

A new genus and new records of linyphiid spiders from the Oriental Region (Aranei: Linyphiidae)

Новые род и находки пауков-линифиид в Ориентальной области (Aranei: Linyphiidae)

A.V. Tanasevitch

А.В. Танасевич

A.N. Severtsov Institute of Ecology and Evolution, Russian Academy of Sciences, Leninsky prospekt 33, Moscow 119071, Russia.
E-mail: tanasevitch@gmail.com

Институт проблем экологии и эволюции им. А.Н. Северцова РАН, Ленинский проспект 33, Москва 119071, Россия.

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КЛЮЧЕВЫЕ СЛОВА: таксономия, фаунистика, Arachnida, Linyphiinae, Erigoninae, Индо-Малайская область, Юго-Восточная Азия.

ABSTRACT. A new genus, *Singatrichona* gen.n., with *Singatrichona longipes* sp.n. as the type species, is described based on a single male from Singapore. The new genus and species presently fail to show any clear-cut relations among the known Oriental Erigoninae, but some superficial resemblance is noted to a few Palaearctic genera, especially *Trichoncus* Simon, 1884. *Caviphantes pseudosaxetorum* Wunderlich, 1979 is recorded from Sri Lanka and Sumatra, Indonesia for the first time; *Nasoona crucifera* (Thorell, 1895) is new to the Sumatran fauna; *N. orissa* Tanasevitch, 2018 is new to the Sri Lankan list; and *Ostearius melanopygius* (O. Pickard-Cambridge, 1880) is new to the fauna of Java, Indonesia.

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РЕЗЮМЕ. Новый род, *Singatrichona* gen.n., с типовым видом *Singatrichona longipes* sp.n., описан по единственному самцу из Сингапура. На сегодняшний день родственных связей среди известных ориентальных эригонин новый род не обнаруживает, но имеет некоторые черты сходства с несколькими палеарктическими родами, в особенности с *Trichoncus* Simon, 1884. Вид *Caviphantes pseudosaxetorum* Wunderlich, 1979 впервые найден на Шри-Ланке и на Суматре, Индонезия; *Nasoona crucifera* (Thorell, 1895) — новый вид для фауны Суматры, *N. orissa* Tanasevitch, 2018 — новый для фауны Шри-Ланки; *Ostearius melanopygius* (O. Pickard-Cambridge, 1880) впервые отмечен на Яве, Индонезия.

