

## A new species of the genus *Sinopoda* from China (Aranei: Sparassidae: Heteropodinae)

### Новый вид рода *Sinopoda* из Китая (Aranei: Sparassidae: Heteropodinae)

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КЛЮЧЕВЫЕ СЛОВА: Sparassidae, Heteropodinae, *Sinopoda*, новый вид, Китай, Хэнань, Шэньси.

ABSTRACT. *Sinopoda serpentemolus* sp.n. is described from Henan and Shaanxi Provinces of China.

РЕЗЮМЕ: По самцам и самкам описан новый вид *Sinopoda serpentemolus* sp.n. из китайских провинций Хэнань и Шэньси.

#### Introduction

The genus *Sinopoda* was erected by Jäger [1999] with the type species *Sarotes forcipatus* Karsch, 1881 for eleven species. Almost half of the species were formerly described in the genus *Heteropoda* [Wang, 1990, 1991; Jäger, 1999]. *Sinopoda* species can easily be distinguished from other Heteropodinae by the following combination of characters: embolus distally with apophysis; tibial apophysis bifurcate, dorsal branch longest; copulatory ducts uncoiled, spermathecae divided into a basal part and a head [Jäger, 1999; Jäger & Yin, 2001]. Up to now, 28 species have been described from Asia, of which 20 species occur in China [Jäger & Yin, 2001; Jäger, Gao & Fei, 2002; Platnick, 2007].

While examining spider specimens collected from Henan Province, China, a new species of the spider genus *Sinopoda* was recognised and is described here under the name *Sinopoda serpentemolus* sp.n. One male specimen was collected by P. Jäger from Shaanxi, China in 1997 and is included as paratype.

#### Material and methods

Terminology is standard for Aranei. Spine notation follows Davies [1994]. All specimens were kept in 75% ethanol and examined, drawn and measured with a Tech XTL-II stereomicroscope equipped with an Abbe drawing device. Length of dorsal shield of prosoma

was measured from the anterior margin to its rear margin medially. Eye sizes were measured as the maximum diameter in dorsal or frontal view. The measurements of legs are shown as total length (femur, patella and tibia, metatarsus, tarsus). The epigyne was cleared in a warm solution of potassium hydroxide (KOH), transferred to water and temporarily mounted for drawing. All measurements are given in millimeters.

Abbreviations: ALE — anterior lateral eye; AME — anterior median eye; MOA — median ocular area; PLE — posterior lateral eye; PME — posterior median eye; RTA — retrolateral tibial apophysis.

Museums: MHBU — Museum of Hebei University, Hebei University, Baoding, China; SMF — Senckenberg Museum Frankfurt, Germany; ZMUM — Zoological Museum of the Moscow State University, Russia.

