Sparassidae from Japan. II. First *Pseudopoda* species and new *Sinopoda* species

(Araneae: Sparassidae: Heteropodinae)

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Abstract — The genus *Pseudopoda* is recorded for the first time from Japan. *Pseudopoda kasariana* sp. nov. (♂, ♀) and *Pseudopoda spirembolus* sp. nov. (♂, ♀) are described from Amami-ōshima Island and Okinawajima Island respectively. Four new *Sinopoda* species are described: *Sinopoda albofasciata* (♂), *Sinopoda derivata* (♂, ♀), *Sinopoda ogatai* (♂, ♀) and *Sinopoda stellatoidea* (♂, ♀). *Sinopoda koreana* (Paik 1968) is recorded for the first time from Japan. New records of *Sinopoda okinawana* Jäger & Ono 2000 and *S. tanikawai* Jäger & Ono 2000 are presented. Within the genus *Sinopoda* Jäger 1999 the *okinawana* species-group is newly diagnosed, which is represented by *S. albofasciata* sp. nov. (Japan), *S. derivata* sp. nov. (Japan), *S. fasciculata* Jäger, Gao & Fei 2002 (China), *S. hamata* (Fox 1937) (China), *S. koreana* (Paik 1968) (Korea, Japan), *S. okinawana* Jäger & Ono 2000 (Japan), *S. tanikawai* Jäger & Ono 2000 (Japan), *S. wangi* Song & Zhu 1999 (China). *Sinopoda stellata* (Schenkel 1963) is deleted from the list of Japanese spiders and considered endemic to central China.

Key words — Araneae, Sparassidae, *Pseudopoda*, *Sinopoda*, Japan, new species, taxonomy

Introduction

A revisional study of the family Sparassidae in Japan was recently started by the present authors (Jäger & Ono 2000). Four new species were described and records of described species were given. Since then new material of Sparassidae has become available, which is treated in the present paper. The diversity of Japanese Sparassidae turned out to be larger than assumed so far, especially in southern parts (Tokara Islands, Amami Islands, Ryukyu Islands).

Material and Methods

Style of description follows Jäger & Ono (2000).


Taxonomy

Family Sparassidae Bertkau 1872
Subfamily Heteropodinae Thorell 1873
Genus *Pseudopoda* Jäger 2000

The genus *Pseudopoda* was erected by Jäger (2000) and revised mainly based on Himalayan representatives (Jäger 2001). A total of 62 species were hitherto described and further 25 undescribed species (mainly from China) are known to the senior author. The genus *Pseudopoda* is distributed from Pakistan in the West to Japan in the East, and from Shaanxi Prov. (China) in the North to Sumatra in the South. The two species presented in this paper show the first records of *Pseudopoda* in Japan and the eastern limit of the genus in Asia.

*Pseudopoda kasariana* sp. nov.
Figs. 1–6


Diagnosis. Closely related to *Pseudopoda spirembolus*
sp. nov., but with following differences in the genitalia: ♂
1. embolus shorter than in *P. spirembolus* sp. nov., 2. dorsal
RTA not distinctly “S”-shaped as in *P. spirembolus* sp. nov.
(ventral view), 3. cymbium with smaller retrolateral bulge
than in *P. spirembolus* sp. nov. (Figs. 1–3), ♀
1. pits in lat-
eral lobes wider than in *P. spirembolus* sp. nov. (Fig. 4), 2.
vulva with an undivided dorsal cover (this cover divided by
a median suture in *P. spirembolus* sp. nov.) (Figs. 5–6).

*Description.* ♂: Measurements (in mm, holotype first,
paratype in parentheses): PL 4.1 (4.3), PW 3.6 (4.0), AW
1.7 (1.9), PH 1.2 (1.4), OL 5.8 (6.5), OW 3.4 (3.7). Eyes:
AME 0.20 (0.21), ALE 0.27 (0.29), PME 0.25 (0.25), PLE
0.28 (0.29), AME-AME 0.13 (0.10), AME-ALE 0.06 (0.06),
PME-PME 0.24 (0.28), PME-PLE 0.28 (0.28), AME-PME
0.30 (0.34), ALE-PLE 0.22 (0.24), CH AME 0.30 (0.35),
CH ALE 0.28 (0.29). Measurements of palp and legs as in
Table 1.