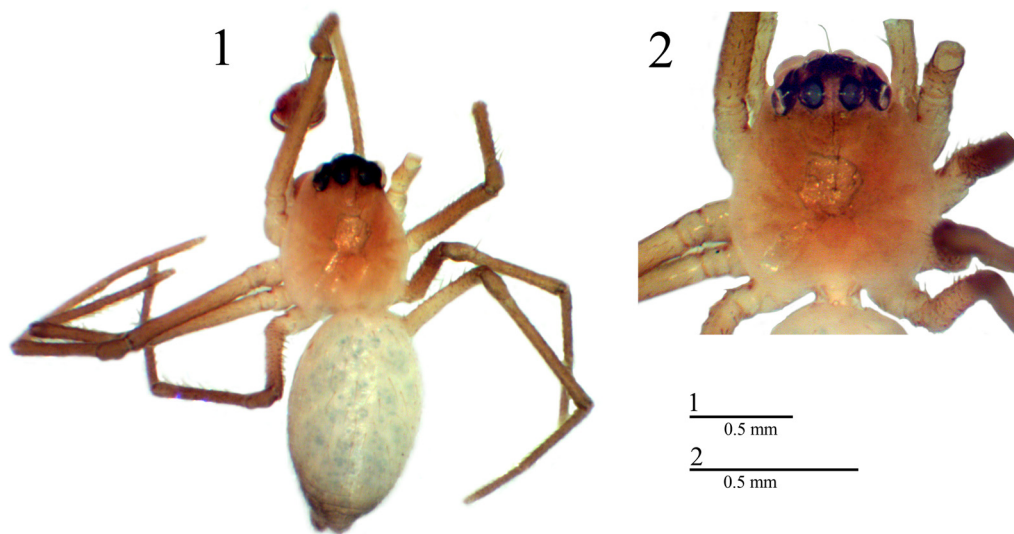
Introduction

Only five recognized linyphiid species from three genera are currently known to occur in Singapore: *Batueta voluta* Locket, 1982, *Nasoona chrysanthusi* Locket, 1982, *N. crucifera* (Thorell, 1895), *N. prominula* Locket, 1982 [WSC, 2019], and *Erigone bifurca* [Locket, 1982, Seletar Reservoir]. The present paper provides descriptions of a new genus and species from Singapore, as well as new records of further 13 linyphiid spider species from the Oriental Region.

Material and methods

This paper is chiefly based on material kept in the Muséum d'histoire naturelle de Genève, Switzerland (MHNG), with a few additional samples coming from the Zoological Museum of the Moscow State University, Moscow, Russia (ZMMU). Sample numbers (for MHNG material) are given in square brackets. Specimens preserved in 70% ethanol were studied using a MBS-9 stereo microscope. A Levenhuk C-800 digital camera was applied for taking some pictures. The sequence of leg segment measurements is as follows: femur+patella+tibia+metatarsus+ tarsus. All measurements are given in millimeters. The chaetotaxy is given in a formula, e.g., 1.1.1.1.1, which refers to the number of dorsal spines on tibiae I–IV. Scale lines in the figures correspond to 0.1 mm unless indicated otherwise.

The following abbreviations are used in the text and figures: a.s.l. — above sea level; ARA — anterior radical apophysis; DSA — distal supratetral apophysis sensu Hormiga [2000]; E — embolus; R — radix; WSC — World Spider Catalog.



Figs 1–2. Photographs of *Singatrichona longipes* sp.n., ♂ holotype. 1 — habitus, dorsal view; 2 — prosoma, dorsal view.
Рис. 1–2. Фотографии *Singatrichona longipes* sp.n., ♂ голотип. 1 — внешний вид сверху; 2 — просома, вид сверху.

Taxonomy

Order Araneae Clerck, 1758
Family Linyphiidae Blackwall, 1859
Subfamily Erigoninae Emerton, 1882

Singatrichona gen.n.

Figs 1–6.

Type species: *Singatrichona longipes* sp.n.

NAME. The generic name is a combination of two words: “Singapore”, the “*terra typica*”, and a part of the generic name *Trichoncus*; the gender is feminine.

DIAGNOSIS. The genus contains medium-sized erigonines (total length 1.63) with slender and relatively long legs, being characterized by the following combination of somatic and genitalic characters:

- 1) Carapace unmodified (Fig. 1), eyes somewhat enlarged, cephalic pits (= sulci) absent (Fig. 2).
- 2) Chaetotaxy formula 1.1.1.1.
- 3) No metatarsal trichobothria traced on any legs. TmI unknown.
- 3) Palpal tibia strongly modified.
- 4) Paracymbium small, unmodified.
- 5) Median membrane (sensu van Helsdingen [1965]) reduced.
- 6) Distal suprategular apophysis moderately developed.
- 7) Embolus wide, flat, looped.
- 8) Radix relatively large and elongated; anterior radical apophysis present.
- 9) Convector absent.

For more details see the description of the type species below.

