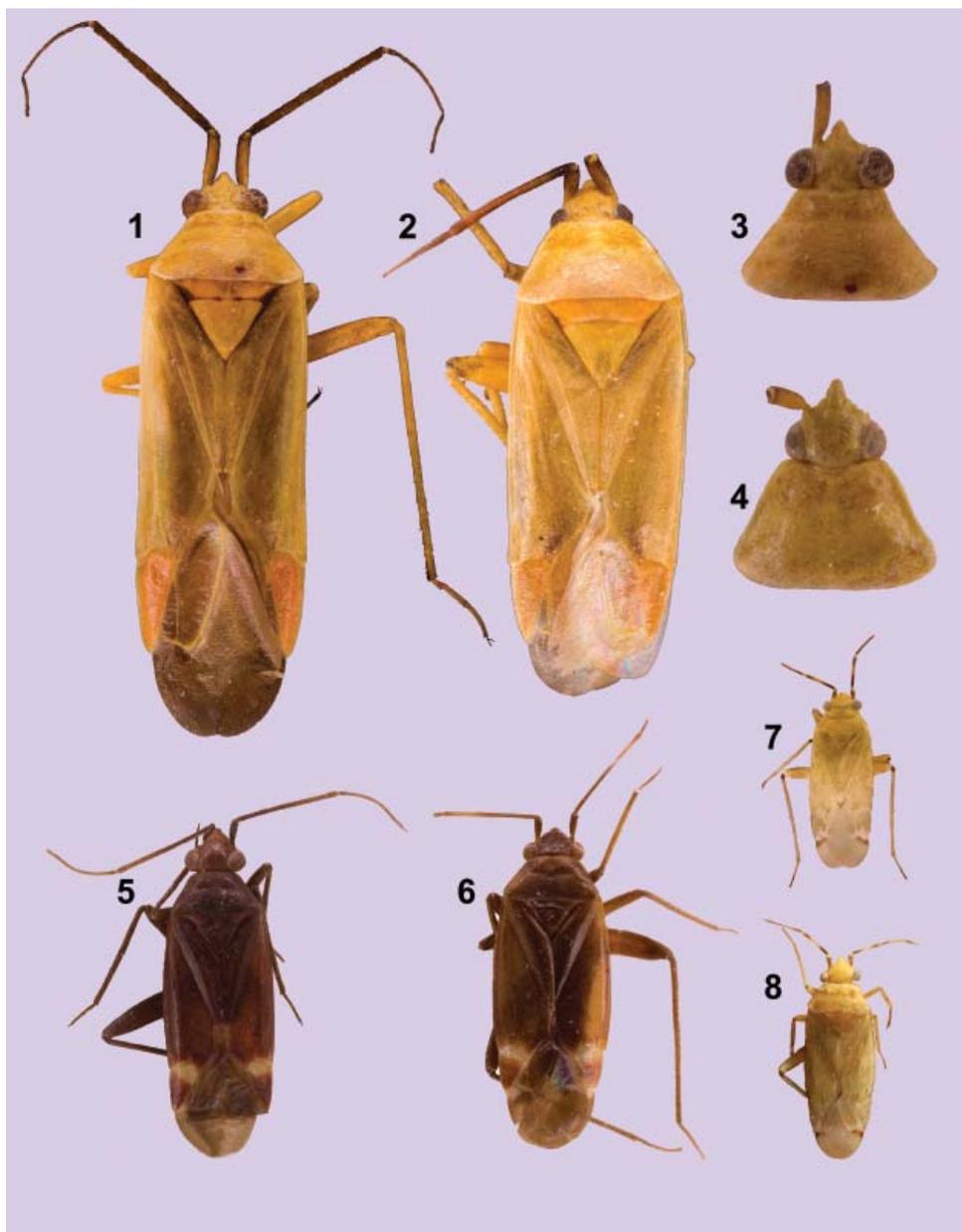
Taxonomy

Pleuroxonotus stysi sp. nov.

(Figs. 1-4, 9-10, 13-17)

Type material. HOLOTYPE: ♂, KAZAKHSTAN: EAST KAZAKHSTAN PROV.: Zaysan city, 5 km along Rd to Zaysan Lake, 47.48333°N 84.8°E, 21 Sep 1971, Asanova (AMNH_PBI 00240875). PARATYPES: KAZAKHSTAN: EAST KAZAKHSTAN PROV.: E coast of Alakol Lake, 46.2°N 82°E, Chernyakovskaya, 1 ♀ (AMNH_PBI 00153716). Kyzylkum Sands on Irtysh river, 30 km S Samarskoye, 48.744°N 83.368°E, 03 Aug 1978 – 04 Aug 1978, I. M. Kerzhner, *Chondrilla* sp., 1 ♂ (AMNH_PBI 00153711). Zaysan city, 5 km along Rd to Zaysan Lake, 47.48333°N 84.8°E, 21 Sep 1971, Asanova, 2 ♂♂ (AMNH_PBI 00153708, AMNH_PBI 00252579), 1 ♀ (AMNH_PBI 00155342); 28 Aug 1975, Asanova, 3 ♂♂ (AMNH_PBI 00153709-AMNH_PBI 00153710, AMNH_PBI 00236850), 3 ♀♀ (AMNH_PBI 00224404, AMNH_PBI 00224481, AMNH_PBI 00225936); 05 Aug 1975, Asanova, 3 ♀♀ (AMNH_PBI 00150813, AMNH_PBI 00153721, AMNH_PBI 00159191). **Additional material examined.** KAZAKHSTAN: EAST KAZAKHSTAN PROV.: Kyzylkum Sands on Irtysh river, 30 km S Samarskoye, 48.744°N 83.368°E, 03 Aug 1978 – 04 Aug 1978, I. M. Kerzhner, *Chondrilla* sp., 4 larvae (AMNH_PBI 00153722-AMNH_PBI 00153725).