Leg formula: 2143, spination: PP 130(1),000,2101, FE I–
III 323, IV 321, PA I–II 001, III 001(0), IV 000, TI I 2226,
II 22(1)26, III–IV 2126, MT I–II 1014, III 3(2)014, IV
3036.

Embolus arising from tegulum in a 6– to 7–o’clock-po-
sition, running first a semi-circle, bent at its tip in another
direction; with an embolic apophysis; flattened. Tegulum
with a hump, this covering arising point of embolus. RTA
originating from proximal tibia (Fig. 1). Proximal part of
RTA massive, apical part thinner and slightly bent (Figs. 1–
3).

Color: Yellowish-brown with darker pattern. PS, CC and
legs (FE-TI) with small spots (as in Figs. 9–10). FE with

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**Table 1.** Measurements of palp and legs of *Pseudopoda kasariana* sp. nov. (♂ holotype with ♀ paratype in pa-
renchtheses)

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*Acta Arachnologica,* 51(2), December 2002 ©Arachnological Society of Japan
spine patches, TI with a prolateral proximal patch. ST and ventral CX without pattern. Dorsal OS with four dark muscle sigillae in its anterior half. Posterior half of OS with paired irregular patches, these divided by a white transversal line. Lateral OS with irregular pattern. Ventral OS with irregular spots, these running together in front of the spinnerets.

导游: Measurements (in mm): PL 5.4, PW 5.0, AW 2.6, PH 1.6, OL 8.5, OW 5.3. Eyes: AME 0.24, ALE 0.36, PME 0.29, PLE 0.35, AME-AME 0.37, AME-ALE 0.32, AME-PME 0.32, PME-PLE 0.35, AME-PLE 0.31, CH AME 0.42, CH ALE 0.36. Measurements of palp and legs as in Table 2.


Palpal claw with 6 teeth. Ratio of width to length of epigyne = 1.44. Epigyne with a few distinct wrinkles in its anterior part. Anterior part of lateral lobes covered by a transversal rim. Posterior margin of lateral lobes with an indistinct indentation (Fig. 4).

Color: As in male.

Distribution. Known only from the type locality.

Etymology. The specific name refers to the type locality; adjective.

The following female specimen could not clearly assigned to any described species. It could be conspecific with P. kasariana sp. nov. As it shows several differences, it is here described separately as an undetermined specimen.

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Table 2. Measurements of palp and legs of Pseudopoda kasariana sp. nov. (♀ paratype)

Figs. 7–10. Pseudopoda sp.: ♀ from Amami-oshima, Japan (NHMK 2001 H). — 7, prosoma, dorsal view; 8, vulva, dorsal view; 9, prosoma, dorsal view; 10, right leg I, prolateral view. (Scales in mm)
Pseudopoda sp.  
Figs. 7–10


Diagnosis. According to the undivided cover of vulva and the locality closely related to Pseudopoda kasariana sp. nov., but with following differences in female genitalia: 1. ratio of width to length of epigyne different (1.32) in comparison to that in P. kasariana sp. nov. (1.44), 2. pits of lateral lobes without an additional rim as in P. kasariana sp. nov., 3. Posterior lateral lobes more rounded than in P. kasariana sp. nov. (Figs. 7–8).

Description. ♂: Measurements (in mm): PL 4.8, PW 4.3, AW 2.5, PH 1.6, OL 7.2, OW 3.7. Eyes: AME 0.22, ALE 0.32, PME 0.28, PLE 0.32, AME-AME 0.15, AME-ALE 0.11, PME-PME 0.34, PME-PLE 0.34, AME-PME 0.41, ALE-PLE 0.31, CH AME 0.43, CH ALE 0.39. Measurements of palp and legs as in Table 3.


Palpal claw with 6 teeth. Epigyne with distinct wrinkles in its anterior part. Anterior part of lateral lobes covered by a transversal rim. Posterior margin of lateral lobes with an indistinct indentation (Fig. 7).

Color: As in P. kasariana sp. nov., but in general darker and with markings more distinct (Figs. 9–10).