TAXONOMIC REMARKS. Unfortunately, the presently poor knowledge of the Oriental linyphiid fauna allows for no genus related to *Singatrichona* gen.n. to be found among the Indo-Malayan erigonines. The new genus does bear some superficial resemblance to a few Palearctic genera, i.e., *Hypsocephalus* Millidge, 1978, *Maculoncus* Wunderlich,

1995, and, especially, *Trichoncus* Simon, 1884. This similarity is supported by the chaetotaxy formula and the structure of the palp, namely, the coiled embolus, the elongated radix, the presence of an anterior radical apophysis, the moderately developed distal suprategular apophysis, as well as the absence of a convector. However, *Singatrichona* gen.n. cannot be assigned to *Trichoncus*, as this similarity seems to be superficial, as the habitus and palp of both genera are different. *Trichoncus* is characterized by the relatively short and stout legs, the presence of a characteristic shallow hollow in the proximal part of the cymbium, the peculiar shape of the palpal tibia with a long, special apophysis, as well as the much thinner, whip-shaped embolus.

SPECIES INCLUDED. Only the type species.

DISTRIBUTION: So far known only from the type locality in Singapore.

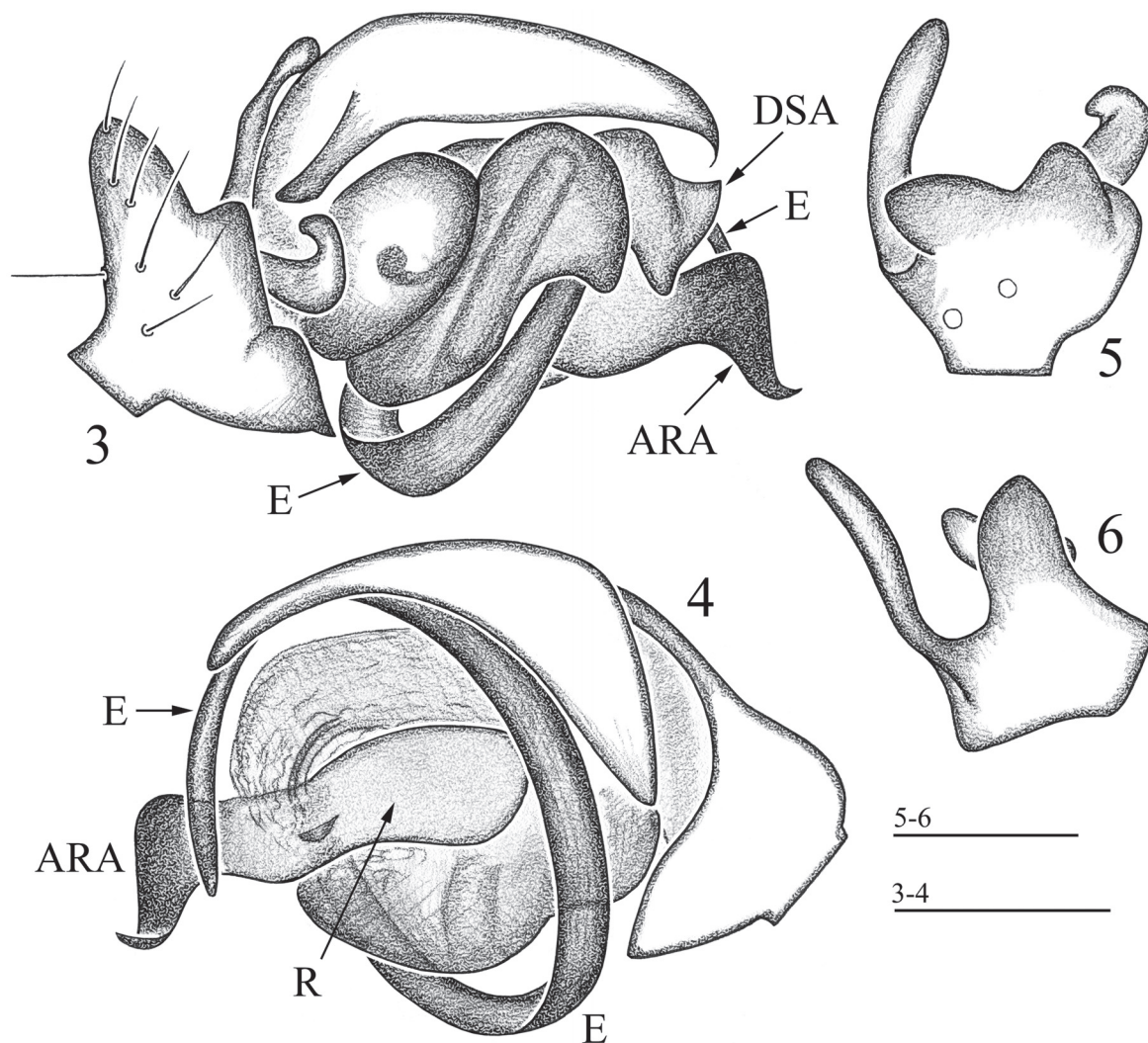
Singatrichona longipes sp.n.