Description. Male. COLORATION (Figs. 1-2): Bright yellow. **Head:** Uniformly yellow; labium with darkened apex of last segment; antenna pale, dirty yellow to light yellow-brown. **Thorax:** Pronotum, scutellum, and thoracic pleurites uniformly bright yellow, without any dark markings. **Legs:** Uniformly yellow, with dark tibial spines, apically darkened third tarsal segment and claws. **Hemelytra:** Uniformly yellow to greenish-yellow, usually with wide, indistinctly bordered pale brown stripe along inner margin; entire cuneus except lateral margin distinctly orange red, uniformly greenish-yellow in fresh specimens; membrane with smoky,



Figs. 1-8. Dorsal habitus photographs. 1-4 – *Pleuroxonotus stysi* sp. nov. 1 – male; 2 – female; 3 – head and pronotum, male; 4 – head and pronotum, female. 5-6 – *Lepidargyrus fasciatus* sp. nov. 5 – male; 6 – female. 7 – *Macrotylus subattenuatus* sp. nov., male; 8 – *Macrotylus attenuatus* Jakovlev, 1882, female, lectotype.

semitransparent inner region and brown lateral stripe extending through both cells to apex; veins yellow. Abdomen: Uniformly yellow.

SURFACE AND VESTITURE. Dorsum shining, pronotum slightly granulate, scutellum and hemelytra smooth; dorsum with dense, simple, decumbent, short and thick black setae, and with simple, decumbent, short silver setae on scutellum and at sides of pronotum and hemelytra; venter with reclining, pale, simple setae, scarce on thorax and dense on abdomen; all appendages with dense short, black, semiadpressed, simple setae, especially dense on antennae; tibial spines shorter than width of tibia; first antennal segment without spinelike setae on medial surface.

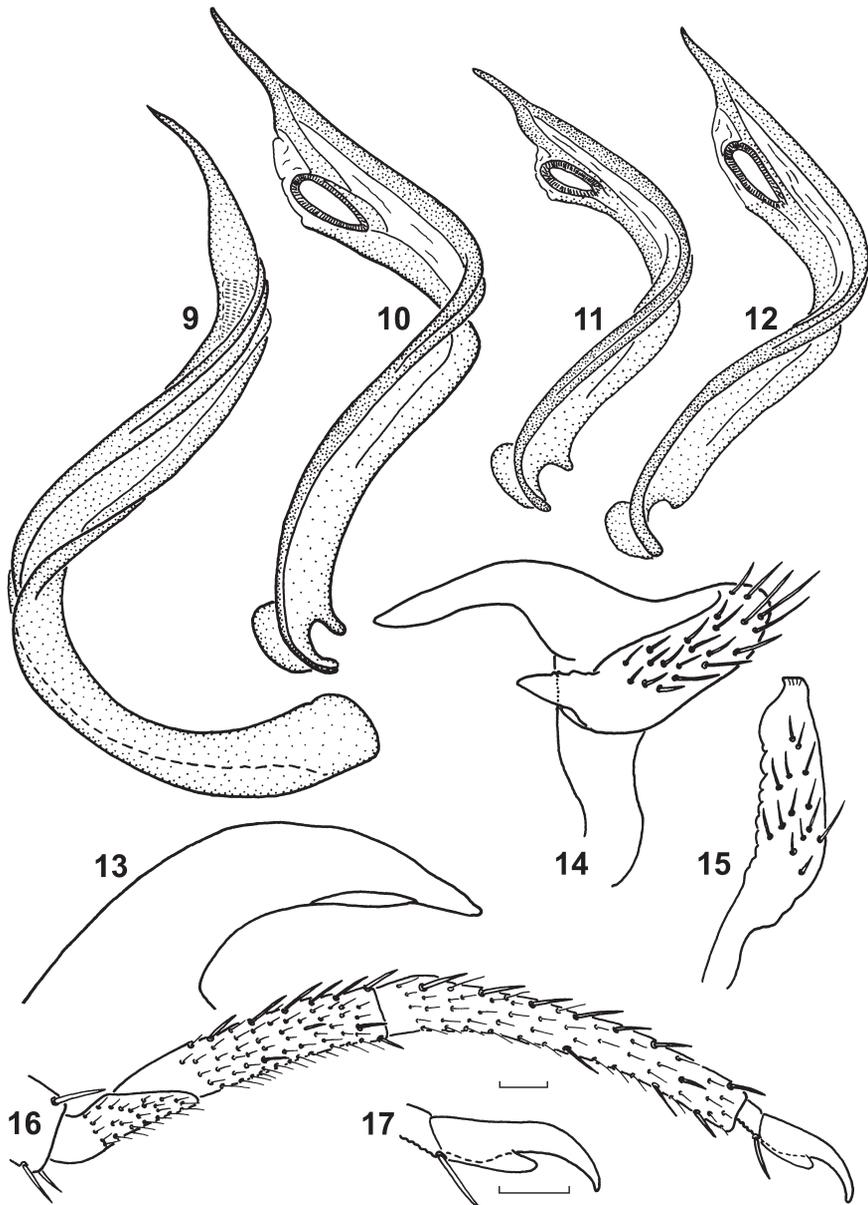
STRUCTURE. Elongate oval, body $3.4-3.7 \times$ as long as width of pronotum; total body length $7.5-8.0$. Head (Fig. 3): Elongate, projecting anteriorly, about $1.75 \times$ as long as eye in anterior view, with very large eyes; vertex $1.2-1.4 \times$ as wide as eye, frons weakly convex and projecting beyond anterior margin of eyes, clypeus prominent, extending far beyond antennal fossa; antenna rather long, second antennal segment $1.0-1.2 \times$ as long as basal width of pronotum and $1.7-2.0 \times$ as long as width of head; labium slightly surpassing fore coxae. Thorax: Pronotum $1.8-2.0 \times$ as wide as long, with strongly carinate anteriolateral angles, distinctly carinate and slightly concave lateral margins, rounded posterolateral angles; calli distinctly demarcated by shallow impression; metathoracic scent-gland evaporatory area elongate oval, broadly rounded dorsally. Legs: Slender, hind femora rather thin and long, almost reaching apex of abdomen, third tarsal segment slightly longer than first and second segments combined (Fig. 16), claw rather long, thin, moderately bent at middle, pulvillus flaplike, barely reaching midpoint of claw, apically free, not attach to claw (Fig. 17).