Pseudopoda spirembolus sp. nov.  
Figs. 11–14


Diagnosis. ♀♂ With unique long spiral embolus (Figs. 11–12). ♀♀ Lateral lobes with pits, these narrower than in P. kasariana sp. nov. Dorsal cover of vulva divided by a median suture (Figs. 13–14).

Material examined. ♀ (PJ 1301), IB 1-I 321, IA 4120, IC 321, II 323, III 323, IV 321, PA I-III 001, IV 000, TI I-II 2226, III–IV 2126, MT I-II 1014, III 3014, IV 3036.

Diagnosis. ♀♂ With unique long spiral embolus (Figs. 11–12). ♀♀ Lateral lobes with pits, these narrower than in P. kasariana sp. nov. Dorsal cover of vulva divided by a median suture (Figs. 13–14).

Description. ♀: Measurements (in mm): PL 4.7, PW 4.8, AW 2.0, PH 1.3, OL 4.1, OW 2.2. Eyes: AME 0.25, ALE 0.35, PME 0.29, PLE 0.32, AME-AME 0.14, AME-ALE 0.07, PME-PME 0.31, PME-PLE 0.32, AME-PME 0.35, ALE-PLE 0.29, CH AME 0.41, CH ALE 0.35. Measurements of palp and legs as in Table 4.


Cymbium with a characteristic retrolateral bulge. Embolus arising from tegulum in a retrolateral to proximal position, running first almost 360°, resulting in a large oval-shaped loop. After a bend on the retrolateral side the embolus is running two distal, smaller loops. Embolus in general filiform, but with distinct edges. Tegulum with hump, covering arising point of embolus. Conductor directed retrolaterally. RTA originating from proximal tibia. Distal part of RTA ‘S’-shaped, proximal part with triangle-shaped structure, retrolaterally pointed (in ventral view) (Figs. 11–12).

Color: Pale yellow with redbrown markings and sparse hairs. PS with radial rows of spots, some of them widened to lines or patches. CC with three longitudinal stripes of spots. ST and CX pale yellow without pattern. Legs with femoral spine-patches and smaller spots; additional patches at TI (proximal, prolateral). OS dorsally with irregular dark markings; posterior with transversal thin white band; ventrally with spottled median line and dark patch in front of the spinnerets.

♀: Measurements (in mm): PL 4.0–5.1, PW 3.7–4.7, AW 2.1–2.7, PH 1.3–1.7, OL 4.9–6.5, OW 3.0–4.8. Eyes: AME 0.18–0.25, ALE 0.30–0.36, PME 0.25–0.30, PLE 0.29–0.35, AME-ALE 0.14–0.18, AME-AME 0.04–0.08, PME-PME 0.28–0.34, PME-PLE 0.29–0.35, AME-PME 0.35–0.42, ALE-PLE 0.26–0.31, CH AME 0.38–0.55, CH ALE 0.28–0.45. Measurements of palp and legs as in Table 5.

Table 3. Measurements of palp and legs of Pseudopoda sp. (♀)

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Table 4. Measurements of palp and legs of Pseudopoda spirembolus sp. nov. (♂ holotype)

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Table 5. Measurements of palp and legs of Pseudopoda spirembolus sp. nov. (♀ paratypes)

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Palpal claw with 6 (5) teeth. Epigyne broader than long (width / length = 1.92), with anterior transversal rim and two lateral lobes, these touching each other in the median line. Each lobe with a pit, posteriorly with a median indentation (Fig. 13). Internal duct system covered by lobes ventrally and dorsally. Only fertilisation ducts visible in a dorsal view. Part of the spiral windings only visible through a small ‘window’ from a latero-dorsal view. Vulval cover membranous, with wrinkles (Fig. 14).

Figs. 11–14. Pseudopoda spirembolas sp. nov. from Okinawajima Island, Japan: 11–12, ♂ holotype (NSMT-Ar 4469); 13–14, ♀ paratype (NSMT-Ar 4222). — 11, Male left palp, ventral view; 12, male left palp, retrolateral view; 13, epigyne, ventral view; 14, vulva, dorsal view. (Scale in mm)
Color: As in male, but yellowish-brown. PS with fovea marked and with a thin dark margin. ST and CX yellow, without pattern. Posterior OS with extended white patch. Epigyne light redbrown.