#### Taxonomy

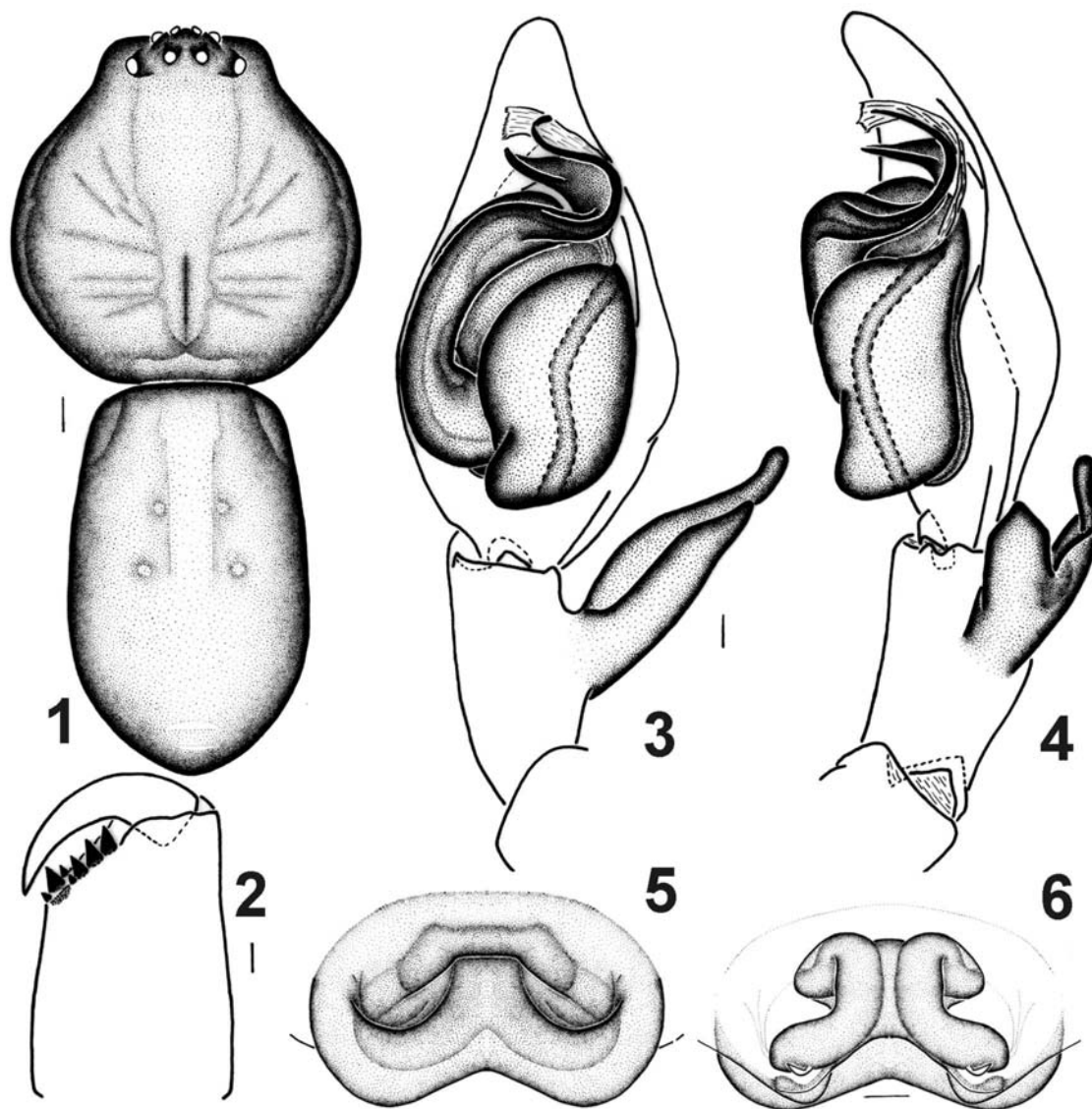
##### *Sinopoda serpentemolus* sp.n.

Figs 1–6.

TYPE MATERIAL. Holotype ♂ (MHBU), Baotianman National Nature Reserve (33°31'N, 111°55'E; altitude 1382 m), Neixiang County, Henan Province, China, 13.VIII.2006, collected by Bao-Shi Zhang. Paratypes: 1 ♀, same data as holotype; 1 ♂ (MHBU), Tianchi Mt. (34°16'N, 111°50'E; altitude 1400 m), Song County, Henan Province, China, 12.VI.2004, collected by Ming-Sheng Zhu; 2 ♀♀ (MHBU), 1 ♀ (ZMUM), 1 ♂ (SMF), Baotianman National Nature Reserve (33°31'N, 111°55'E; altitude 1382 m), Neixiang County, Henan Province, China, 23.VI.2004, collected by Ming-Sheng Zhu; 1 ♂ (SMF, PJ 923), Houzhenzi Village (33°51'N, 107°50'E; altitude 1330–1400 m), south flanks, Taibai Mt., Shaanxi Province, China, 6.VIII.1997, collected by Peter Jäger.

ETYMOLOGY. The specific name is derived from the Latin noun 'serpens', meaning 'snake', and 'embolus' referring to the shape of the male embolus; noun in apposition.

DIAGNOSIS. Males of the new species can be recognised by the unique shape of the distal embolus, i.e. tip of embolus and embolic apophysis turning roughly 180° and tip is bent additionally ventrad. The basal tegular protuberance pointing prolatero-proximad may also be diagnostic in



Figs 1–6. *Sinopoda serpentembolus* sp.n.: 1 — male (holotype) body, dorsal view; 2 — left chelicera, ventral view; 3–4 — left male palp (3 — ventral view; 4 — retrolateral view); 5 — epigyne, ventral view; 6 — internal duct system, dorsal view. Scales 0.5 mm (Fig. 1) and 0.2 mm (Figs 2–6).

Рис. 1–6. *Sinopoda serpentembolus* sp.n.: 1 — самец (голотип), габитус, сверху; 2 — левая хелицера, снизу; 3–4 — левая пальпа самца (3 — снизу; 4 — ретролатерально); 5 — эпигина, снизу; 6 — вульва, сверху. Масштаб: 0,5 мм (Рис. 1) и 0,2 мм (Рис. 2–6).

combination with the embolus' shape. Females may be recognised by the broad median part of the epigyne which separates the two lobal pockets from each other, whose semicircular shape may also have diagnostic value as well as the shape of the internal duct system.