MALE GENITALIA. Genital capsule: Approximately one-third of abdomen, conical, gradually tapering and broadly rounded apically, without distinctive ornamentation. Parameres: Right paramere narrow, lanceolate, with comparatively short, truncate apical process (Fig. 15); left paramere with strongly sclerotized, claw-shaped, dorsally tuberos sensory lobe, apical process thin, nearly as long as whole body of paramere, distinctly curved at middle, apically rounded (Fig. 14). Apex of theca: Typical of many phylines (Fig. 13). Vesica: S-shaped, body of vesica with several shallow longitudinal ridges, apical portion with two sclerotized straps separated by membranous area and apically terminating with straight, long, thin and acute apical blade; secondary gonopore subapical, with well developed sculpture, placed on membrane lateral to sclerotized strap of vesica (Figs. 9-10).

Female. **COLORATION.** As in male, but usually paler (Fig. 2).

SURFACE AND VESTITURE. As in male.

STRUCTURE. Somewhat smaller and broader than male, length $3.1-3.4 \times$ width of pronotum, total body length $7.3-7.8$. Head (Fig. 4): Distinctly projecting anteriorly, about 2.5 as long as eye in anterior view, eyes smaller, dorsal width of eye $0.7-0.85 \times$ than in male, vertex $2.2-2.4 \times$ as wide as eye, clypeus markedly prominent, wider and distinctly more projected anteriorly than in male; second antennal segment $0.9-1.1 \times$ as long as basal width of pronotum, $1.8-2.0 \times$ as long as width of head. Thorax: Pronotum $1.6-1.9 \times$ as wide as long, with lateral margins delimited by shallow longitudinal impressions, finely upturned and more strongly carinate than in male (Fig. 4).



Figs. 9-17. *Pleuroxonotus* spp., genitalia and tarsus. 9-12 – vesica. 9-10 – *P. stysi* sp. nov.: 9 – lateral view; 10 – ventral view. 11 – *P. longicornis* (Reuter, 1900), ventral view. 12 – *P. nasutus* Reuter, 1904, ventral view. 13-17 – *P. stysi* sp. nov.: 13 – apex of theca; 14 – left paramere; 15 – right paramere; 16 – tarsus; 17 – pretarsus. Scale bars = 0.05 mm.

Differential diagnosis. Recognized by the large body size, almost pale general coloration with orange tinge on cuneus (Figs. 1-2), short labium slightly surpassing fore coxae, and large eyes in males (Fig. 3). Easily distinguished from all three hitherto known species of the genus by the total body length exceeding 7.3 in both sexes, while body length in other species reaching at most 7.0. *Pleuroxonotus nasutus* Reuter, 1904 resembles the new species in having the short rostrum and trace of pale brown stripe along inner margin of hemelytra, but differs in the uniformly pale cuneus and smaller eyes, with vertex $1.4-1.5 \times$ as wide as eye in males, $1.9-2.1 \times$ as wide as eye in females (see description of metrics of *P. stysi* sp. nov.). *Pleuroxonotus longicornis* (Reuter, 1900) close to *P. stysi* sp. nov. in having comparatively large eyes, but differs in labium extending to middle coxae, long and narrow body, males $3.9-4.3 \times$, females $3.6-3.7 \times$ as long as basal width of pronotum (see description of metrics of *P. stysi* sp. nov.), somewhat longer antennae, and uniformly pale cuneus. Male genitalia of these species, although differing in size and degree of sclerotization, are structurally too similar to be used as reliable taxonomic characters (Figs. 10-12).

Etymology. The species is named in honor of Prof. Pavel Štys on the occasion of his 75th birthday and for his many contributions to our knowledge of Heteroptera.

Host plant. *Chondrilla* sp. (Asteraceae).

Distribution. Kazakhstan, East Kazakhstan province.

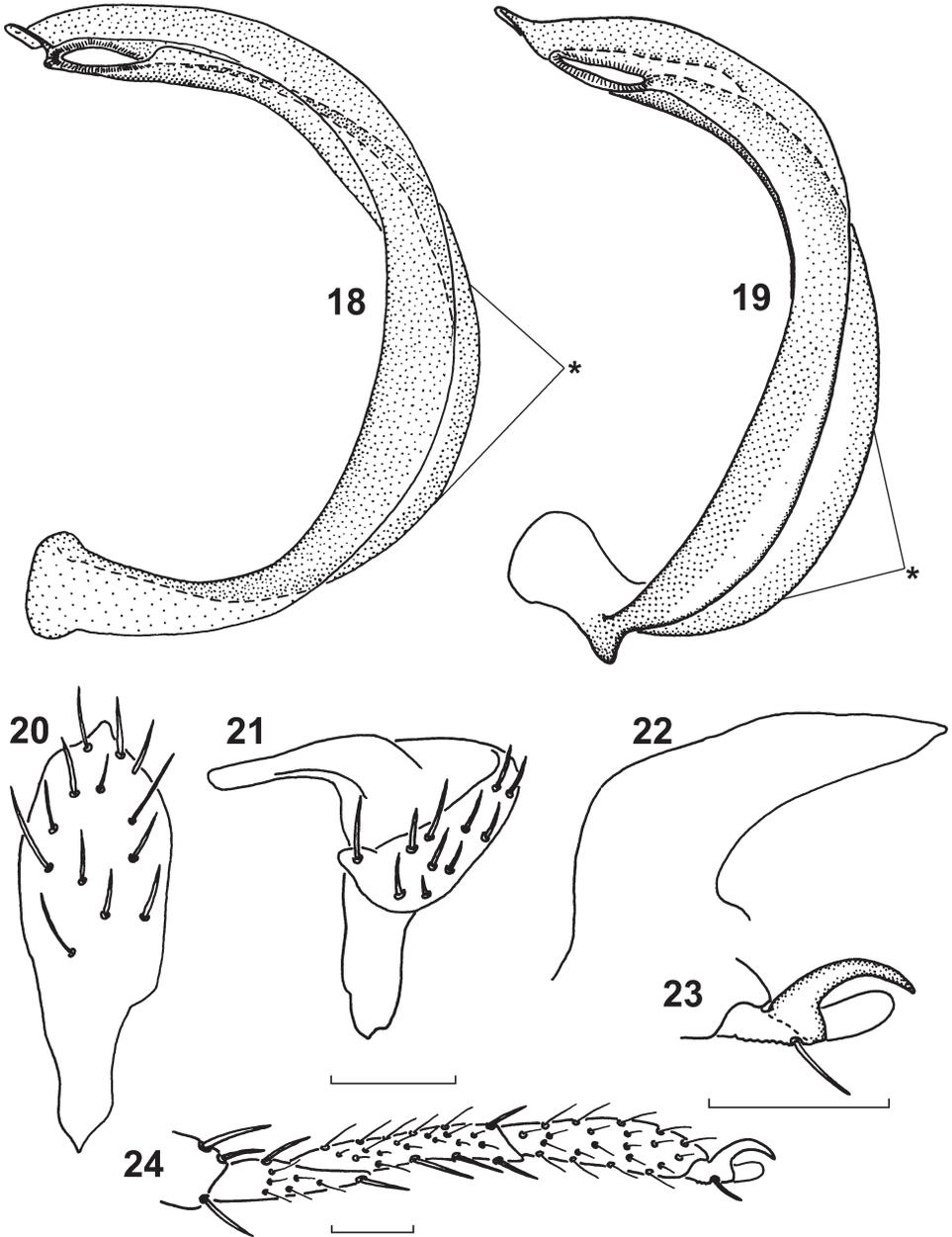
***Macrotylus (Alloeonycha) subattenuatus* sp. nov.**