Variability. White abdominal patch may be reduced in both sexes to a white bar.

Distribution. Japan, Okinawa Pref., Okinawajima Is.: Sukuta, Nago-shi; Benoki; Yona.

Etymology. Named after the long spiral embolus of the male, which is unique in the whole genus (Latin: *spira* means winding); noun in apposition.

Genus *Sinopoda* Jäger 1999

At present eighteen *Sinopoda* species are described, additional fifteen undescribed species from Asia (mainly from China) are known to the senior author. No phylogenetic analysis is available for the whole genus. Within undescribed and described *Sinopoda* spp. at least one species group is supposed to be monophyletic: the *okinawana*-group.


The *okinawana*-group is distributed in Japan, Korea and China (Sichuan, Guizhou, Jiangxi). One trend of reduction within this species group is recognizable from the western (Sichuan) to the eastern parts (Japan): the embolic apophysis and the ventral RTA of westernmost species (*S. hamata, S. fasciculata*) are well developed, whereas those of easternmost species (*S. derivata* sp. nov.) turn to be a thin embolus without an embolic apophysis and a poorly developed ventral RTA. Although females of the *okinawana*-group generally show narrower copulatory ducts in comparison to other *Sinopoda* spp., those can only hardly be diagnosed and thus recognized as members of the *okinawana*-group without conspecific males. According to known females a trend is also recognizable in the female genitalia: in contrast to westernmost species the median part of the vulva in females of *S. derivata* and *S. tanikawai* is lengthened and bent dorsal.

Japanese specimens formerly attributed to *Sinopoda stellata* (Schenkel 1963) are described in this paper as new. Most likely Korean specimens determined as *S. stellata* (see Paik 1968, 1978, Namkung 2002, Kim 2002) belong also to...
the below described species. From the generally small distribution ranges of Sinopoda species it is supposed that S. stellata is endemic to Central China (type locality: Gansu Prov.). Therefore it is deleted from the list of Japanese spider species.

Sinopoda okinawana-group

Sinopoda koreana (Paik 1968) Figs. 15–18

Heteropoda koreana Paik 1968: 205, figs. 1–2, 7–21; 1978: 394, fig. 177.


Diagnosis. This species is related to S. hamata from Sichuan Prov, China. can be recognized by the following characters: 1. elongated shape of the cymbium, 2. embolic apophysis reduced, 3. dorsal RTA smaller than in S. hamata (Figs. 15–18).

Notes. This species was originally described by Paik (1968) from Korea. Although its type material was not examined by the authors, the present male from Kyushu can clearly be assigned to this species. It represents the first record of this species in Japan. Measurements (in mm): PL 8.3, PW 7.3, AW 3.5, OL 7.3, OW 4.7.

Sinopoda albofasciata sp. nov. Figs. 19–22

Type material. 1 d' holotype (PJ 1498), Southern part of Tokashiki Is., Ryukyu Isls., Japan, 24.VI.2000, Kensuke Imai leg., NSMT-Ar. 4537.

Diagnosis. Embolus thin and without distinct embolic apophysis, but (in contrast to S. derivata sp. nov.) with slightly bent tip of embolus. Dorsal RTA short (in contrast to S. okinawana) and pointed in ventral view (in contrast to S. derivata sp. nov.) (Figs. 19–22).

Description. Measurements (in mm) PL 5.8, PW 5.5, AW 2.6, PH 2.0, OL 7.2, OW 4.3. Eyes: AME 0.29, ALE 0.39, PLE 0.45, AME-AME 0.42, AME-ALE 0.42, ALE-PLE 0.38, CH AME 0.37, CH ALE 0.29. Measurements of palp and legs as in Table 6.


Ventral part of RTA reduced, dorsal part simple, straight in a lateral view (Fig. 20; curved in S. okinawana). Embolus arising in a 6.30-o’clock-position, running a (flattened) half-circle. Tip of embolus bent at a right angle. Sperm-duct almost straight (Fig. 19).