Figs 1–6.

HOLOTYPE ♂ (MHNG), SINGAPORE, Island Country Club, between Lower Peirce Reservoir and Windsor Park Estate, remains of primary forest surrounded by secondary forests, 60 m a.s.l., 12.XI.1988, leg. C. Lienhard [Bru-88/2].

NAME. The specific epithet refers to the relatively long legs observed in the type species.

DESCRIPTION. Male holotype. Total length 1.63. Carapace unmodified, as shown in Fig. 2, 0.80 long, 0.63 wide, reddish pale brown; coloration intensity decreasing towards the edge of carapace. Eyes slightly enlarged. Chelicerae 0.30 long, a mastidion absent. Legs infusate, grayish yellow to grayish pale brown. Leg I, 2.78 long (0.75 + 0.18 + 0.70 + 0.65 + 0.50), leg IV, 2.69 (0.75 + 0.15 + 0.72 + 0.62 + 0.45). Chaetotaxy 1.1.1.1. Spines 1.5–2 as long as diameter of corresponding leg segment. Palp (Figs 3–6): Tibia modified, complex in shape. Paracymbium small, L-shaped, hooked apically. Distal suprategular apophysis short and broad. Median membrane reduced. Embolus flat and broad, making a loop, with a narrow membranous edge. Radix elongated, anterior radical apophysis infusate, bent down, pointed api-



Figs 3–6. Details of male palpal structure of *Singatrichona longipes* sp.n., ♂ holotype. 3–4 — right palp, retrolateral and prolateral views, respectively; 5–6 — palpal tibia, dorsal and prolateral views, respectively.

Рис. 3–6. Детали строения пальпы самца *Singatrichona longipes* sp.n., ♂ голотип. 3–4 — правая пальпа, ретролатерально и пролатерально, соответственно; 5–6 — голень пальпы, вид сверху и пролатерально, соответственно.

cally. Abdomen 1.00 long, 0.60 wide, white, with an infuscate end as shown in Fig. 1.

Female unknown.

TAXONOMIC REMARKS. See above under the generic diagnosis.

DISTRIBUTION. So far known only from the type locality.

Faunistic records

Atypena cirrifrons (Heimer, 1984)

MATERIAL. 1 ♂ (ZMMU), INDIA, Meghalaya, Sohra (Cherapunjee), plateau, 25.27°N 91.82°E, 1320 m a.s.l., 14–26.XII.2013, leg. K.P. Tomkovich.

DISTRIBUTION. *Atypena cirrifrons* is known from Hanoi, Vietnam [Heimer, 1984]; Guangxi, China (Zhu, Sha, 1992); Champasak Prov., Laos [Tanasevitch, 2014a]; Chiang Mai Prov., Thailand [Tanasevitch, 2014b]; Orissa (= Odisha), India [Tanasevitch, 2017], and presently also from Meghalaya, India.

ha), India [Tanasevitch, 2017], and presently also from Meghalaya, India.