(Figs. 7, 18-24)

Type material. HOLOTYPE: ♂, KAZAKHSTAN: AKMOLA PROV: Kyzyl-Sengir Mt., 23 km S of Istembet, nr Tengiz Lake, 50.26667°N 69.63333°E, 08 Jun 1962, I. M. Kerzhner, *Potentilla* sp. (AMNH_PBI 00236881). PARATYPES: KAZAKHSTAN: AKMOLA PROV.: Kyzyl-Sengir Mt., 23 km S of Istembet, nr Tengiz Lake, 50.26667°N 69.63333°E, 08 Jun 1962, I. M. Kerzhner, *Potentilla* sp., 13 ♂♂ (AMNH_PBI 00234310-AMNH_PBI 00234311, AMNH_PBI 00236878, AMNH_PBI 00236880, AMNH_PBI 00236882-AMNH_PBI 00236883, AMNH_PBI 00236885-AMNH_PBI 00236886, AMNH_PBI 00236888) and 30 ♀♀ (AMNH_PBI 00234310-AMNH_PBI 00234312, AMNH_PBI 00236877-AMNH_PBI 00236880, AMNH_PBI 00236884-AMNH_PBI 00236888).

Description. Male. COLORATION (Fig. 7). Greenish-yellow, naturally pale green. **Head:** Uniformly pale; antenna pale yellow, first segment pale brown, with pale base and apex, rarely pale yellow with incomplete pale brown ring medially; second segment with dark brown ring proximally and brown to pale brown ring distally, middle one-third and extreme apex of second segment pale yellow, third and fourth segments pale brown; labium with darkened apex of fourth segment. **Thorax:** Pronotum and thoracic venter uniformly pale. **Legs:** Pale yellow, with narrow pale brown stripe along fore margin of all or at least hind femora, bases of all tibiae dorsally dark brown, brown tibial spines, and entirely or distally darkened tarsi. **Hemelytra:** Uniformly pale except membrane; membrane smoky pale brown, semitransparent, with brown to dark brown, contrasting, narrow transverse stripe passing from apex of cells through outer margin of membrane distal to apex of cuneus; veins as well as areas proximal and distal to transverse stripe whitish. **Abdomen:** Uniformly pale.

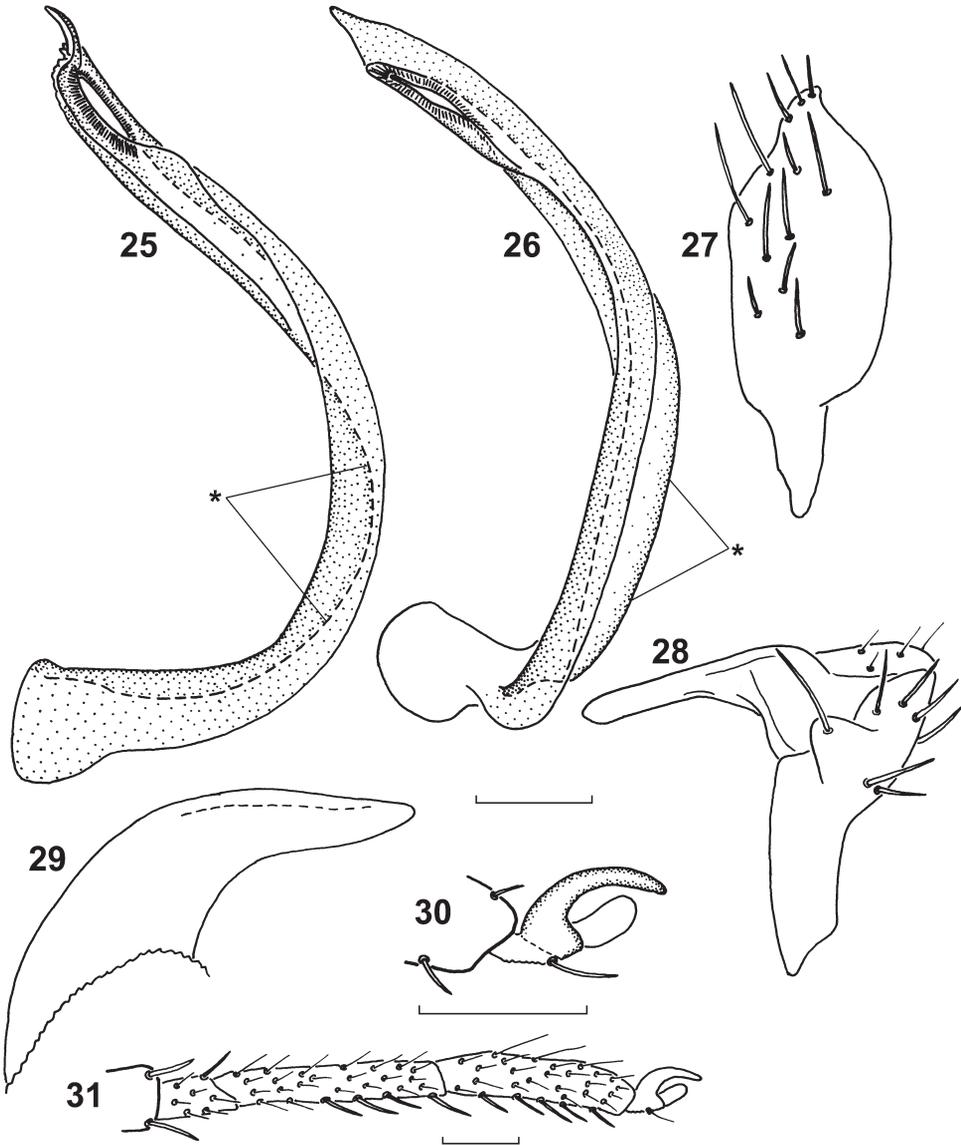
SURFACE AND VESTITURE. Dorsum smooth, shiny, with dense, dark, simple setae, semiadpressed to erect on head and apical part of pronotum, adpressed elsewhere; legs and antennae with similar setae twice as short as those on pronotum and hemelytra; tibial spines