Color: Light brown with brown markings. PS with a light longitudinal median and a light transversal posterior band, in darker lateral half with a submarginal row of indistinct lighter patches. ST, CX, Labium, gnathocoxae and ventral FE pale yellow without pattern. FE dorsally with dark spine patches, these consisting of dark hairs. Other parts of legs brown without pattern. OS dorsally with light longitudinal median band. Laterally with irregular pattern. Ventrally with light median band. [The holotype male has some white spots on the legs, which may be due to fungal activity after the specimen’s death and which are not part of the natural coloration].

† unknown.

Distribution. Known only from the type locality.

Etymology. The specific epithet is derived from the light longitudinal median band on the prosoma (Latin: albus means white; Latin: fascia means color stripe); adjective.

Sinopoda derivata sp. nov. Figs. 23–31

Type material. 1 d' holotype (PJ 1501), Saromura, Nakano-shima Island, Tokara Islands, Kagoshima Pref., Japan, 3.X.1999, Y. Baba leg., NSMT-Ar 4824. ♂ paratype (PJ 1531), Nakano-shima Island, Tokara Islands, Kagoshima Pref., Japan, 3.X.1999, Y. Baba leg., NSMT-Ar 4823.

Further material examined. Sinopoda sp., 1 d' (PJ 1500), Nakano-shima Island, Tokara Islands, Kagoshima Pref., Japan, 24.VI.1973, H. Makihara leg., Heteropoda venatoria, det. by Dr. Chiyoko Okuma, NHMK 2001 J.

Diagnosis. Embolus thin, without embolic apophysis, running a semi-circle, without a distal bend (Figs. 23–24), genitalia similar to those of Sinopoda tanikawai Jäger & Ono 2000, but individuals generally smaller and with the following differences in the genitalia: 1. tip of anterior appendices of vulva straight (Fig. 30; bent in S. tanikawai), 2. lateral ends of both rims of lateral lobes and epigynal pock-

| Table 6. Measurements of palp and legs of Sinopoda albofasciata sp. nov. (♂ holotype) |
|---|---|---|---|---|---|---|
| d' | Fe | Pa | Ti | Mt | Ta | Total |
| Pp | 3.5 | 1.6 | 2.0 | — | 2.9 | 10.0 |
| I | 7.0 | 2.8 | 7.2 | 6.7 | 2.5 | 26.2 |
| II | 7.8 | 3.0 | 7.8 | 7.2 | 2.5 | 28.3 |
| III | 6.2 | 2.5 | 5.6 | 5.4 | 1.9 | 21.6 |
| IV | 6.8 | 2.4 | 6.1 | 6.5 | 2.2 | 24.0 |

| Table 7. Measurements of palp and legs of Sinopoda derivata sp. nov. (♂ holotype; legs II missing) |
|---|---|---|---|---|---|---|
| d' | Fe | Pa | Ti | Mt | Ta | Total |
| Pp | 3.0 | 1.4 | 1.9 | — | 2.5 | 8.8 |
| I | 6.7 | 2.8 | 7.0 | 6.7 | 2.4 | 25.6 |
| II | — | — | — | — | — | — |
| III | 6.2 | 2.6 | 5.7 | 5.4 | 2.0 | 21.9 |
| IV | 6.5 | 2.3 | 6.0 | 6.1 | 2.2 | 23.1 |
ets are close together (Fig. 29; separated in *S. tanikawai*), 3.
posterior margin of epigyne distinctly bilobate (Fig. 29;
only slightly bilobate in *S. tanikawai*).

**Description.** ♀: Measurements (in mm) PL 5.8, PW 5.2,
AW 2.7, PH 1.9, OL 5.5, OW 3.6. Eyes: AME 0.28, ALE 0.44,
PME 0.32, PLE 0.44, AME-AME 0.18, AME-ALE 0.07,
PME-PME 0.28, PME-PLE 0.41, AME-PME 0.43,
ALE-PLE 0.38, CH AME 0.34, CH ALE 0.28.
Measurements of palp and legs as in Table 7.

Leg formula: 2143, spination: PP 1 FE 1,111 323, IV 321, PA I,III 101, IV 100, TI 2326, MT I 2024, III 3034, IV 3036.