Bathyphantes floralis Tu et Li, 2006

MATERIAL. 1 ♀ (MHNG), VIETNAM, Ha Noi Province, Ba Vi District, Mt Ba Vi, 21°04'35"N, 105°22'13"E, 500–750 m a.s.l., evergreen forest, 15–17.V.2012, leg. P. Schwendinger & A. Schulz [VN-12/04c].

DISTRIBUTION. The species is known from northern Vietnam [Tu, Li, 2006]; Luang Prabang, Vientiane and Champasak provinces, Laos [Tanasevitch, 2014a].

REMARKS. As mentioned elsewhere [Tanasevitch, 2014a], *B. floralis* is probably a junior synonym of *B. robustus* Oi, 1960.

Bathyphantes paracymbialis Tanasevitch, 2014

MATERIAL. 1 ♀ (MHNG), THAILAND, Tak Province, Lan Sang National Park, between Tak and Mae Sot, 200 m a.s.l., 25.VII.1987, leg. P. Schwendinger.

DISTRIBUTION. Known from southeastern China [Zhao, Li, 2014]; Laos; northern Thailand [Tanasevitch, 2014a]; West Malaysia [Tanasevitch, 2014a, b]; Mandalay Region, Myanmar; Sumatra, Indonesia [Tanasevitch, 2017].

Caviphantes pseudosaxetorum Wunderlich, 1979

MATERIAL. 3 ♂♂ (ZMMU), INDIA, Himachal Pradesh, Kothi Village & environs, 32°18'N 77°11'E, 2300–2600 m a.s.l., 29.V–8.VI.1999, leg. Yu. Marusik; 3 ♀♀ (MHNG), Tamil Nadu, Kodaikanal, 1800 m a.s.l., 8.I.1972; leg. R. Mussard [In-72/10]; 1 ♂, 6 ♀♀ (MHNG), SRI LANKA, Central Province, Pidurutalagala, 2500 m a.s.l., timberline, sifting litter just below summit, 29.I.1970, leg. C. Besuchet & I. Löbl [SL-70/31]; 1 ♂, 2 ♀♀ (MHNG), INDONESIA, Sumatra, North Sumatra Province, Lumban Rang National Park, near Prapat–Porsea road, 15 km from Prapat, 2°36'14"N, 99°02'42"E, 1350 m a.s.l., primary forest, 1.VII.2006, leg. P. Schwendinger [Sum-06/31]; 1 ♂ (MHNG), Java, West Java Province, near Cipanas, ca. 50 km E of Bogor, Cibodas Botanical Garden, 1400 m a.s.l., sifted plant debris in montane *Lithocarpus-Castanopsis* forest, 3–6.XI.1989, leg. D. Burckhardt, I. Löbl & D. Agosti [2a].

DISTRIBUTION. The species was originally described from the Nepal Himalayas (2100–2900 m a.s.l.) [Wunderlich, 1979], later recorded from Japan [Ono *et al.*, 1991]; China [Gao *et al.*, 1992]; Lebanon [Tanasevitch, 2011a]; Kurile Islands, Russia [Tanasevitch, 2011b]; Pakistan and India [Tanasevitch, 2011c], and presently reported from Himachal Pradesh, India, as well as Sri Lanka and Sumatra, Indonesia for the first time.

Ostearius melanopygius (O. Pickard-Cambridge, 1880)

MATERIAL. 1 ♀ (MHNG), INDONESIA, Java, Cibodas Botanical Garden, ca. 1320 m a.s.l., under bark and, especially, under flower pots in the “Nursery” part, 27.XI.1987, leg. B. Hauser [Sar-87/27].

DISTRIBUTION. Cosmopolitan, in southeastern Asia is known from Borneo, East Malaysia [Tanasevitch, 2017], and presently recorded from Java, Indonesia for the first time.

Nasoona crucifera (Thorell, 1895)

MATERIAL. 1 ♀ (MHNG), INDONESIA, Sumatra, ca. 15 km W of Bukittinggi, Lake Maninjau, 30.IV.1977, leg. T. Jaccoud & P. Marcuard [r147].