Figs. 18-24. *Macrotylus subattenuatus* sp. nov., genitalia and tarsus. 18-19 – vesica (18 – lateral view, 19 – ventral view); 20 – right paramere; 21 – left paramere; 22 – apex of theca; 23 – pretarsus; 24 – claw. Scale bars = 0.05 mm.

slightly longer than width of tibia; first antennal segment with two spine-like setae on medial surface; venter with scarce, silver, adpressed, simple setae.

STRUCTURE: Elongate-oval, total length 1.7-2.1, body 2.9-3.3 × as long as width of pronotum. **Head:** Moderately projecting anteriorly, clypeus visible from above; vertex 2.0-2.5 ×



Figs. 25-31. *Macrotylus attenuatus* Jakovlev, 1882, genitalia and tarsus (Turkey: Kayseri). 25 – vesica, lateral view; 26 – vesica, ventral view; 27 – right paramere; 28 – left paramere; 29 – apex of theca; 30 – pretarsus; 31 – tarsus. Scale bars = 0.05 mm.

as wide as eye; second antennal segment $0.6 \times$ as long as basal width of pronotum, $0.9 \times$ as long as width of head; labium slightly or substantially surpassing hind coxa, never reaching genital segment. **Thorax:** Pronotum $2.5\text{-}2.6 \times$ as wide as long, with indistinctly demarcated calli; tarsus with somewhat incrassate third segment (Fig. 24), claw as in Fig. 23.

MALE GENITALIA. **Genital capsule:** About 40 % of abdomen, without distinctive ornamentation. **Parameres:** Shape typical for Phylini, right paramere as in Fig. 20, left paramere as in Fig. 21. **Apex of theca:** As in Fig. 22. **Vesica:** C-shaped, with uniformly sclerotized strap along lateral margins, posterior (in lateral view) flange of vesical strap wide extended beyond curvature of anterior flange (Figs. 18-19, indicated with asterisk); secondary gonopore subapical, located just proximal to short, straight, almost triangular, in ventral view, apical blade.

Female. **COLORATION, SURFACE AND VESTITURE.** As in male.

STRUCTURE. As in male, with similar body proportions. Total length 1.9-2.1, body $2.9\text{-}3.4 \times$ as long as width of pronotum. **Head:** Vertex $2.2\text{-}2.9 \times$ as wide as eye; second antennal segment $0.6 \times$ as long as basal width of pronotum, $0.8\text{-}0.9 \times$ as long as width of head. **Thorax:** Pronotum $2.3\text{-}2.7 \times$ as wide as long.

Differential diagnosis. Recognized by the small body size, color-pattern of antennae, darkened bases of tibiae, narrow transverse band on membrane behind cells, C-shaped vesica with straight apical blade, and extended posterior flange. The new species closely related to and virtually indistinguishable from *Macrotylus attenuatus* Jakovlev, 1882 in the body proportions, vestiture, color-pattern (Fig. 8), structure of tarsus (Figs. 23-24) and other characters of external morphology, as well as in the structure of theca (Fig. 22), and parameres (Figs. 20-21). Both species associated with *Potentilla* spp. (Rosaceae). *Macrotylus attenuatus* somewhat differs from the new species in the larger average size (Table 1) and vestiture of third and fourth antennal segments, with longer semierect setae, exceeding the width of respective segments. Clearly separated from *M. subattenuatus* sp. nov. by the structure of comparatively thin, J-shaped vesica, with longer, gradually curved apical blade, and posterior flange of vesica not exposed in lateral view (marked with asterisk on Figs. 25-26).

Etymology. The species name 'subattenuatus' indicates that the new species is nearest to *M. attenuatus*.

Host plant. *Potentilla* sp. (Rosaceae).

Distribution. North Kazakhstan, Akmola province.

Lepidargyrus fasciatus sp. nov.

(Figs. 5-6, 32, 38-42)

Type material. HOLOTYPE: ♂, **UZBEKISTAN:** Syrganak, Karzhantau Mt. Ridge, $41.7333^{\circ}\text{N } 70.0333^{\circ}\text{E}$, 12 Jul 1967, Asanova (AMNH_PBI 00239792). PARATYPES: **UZBEKISTAN:** Dudusay, Karzhantau Mt. Ridge, $41.7333^{\circ}\text{N } 70.0333^{\circ}\text{E}$, 13 Jul 1939, Obukhova, *Rosa* sp. (Rosaceae), 1 ♂ (AMNH_PBI 00239789), 3 ♀♀ (AMNH_PBI 00239786-AMNH_PBI 00239788). Samarkand, $38.5666^{\circ}\text{N } 68.0333^{\circ}\text{E}$, 1947, Fursov, 1 ♀ (AMNH_PBI 00239795). Sidzhak, Ugamskiy Mt. Range, $41.68^{\circ}\text{N } 70.05^{\circ}\text{E}$, 22 Jun 1958, Y. Popov, 2 ♀♀ (AMNH_PBI 00239793, AMNH_PBI 00239794). Syrganak, Karzhantau Mt. Ridge, $41.7333^{\circ}\text{N } 70.0333^{\circ}\text{E}$, 12 Jul 1967, Asanova, 2 ♀♀ (AMNH_PBI 00239790, AMNH_PBI 00239791).