Palpal tarsus longer than tibia. Embolus arising from the
tegulum in a 6-o’clock-position. Tip of embolus straight.
Tegular sperm duct straight. Tip of RTA blunt (Fig. 24).
RTA with a small ventral part (Fig. 25–26).

Color: Yellowish-brown to light-brown. PS with two
dark longitudinal bands. Head region dark. Margins spotted
irregularly dark and bright (Fig. 27). CC brown with dark
longitudinal bands, these with bristles. FE yellow with
brown spine patches and iridescent hairs. Distal leg joints
(PA to TA) darker. ST and ventral CX pale yellow without
pattern. Dorsal OS with bright region above heart and
three pair of dark patches at the muscle sigillae, the second
pair the largest. Lateral OS with irregular pattern. Ventral
OS with a bright longitudinal band. Within this band two
longitudinal rows of muscle sigillae.

**Table 8.** Measurements of palp and legs of *Sinopoda derivata*
sp. nov. (♀ paratype)

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<td>18.1</td>
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</tbody>
</table>

Leg formula: 2143, spination: PP 131,101,2101, FE I,III
323, IV 321, PA I,III 101, IV 100, TI 2326, MT I 2024, III
3034, IV 3036.

Palpal claw with 7 (right) and 8 (left) teeth.

Epigynal rims forming semi-circles, running parallel to
posterior margin. Epigynal bands partly fragmented (Fig.
29). Median part of vulva bent dorsad (Fig. 31).

*Acta Arachnologica*, 51(2), December 2002 ©Arachnological Society of Japan
Color: As in male, but generally darker and markings more distinct.

Distribution. Known only from the type locality.

Etymology. With its unique palpal characters (reduction of embolus, embolic apophysis, RTA) this species is considered strongly derived in comparison to other species of the okinawana-group (Latin: derivatus means derived); adjective.

**Sinopoda tanikawai Jäger & Ono 2000**

Figs. 32–34


Notes. Although genitalia of the present specimen are slightly different from those of the holotype (Jäger & Ono 2000).
2000), the both specimens are considered conspecific. For diagnostic characters see diagnosis of *S. derivata* sp. nov. The present female is smaller than the type specimen: PL 7.6, PW 6.8, AW 4.2, PH 2.5, OL 8.7, OW 4.7.

*Sinopoda okinawana* Jäger & Ono 2000


**Notes.** Genital characters fit with diagnosis and description in Jäger & Ono (2000). As this female is larger than the known specimens, measurements of PS and OS are listed here: PL 6.5, PW 5.5, AW 3.4, PH 2.0, OL 6.6, OW 4.0.

Two un-grouped *Sinopoda* species

*Sinopoda ogatai* sp. nov.

**Heteropoda** sp., - Ogata 1999: 110, figs. 14-16, 41.

**Type material.** ♂ holotype (PJ 1456), Horaiji-san, Horai-cho, Minamishitara-gun, Aichi Pref., Honshu, Japan, 23.V.1993, Kiyoto Ogata leg., NSMT-Ar 4471. ♀ paratype (PJ 1458), same location as holotype, 22.V.1993, Kiyoto Ogata leg., NSMT-Ar 4470.

**Diagnosis.** ♂ ♂ Embolic apophysis extending clearly above tip of embolus. Dorsal branch of retrolateral apophysis thin (Figs. 37-41), ♀♀ difficult to separate from *Sinopoda stellatops* sp. nov. without males (compare also diagnosis of *S. stellatops* sp. nov.), but two differences are recognizable in comparison to the latter species: 1. posterior part of vulva larger than anterior appendices (Fig. 36), 2. anterior bands of the epigynal field longer than in *S. stellatops* sp. nov. (Fig. 35)

**Description.** ♂: Measurements (in mm) PL 4.4, PW 3.9, AW 2.0, PH 1.4, OL 4.4, OW 2.7. Eyes: AME 0.21, ALE 0.31, PME 0.22, PLE 0.31, AME-AME 0.17, AME-ALE 0.04, PME-PME 0.22, PME-PLE 0.28, AME-PME 0.29, ALE-PLE 0.27, CH AME 0.22, CH ALE 0.24. Measurements of palp and legs as in Table 9.