N.B.: The genus *Sinopoda* contains far more species than currently described. Only after a thorough revision the taxonomic value of certain characters can be determined.

DESCRIPTION. Male. Total length 10.92–12.64. Holotype total length 12.64: Dorsal shield of prosoma 6.12 long, 5.61 wide; opisthosoma 6.73 long, 4.18 wide. Dorsal shield of prosoma light brown, with lateral brown bands. Ocular area with few long setae. Cervical groove and radial groove

obvious. Fovea dark brown. Base of eyes with circular black patches. Eye rows slightly recurved. Eye diameters: AME 0.25, ALE 0.35, PME 0.25, PLE 0.35. Eye interdistances: AME–AME 0.23, AME–ALE 0.10, PME–PME 0.37, PME–PLE 0.46, ALE–PLE 0.38. MOA 0.75 long, anterior width 0.67, posterior width 0.88. Clypeus height 0.33. Chelicerae brown. Distinct lateral condyle yellow. Gnathocoxae fawn with tuft distally. Labium short, semicircular. Sternum yellow brown with dark brown setae. Legs dark brown except femora. Spination: Palps 131, 000, 1001; femora I 3(4)23, II 323, III 322(3), IV 321; patellae 101; tibiae 2326; metatarsi I 1014, II 2(1)02(1)4, III 3026, IV 3036. Opisthosoma oval, longer than wide, brown dorsally and light brown ventrally

with lateral dark brown bands. Measurements of legs: I 23.46 (6.02, 8.57, 6.83, 2.04), II 25.30 (6.83, 9.49, 6.94, 2.04), III 19.58 (5.81, 7.24, 4.90, 1.63), IV 23.57 (6.02, 7.65, 7.96, 1.94). Leg formula: 2413. Palp dark brown. Dorsal branch of RTA digitiform and longer than ventral one. Tegulum oval; sperm duct slightly s-shaped in ventral view; embolus arising in a 7-o'clock-position, running a half-circle; tip of embolus thin, long and flagelliform (Figs 3–4).

Female. Total length 10.29–11.76. A female paratype total length 11.76: dorsal shield of prosoma 4.83 long, 5.15 wide; opisthosoma 6.72 long, 4.41 wide. Eye diameters: AME 0.20, ALE 0.30, PME 0.18, PLE 0.33. Eye interdistances: AME–AME 0.17, AME–ALE 0.10, PME–PME 0.33, PME–PLE 0.43, ALE–PLE 0.35. MOA 0.63 long, anterior width 0.53, posterior width 0.73. Clypeus height 0.30. Spination: Palps 131, 101, 2121, 1014; femora I–III 323, IV 321; patellae I–II 001, III–IV 101; tibiae I 2026, II 20(1)26, III 2226, IV 2326; metatarsi I–II 1014, III 3026, IV 3036. Measurements of legs: I 14.19 (4.10, 5.57, 3.36, 1.16), II 15.44 (4.62, 5.99, 3.57, 1.26), III 13.14 (3.99, 4.94, 3.05, 1.16), IV 15.02 (4.41, 5.25, 3.99, 1.37). Leg formula: 2413. Shape, colouration and markings of body as in male. Epigyne two times wide as long, with posterior lobes undivided medially; head of spermathecae almost as long as broad (Figs 5–6), not extending beyond posterior part laterally; spermathecae separated medially.

VARIATION. The specimen from Taibai Shan, Shaanxi Province exhibits some slight differences: The leg formula is 2143 (2413 in holotype and female paratype). This is almost in accordance with results of Jäger [2001: Fig. 4] for Heteropodinae: leg formula depends on body size (2413 in smaller species with prosoma length 1.8–5.5 mm, 2143 in larger species with prosoma length 4.5–11.7 mm prosoma length). The range for species with the leg formula 2413 is here extended for *Sinopoda* to 6.1 mm prosoma length. Embolic apophysis is slightly shorter than in the holotype and ventral branch of RTA is more slender than that of the holotype. The specimen was freshly moulted. Therefore the colouration is brighter than in the holotype. Prosoma and legs are yellowish brown. Opisthosoma exhibits a bright heart patch dorsally.

TAXONOMIC REMARKS. The new species is distinctly different from known *Sinopoda* spp. from China. However, the female holotype of *Sinopoda stellata* (Schenkel, 1963) from Gansu Prov. could not be located. However, the original illustration show distinct differences to the present spec-

imens. Male holotype of *Sinopoda minschana* (Schenkel, 1936), also described from Gansu Prov., was examined by P. Jäger and is not conspecific with neither closely related to *S. serpentembolus* sp.n.

DISTRIBUTION. China (Henan, Shaanxi).

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