Description. Male. **COLORATION** (Figs. 5-6). Dorsum uniformly reddish-brown to dirty brown. **Head:** Reddish-brown to brown; antennae with dark brown first and basal half of

second segments, remainder of lighter coloration, brown to pale brown; labium brown, with darkened apex. **Thorax:** Uniformly reddish brown to dirty brown, thoracic venter brown to castaneous. **Hemelytra:** Apical part of hemelytra usually somewhat darker than base, cuneus with contrasting transverse whitish spot at base, membrane uniformly brown, veins of inner cell and small area near apex of cuneus usually paler. **Legs:** All legs or at least hind ones darker than dorsum, uniformly brown to dark brown, tibial spines dark. **Abdomen:** Usually dark brown.

SURFACE AND VESTITURE. Dorsum shiny, smooth, pronotum weakly granulate, with mixture of evenly distributed, adpressed, slightly flattened, silver setae and long, robust simple setae; head, apical part of pronotum, and bases of hemelytra at sides with dark, erect to semiadpressed simple setae, basal part of pronotum, scutellum, and hemelytra with pale, semiadpressed to adpressed simple setae; first antennal segment with two spine-like setae on medial surface, fore margin of hind femora subapically with two similar setae; venter with pale adpressed simple setae.

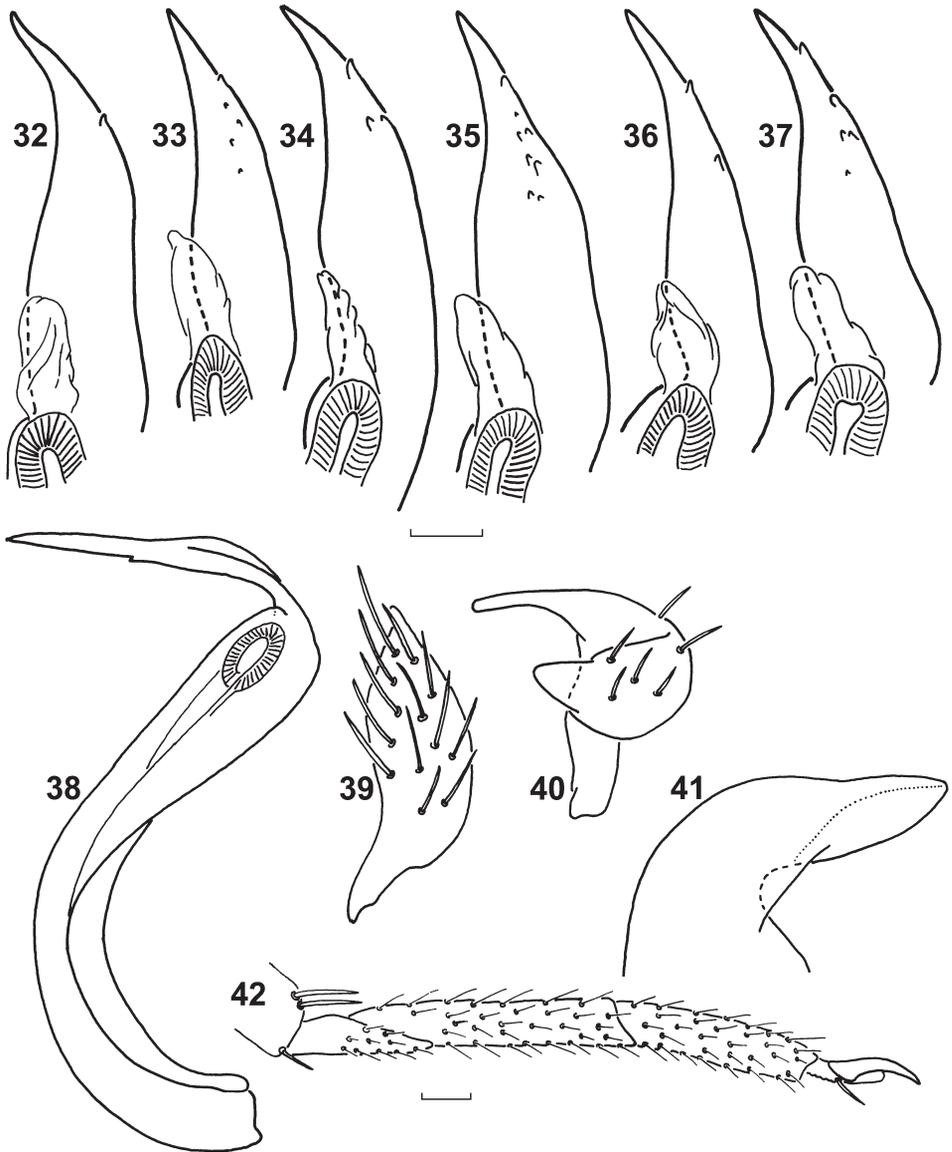
STRUCTURE. Elongate-oval, total length 3.4-3.8, body $3.4-3.7 \times$ as long as width of pronotum. **Head:** Distinctly projecting anteriorly, with weakly convex frons, prominent clypeus, vertex $1.6-1.7 \times$ as wide as eye; second antennal segment $1.1-1.2 \times$ as long as basal width of pronotum, $1.7 \times$ as long as width of head; labium slightly surpassing hind coxae. **Thorax:** Pronotum $2.1 \times$ as wide as long; calli not demarcated; metathoracic scent-gland evaporatory area broadly triangular. **Legs:** Slender, hind femur moderately thickened, second tarsal segment longer than third (Fig. 42), claw long, smoothly bent at middle, pulvillus slightly surpassing midpoint of claw, attached to claw along entire length.