Leg formula: 2143, spination: PP 13(4)1, 0(1)01(2), 2101, 1(2)00, FE I-II 323, III 323(2), IV 321, PA 001, TI 2326, MT I-II 2326, III 3026, IV 3036.

Color: Yellow-brown without distinct pattern. Ventral body and CX pale yellow. PS with slight radial markings and slightly marked fovea. Dorsal and lateral OS with irr-

| Table 9. Measurements of palp and legs of *Sinopoda ogatai* sp. nov. (♂ holotype) |
|---|---|---|---|---|---|---|
| | Fe | Pa | Ti | Mt | Ta | Total |
| Pp | 2.2 | 1.2 | 1.4 | — | 1.8 | 6.6 |
| I | 5.1 | 2.2 | 5.1 | 4.8 | 1.6 | 18.8 |
| II | 5.9 | 2.2 | 5.8 | 5.5 | 1.7 | 21.1 |
| III | 4.9 | 2.1 | 4.3 | 3.7 | 1.5 | 16.5 |
| IV | 5.2 | 1.9 | 4.4 | 4.7 | 1.7 | 17.9 |

Figs. 37-41. *Sinopoda ogatai* sp. nov.: ♂ holotype from Mt. Horaiji-san, Japan (NSMT-Ar 4471). — 37-39, male right palp (37, retrolateral view; 38, ventral view; 39, prolateral view); 40, tip of embolus with conductor, ventral view; 41, tip of embolus, ventral view. (Scales in mm)
New species of *Pseudopoda* and *Sinopoda* from Japan

**Sinopoda stellatops** sp. nov.

Figs. 42–82

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Table 10. Measurements of palp and legs of *Sinopoda ogatai* sp. nov. (♀ paratype)

<table>
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</table>

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Regular red-brown pattern.

♂: Measurements (in mm) PL 5.2, PW 4.6, AW 2.8, PH 2.0, OL 6.6, OW 4.1. Eyes: AME 0.21, ALE 0.35, PME 0.25, PLE 0.34, AME-AME 0.24, AME-ALE 0.07, PME-PME 0.32, PME-PLE 0.41, AME-PME 0.39, ALE-PLE 0.36, CH AME 0.35, CH ALE 0.28. Measurements of palp and legs as in Table 10.

Leg formula: 2413, spination: PP 131,101,2121,101(2)4, FE I-III 323, IV 321, PA I 001(0), II 001, III 001(0), IV 001, TI I 2(1)026, II-III 2026, IV 2226, MT I 0004, II 1014, III 2016, IV 3036.

CC with 3 anterior and 3 (left) and 4 (right) posterior teeth. Palpal claw with 8 teeth.

Color: As in male, but generally darker.

Notes. The coloration in ethanol differs from that when the spider is alive. Ogata (1999: fig. 41) shows a photograph of the female, where the specimen appears darker. The differences in the preserved specimen may be caused by fading or by loosing hairs, which could be rubbed off during catching or transporting the specimen.

Distribution. Known only from the type locality.

Etymology. In honor to the collector Mr. Kiyoto Ogata, who recognized and illustrated this species already; noun in genitive.

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Sinopoda sp. cf. stellata, - Jäger & Ono 2000: 56, figs. 46–52.


Figs. 50–53. Sinopoda stellatops sp. nov.: ♂ paratypes from Tachibana-yama, Kyushu, Japan: 50–51, NHMK 2001 B (PJ 1511); 52–53, NHMK 2001 A (PJ 1517). — 50, 52, male left palp, ventral view; 51, RTA, dorso-retrolateral view; 53, male right palp, retrolateral view. (Scales in mm)

Figs. 54–61. Sinopoda stellatops sp. nov.: ♂ from Shimane, Japan (NSMT-Ar 3702); 56–57, ♂ from Hiroshima, Japan (NSMT-Ar 3704); 58–59, ♂ from Hiroshima, Japan (NSMT-Ar 4210); 60, ♂ from Kagawa, Japan (NSMT-Ar 4208); 61, ♂ from Hiroshima, Japan (NSMT-Ar 4209). — 54, 56, 58, male left palp, ventral view; 55, 57, 59–61, RTA, dorso-retrolateral view. (Scale in mm)
New species of *Pseudopoda* and *Sinopoda* from Japan

Chiyoko Okuma, NHMK 2001 E.