DISTRIBUTION. Known from India; China (including Taiwan); Hong Kong; Myanmar; Laos; Vietnam; Thailand; Singapore; Malaysia (mainland and Borneo); Borneo, Indonesia [WSC, 2019], and presently recorded from Sumatra, Indonesia for the first time.

Nasoona orissa Tanasevitch, 2018

MATERIAL. 1 ♂ (MHNG), SRI LANKA, North Central, Ambagaswewa, sifting litter in forest near river, 3.II.1970, leg. C. Besuchet & I. Löbl [SL-70/44c]; 1 ♂ (MHNG), Uva, Inginiyagala, sifting litter in forest, 12.II.1970, leg. C. Besuchet & I. Löbl [SL-70/63c].

DISTRIBUTION. The species is known from Orissa (= Odisha), India [Tanasevitch, 2017], and presently recorded from Sri Lanka for the first time.

Nematogmus dentimanus Simon, 1886

MATERIAL. 1 ♂ (MHNG), SRI LANKA, Uva, Inginiyagala, sifting litter in forest, 12.II.1970, leg. C. Besuchet & I. Löbl [SL-70/63c].

DISTRIBUTION. Sri Lanka to Malaysia; Java and Krakatau, Indonesia [WSC, 2019].

Oedothorax kodaikanal Tanasevitch, 2015

MATERIAL. 1 ♂ (MHNG), INDIA, Tamil Nadu, Kodaikanal, 1800 m a.s.l., 8.I.1972, leg. R. Mussard [In-72/10].

DISTRIBUTION. The species was originally described from Palni Hills (2150 m a.s.l.), Tamil Nadu, India [Tanasevitch, 2015], and presently registered close to its type locality.

Oedothorax stylus Tanasevitch, 2015

MATERIAL. 1 ♂ (MHNG), INDIA, Tamil Nadu, Anaimalais Hills, 700–1000 m a.s.l., 17.I.1972, leg. R. Mussard [In-72/4].

DISTRIBUTION. The species was originally described from Nelliampathi Hills (900 m a.s.l.), Kerala and from Anaimalai Hills (1250 m a.s.l.), Tamil Nadu, India [Tanasevitch, 2015].

Oedothorax rusticus Tanasevitch, 2015

MATERIAL. 1 ♂ (MHNG), INDIA, Tamil Nadu, Kodaikanal, 1800 m a.s.l., 8.I.1972, leg. R. Mussard [In-72/10].

DISTRIBUTION. The species was originally described from Palni Hills (2100 m a.s.l.), Tamil Nadu, India [Tanasevitch, 2015], and presently registered close to its type locality.

Paracymboides tibialis Tanasevitch, 2011

MATERIAL. 1 ♂, 2 ♀♀ (MHNG), INDIA, Tamil Nadu, Coonoor, 600 m a.s.l., 16.I.1972, leg. R. Mussard [In-72/5]; 1 ♀ (MHNG), Coonoor, 1900 m a.s.l., 16.I.1972, leg. R. Mussard [In-72/7].

DISTRIBUTION. The species was originally described from Nilgiri Hills (1600–2150 m a.s.l.), from Nelliampathi Hills (900 m a.s.l.), and Cardamom Hills (700 m a.s.l.), Kerala, India [Tanasevitch, 2011c].

Paragonyldiellum caliginosum Wunderlich, 1973

MATERIAL. 1 ♂, 4 ♀♀ (MHNG), INDIA, Tamil Nadu, Anaimalais Hills, 700–1000 m a.s.l., 17.I.1972, leg. R. Mussard [In-72/4].

DISTRIBUTION. The species was known from the Nepal Himalayas (2100–3930 m a.s.l.) [Wunderlich, 1973; 1983], as well as from Anaimalai Hills (1250 m a.s.l.), Tamil Nadu, India [Tanasevitch, 2011c].

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