MALE GENITALIA. **Genital capsule:** About 40 % of abdomen, without distinctive ornamentation. **Parameres:** Right paramere lanceolate, with comparatively long and thin apical process (Fig. 39); left paramere as in Fig. 40, with triangular, gradually tapering sensory lobe and straight apical process. **Apex of theca:** As in Fig. 41. **Vesica:** S-shaped, apical blade rather long and flattened, with single subapical denticle (Figs. 32, 38); secondary gonopore subapical, with well-developed sculpture.

Female. **COLORATION, SURFACE AND VESTITURE.** As in male.

STRUCTURE. Similar to male, but distinctly more ovoid, total length 3.4-3.7, body $3.3-3.7 \times$ as long as width of pronotum. **Head:** With somewhat smaller eyes and wider vertex than in male, vertex $2.0-2.3 \times$ as wide as eye; second antennal segment $1.1-1.2 \times$ as long as basal width of pronotum, $1.6-1.7 \times$ as long as width of head. **Thorax:** Pronotum trapeziform, $2.0-2.1 \times$ as wide as long.

Differential diagnosis. Recognized by the body size and proportions, dark coloration with transverse whitish band at base of cuneus, vestiture with slightly flattened silver setae and contrastingly long simple setae, and vesica with single subapical denticle. Most similar to *Lepidargyrus ancorifer* (Fieber, 1858) in the color-pattern and the structure of male genitalia. Vesica of the latter species differs from *L. fasciatus* sp. nov. in having more than one denticle on apical blade; however, the number of denticles shows intraspecific variation (Figs. 33-37). *Lepidargyrus ancorifer* is distinguished from the new species in the vestiture with more



Figs. 32-42. *Lepidargyrus* spp., genitalia and tarsus. 32-37 – apex of vesica, caudal view. 32 – *L. fasciatus* sp. nov., Uzbekistan; 33-37 – *L. ancorifer* (Fieber, 1858): 33 – Turkey: Istanbul; 34 – Sardinia: Asuni; 35 – Sardinia: Sorgono; 36 – Greece: Athens; 37 – Greece: Athens. 38-42 – *L. fasciatus* sp. nov. 38 – vesica, lateral view; 39 – right paramere; 40 – left paramere; 41 – apex of theca; 42 – tarsus. Scale bars = 0.05 mm.

Table 1. Measurements (mm). Abbreviations: Cun-Clyp – distance between apex of clypeus and apex of corium in dorsal view, AntSeg2 – length of second antennal segment, InterOcDi – width of vertex between inner margins of eyes in dorsal view.

Species		Length				Width		
		Body	Cun-Clyp	Pro-notum	Ant-Seg2	Head	Pro-notum	Inter-OcDi
<i>P. stysi</i> sp. nov.								
male (n = 5)	Mean	7.68	6.72	1.11	2.29	1.24	2.14	0.48
	SD	0.24	0.19	0.07	0.15	0.03	0.06	0.02
	Range	0.60	0.50	0.15	0.33	0.08	0.13	0.05
	Min	7.40	6.50	1.03	2.13	1.20	2.08	0.45
	Max	8.00	7.00	1.18	2.45	1.28	2.20	0.50
female (n = 5)	Mean	7.50	6.73	1.34	2.26	1.20	2.37	0.64
	SD	0.23	0.09	0.03	0.05	0.02	0.14	0.01
	Range	0.50	0.20	0.08	0.15	0.05	0.38	0.03
	Min	7.30	6.65	1.30	2.18	1.18	2.15	0.63
	Max	7.80	6.85	1.38	2.33	1.23	2.53	0.65
<i>M. subattenuatus</i> sp. nov.								
male (n = 5)	Mean	1.97	1.67	0.26	0.39	0.44	0.65	0.24
	SD	0.16	0.12	0.02	0.01	0.02	0.03	0.01
	Range	0.40	0.30	0.05	0.03	0.05	0.08	0.03
	Min	1.70	1.48	0.23	0.38	0.40	0.60	0.23
	Max	2.10	1.78	0.28	0.40	0.45	0.68	0.25
female (n = 5)	Mean	2.05	1.75	0.26	0.40	0.46	0.66	0.26
	SD	0.12	0.08	0.01	0.01	0.02	0.02	0.01
	Range	0.30	0.20	0.03	0.03	0.04	0.05	0.03
	Min	1.90	1.65	0.25	0.38	0.44	0.63	0.25
	Max	2.20	1.85	0.28	0.40	0.48	0.68	0.28
<i>M. attenuatus</i>								
male (n = 3)	Mean	2.15	1.87	0.29	0.35	0.45	0.68	0.24
	Range	0.43	0.38	0.03	0.11	0.05	0.18	0.03
	Min	1.95	1.68	0.28	0.28	0.43	0.58	0.23
	Max	2.38	2.05	0.30	0.39	0.48	0.75	0.25
female (n = 5)	Mean	2.21	1.93	0.30	0.38	0.46	0.71	0.27
	SD	0.25	0.20	0.03	0.03	0.05	0.07	0.03
	Range	0.48	0.40	0.06	0.06	0.13	0.18	0.08
	Min	1.93	1.70	0.26	0.35	0.38	0.63	0.23
	Max	2.40	2.10	0.33	0.41	0.50	0.80	0.30

Table 1. (continued)

Species		Length				Width		
		Body	Cun- Clyp	Pro- notum	Ant- Seg2	Head	Pro- notum	Inter- OcDi
<i>L. fasciatus</i> sp. nov.								
male (n = 2)	Mean	3.56	3.09	0.49	1.18	0.69	1.01	0.31
	Range	0.38	0.33	0.03	0.10	0.04	0.02	0.03
	Min	3.38	2.93	0.48	1.13	0.68	1.00	0.30
	Max	3.75	3.25	0.50	1.23	0.71	1.03	0.33
female (n = 5)	Mean	3.61	3.06	0.50	1.16	0.69	1.04	0.35
	SD	0.14	0.11	0.01	0.04	0.03	0.05	0.02
	Range	0.32	0.25	0.03	0.10	0.08	0.13	0.05
	Min	3.43	2.93	0.48	1.10	0.65	0.95	0.33
	Max	3.74	3.18	0.50	1.20	0.73	1.08	0.38
<i>L. ancorifer</i>								
male (n = 5)	Mean	3.56	3.08	0.62	0.93	0.78	1.21	0.38
	SD	0.32	0.19	0.04	0.09	0.03	0.06	0.02
	Range	0.85	0.45	0.10	0.25	0.09	0.18	0.05
	Min	3.25	2.95	0.55	0.83	0.74	1.13	0.35
	Max	4.10	3.40	0.65	1.08	0.83	1.30	0.40
female (n = 5)	Mean	3.92	3.34	0.67	0.95	0.82	1.33	0.42
	SD	0.28	0.26	0.08	0.10	0.02	0.07	0.01
	Range	0.65	0.65	0.18	0.23	0.05	0.18	0.03
	Min	3.75	3.10	0.58	0.88	0.80	1.25	0.40
	Max	4.40	3.75	0.75	1.10	0.85	1.43	0.43