*Diagnosis.* 3♂ embolic apophysis with a distal tooth (Figs. 43,50,52), dorsal RTA slender, digitiform and pointed at apex in a dorso-retrolateral view (Figs. 45–49,51). ♀♀ Difficult to identify without males, but following combination of characters may help with identification (compare also diagnosis of *S. ogatai* sp. nov.): epigynal field with short anterior bands, anterior ends of lateral lobes of epigyne close to lateral ends of epigynal pockets, ledges of lateral lobes reaching the middle of epigynal field (Figs. 63,75–82), anterior appendices of vulva larger than posterior parts of vulva (Figs. 64,66,68,70,72).

*Description* of ♀♀ see Jäger & Ono (2000: 56). Measurements of specimens from Kyushu first with measurements of individuals from Honshu and Shikoku in parentheses: ♀♀ PL 4.8–6.0 (4.5–5.6), OL 5.0–6.2 (4.7–6.4). ♀♀ PL 4.4–6.1 (4.4–5.1), OL 5.2–8.3 (4.8–6.1)

*Distribution.* Japan: Honshu (Hiroshima Pref., Okayama Pref., Shimane Pref.), Shikoku (Kagawa Pref.), Kyushu (Fukuoka Pref., Oita Pref., Saga Pref.); Korea.

*Variability.* Populations from Honshu and Shikoku respectively show differences in genital structures: in males of populations from the latter two islands the distal tooth of the embolic apophysis is more pronounced, i.e. a transversal rim runs across the embolic apophysis and marks a triangle-shaped structure. The dorsal RTA in a dorso-retrolateral view (Figs. 55,57,59–61) is not as slender as in populations from Kyushu. The proximal margin of the ventral RTA in a ventral view is straight (Figs. 54,56,58), while it is undulated in specimens from Kyushu (Figs. 43,52). The base of the embolus is strongly covered by the tegular furrow in individuals from Honshu and Shikoku (Figs. 43,50,52; Jäger & Ono 2000: fig. 51), while the embolic base of Kyushu specimens is more visible (Figs. 43,50,52).

In females from Kyushu additional rims are present,
Figs. 65–74. *Sinopoda stellatops* sp. nov.: 65–66, ♂ from Hiroshima, Japan (NSMT-Ar 4211); 67–68, ♂ from Hiroshima, Japan (NSMT-Ar 3703); 69–70, ♂ from Shimane, Japan (NSMT-Ar 3701); 71–73, ♂ from Okayama, Japan (NSMT-Ar 4207); 74, ♂ from Kuju-san, Kyushu, Japan (NHMK 2001 F). — 65, 67, 69, 71, 74, epigyne, ventral view; 66, 68, 70, 72, 73, vulva, dorsal view; 73, schematic course of internal duct system, dorsal view. (Scale in mm)
Figs. 75-82. Sinopoda stellatops sp. nov., ♀ paratypes from Tachibana-yama, Kyushu, Japan (NHMK 2001 A). — Epigyne, ventral view. (Scale in mm)
which are located in an anterior position of the epigyneal pockets (Figs. 63,75–82). In contrast, individuals from Honshu and Shikoku lack these additional rims. (Figs. 65,67,69,71).

Beside the above listed differences in the genitalia individuals from Kyushu are generally larger than those from Honshu or Shikoku and possess larger epigynes respectively.

The listed differences may be caused by geographical separation of the populations. That could give rise to speak of subspecies. But as no larger series were examined and as at least in one specimen the consistency of these differences is interrupted (1♀, PJ 1534, from Mt. Kuju-san, Oita Pref., Kyushu; Fig. 74), we refuse to describe these forms as new subspecies, but as cases of intraspecific variability. More detailed investigations on the populations in Honshu, Shikoku and Kyushu could enlighten relationships between them and the taxonomical status of the different forms.

Etymology. Female genital characters are similar to those of Sinopoda stellata (Schenkel 1963) as illustrated in the original description by Schenkel. Because of this similarity the present specimens were formerly misidentified and listed as Sinopoda (Heteropoda) stellata, (Greek: ops means appearance); adjective.

Acknowledgments

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