strongly flattened silver setae located at sides of pronotum in addition to dorsum, uniformly dark coloration without pale band at base of cuneus, robust body with wider head, and pronotum, and shorter antennae (Table 1). In both sexes of *L. ancorifer* body is only 2.8-3.1 ×, as long as width of pronotum, second antennal segment 0.7-0.8 × as long as basal width of pronotum, and 1.1-1.3 × as long as width of head (proportions of *L. fasciatus* sp. nov. are given above).

Etymology. The species name is from the Latin fascia (= band, strip), and is given in reference to the color-pattern of hemelytra, with the transverse pale band at the base of cuneus.

Host. Several specimens were collected from *Rosa* sp. (Rosaceae). Well sampled species of *Lepidargyrus* spp. are known to be polyphagous, predominantly feeding on various herbs.

Distribution. Western Uzbekistan.

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Appendix

List of bar code labels (USIs) for illustrated specimens.

Figure no.	Image of	USI
1	<i>Pleuroxonotus stysi</i> , habitus, male	AMNH_PBI 00153708
2	<i>Pleuroxonotus stysi</i> , habitus, female	AMNH_PBI 00155342
3	<i>Pleuroxonotus stysi</i> , head and pronotum, male	AMNH_PBI 00153708
4	<i>Pleuroxonotus stysi</i> , head and pronotum, female	AMNH_PBI 00153721
5	<i>Lepidargyrus fasciatus</i> , habitus, male	AMNH_PBI 00239792
6	<i>Lepidargyrus fasciatus</i> , habitus, female	AMNH_PBI 00 239790
7	<i>Macrotylus subattenuatus</i> , habitus, male	AMNH_PBI 00236881
8	<i>Macrotylus attenuatus</i> , habitus, female	AMNH_PBI 00158309
9	<i>Pleuroxonotus stysi</i> , vesica, lateral view	AMNH_PBI 00240875
10	<i>Pleuroxonotus stysi</i> , vesica, ventral view	AMNH_PBI 00240875
11	<i>Pleuroxonotus longicornis</i> , vesica, ventral view	AMNH_PBI 00153706
12	<i>Pleuroxonotus nasutus</i> , vesica, ventral view	AMNH_PBI 00153703
13	<i>Pleuroxonotus stysi</i> , apex of theca	AMNH_PBI 00153709
14	<i>Pleuroxonotus stysi</i> , left paramere	AMNH_PBI 00153709
15	<i>Pleuroxonotus stysi</i> , right paramere	AMNH_PBI 00153709
16	<i>Pleuroxonotus stysi</i> , tarsus	AMNH_PBI 00236850
17	<i>Pleuroxonotus stysi</i> , pretarsus	AMNH_PBI 00236850
18	<i>Macrotylus subattenuatus</i> , vesica, lateral view	AMNH_PBI 00234311
19	<i>Macrotylus subattenuatus</i> , vesica, ventral view	AMNH_PBI 00234311
20	<i>Macrotylus subattenuatus</i> , right paramere	AMNH_PBI 00236881
21	<i>Macrotylus subattenuatus</i> , left paramere	AMNH_PBI 00236881
22	<i>Macrotylus subattenuatus</i> , apex of theca	AMNH_PBI 00236881
23	<i>Macrotylus subattenuatus</i> , pretarsus	AMNH_PBI 00236886
24	<i>Macrotylus subattenuatus</i> , claw	AMNH_PBI 00236886
25	<i>Macrotylus attenuatus</i> , vesica, lateral view	AMNH_PBI 00158313
26	<i>Macrotylus attenuatus</i> , vesica, ventral view	AMNH_PBI 00158313
27	<i>Macrotylus attenuatus</i> , right paramere	AMNH_PBI 00158313
28	<i>Macrotylus attenuatus</i> , left paramere	AMNH_PBI 00158313
29	<i>Macrotylus attenuatus</i> , apex of theca	AMNH_PBI 00158313

(continued on the next page)

(continuation from the previous page)

Figure no.	Image of	USI
30	<i>Macrotylus attenuatus</i> , pretarsus	AMNH_PBI 00158315
31	<i>Macrotylus attenuatus</i> , tarsus	AMNH_PBI 00158315
32	<i>Lepidargyrus fasciatus</i> , apex of vesica, caudal view	AMNH_PBI 00239792
33	<i>Lepidargyrus ancorifer</i> , apex of vesica, caudal view	AMNH_PBI 00235403
34	<i>Lepidargyrus ancorifer</i> , apex of vesica, caudal view	AMNH_PBI 00235642
35	<i>Lepidargyrus ancorifer</i> , apex of vesica, caudal view	AMNH_PBI 00235402
36	<i>Lepidargyrus ancorifer</i> , apex of vesica, caudal view	AMNH_PBI 00235252
37	<i>Lepidargyrus ancorifer</i> , apex of vesica, caudal view	AMNH_PBI 00235255
38	<i>Lepidargyrus fasciatus</i> , vesica, lateral view	AMNH_PBI 00239792
39	<i>Lepidargyrus fasciatus</i> , right paramere	AMNH_PBI 00239792
40	<i>Lepidargyrus fasciatus</i> , left paramere	AMNH_PBI 00239792
41	<i>Lepidargyrus fasciatus</i> , apex of theca	AMNH_PBI 00239792
42	<i>Lepidargyrus fasciatus</i> , tarsus	AMNH_PBI 00239791