

## Two new *Oedothorax* Bertkau, 1883 from eastern India (Aranei: Linyphiidae)

## Два новых вида *Oedothorax* Bertkau, 1883 из восточной Индии (Aranei: Linyphiidae)

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КЛЮЧЕВЫЕ СЛОВА: таксономия, пауки, Erigoninae, Ориентальное царство, Meghalaya.

**ABSTRACT.** Two new species, *Oedothorax unciger* sp.n. and *O. sohra* sp.n., are described from the state of Meghalaya, eastern India. *O. unciger* sp.n. differs well from other congeners by the presence of characteristic, hook-shaped outgrowth on the convector. *O. sohra* sp.n. seems to be especially similar to *O. myanmar* Tanasevitch, 2017, but is distinguished by a thinner dorsal tibial process of the palp, as well as by both the distal supratégular apophysis and the distal apophysis of the convector being longer.

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**РЕЗЮМЕ.** Два новых вида, *Oedothorax unciger* sp.n. и *O. sohra* sp.n., описаны из штата Мегхалая (восточная Индия). *O. unciger* sp.n. хорошо отличается от других представителей рода наличием специфического крючковидного отростка на конвекторе. *O. sohra* sp.n. близок к *O. myanmar* Tanasevitch, 2017, но отличается более тонким дорсальным выростом голени пальпы и более длинными дистальным супратегулярным отростком и дистальным отростком конвектора.

### Introduction

At present, the spider fauna of India is known to contain 14 species of *Oedothorax* Bertkau, in Förster et Bertkau, 1883. Six of them are from the Himalaya, likely Palaearctic, encountered at 1200–2600 m a.s.l. The remaining eight *Oedothorax* have been described from uplands within the Oriental part of the country, at 900–2150 m a.s.l. [Thaler, 1987; Tanasevitch 2015, 2016, 2017]. Another two new species of *Oedothorax*, taken by Konstantin Tomkovich (Moscow) from the highlands of Meghalaya, within the Oriental part of

India, have been located in the collection of the Zoological Museum of the Moscow State University, Moscow, Russia (ZMMU). Their descriptions are the subject of the present paper.

### Material and methods

This paper is based on the spider material kept in the ZMMU. All specimens are preserved in 70% ethanol and have been 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., 2.2.1.1, which refers to the number of dorsal spines on tibiae I–IV. Scale bars in the figures correspond to 0.1 mm unless indicated otherwise. Figure numbers are given above the scale lines, the alternative distance below. The terminology of copulatory organs mainly follows that of Merrett [1963], Hormiga [2000] and Tanasevitch [1998, 2015].

The following abbreviations are used in the text and figures: a.s.l. — above sea level, D — duct, DAC — distal apophysis of convector, DSA — distal supratégular apophysis, E — embolus, H — hook, LEC — lateral extension of convector, LT — lateral tooth of DSA, MBC — main body of convector, Mt — metatarsus, P — paracymbium, Pr — protegulum, Ti — tibia, TmI — position of trichobothrium on metatarsus I.

### Descriptions

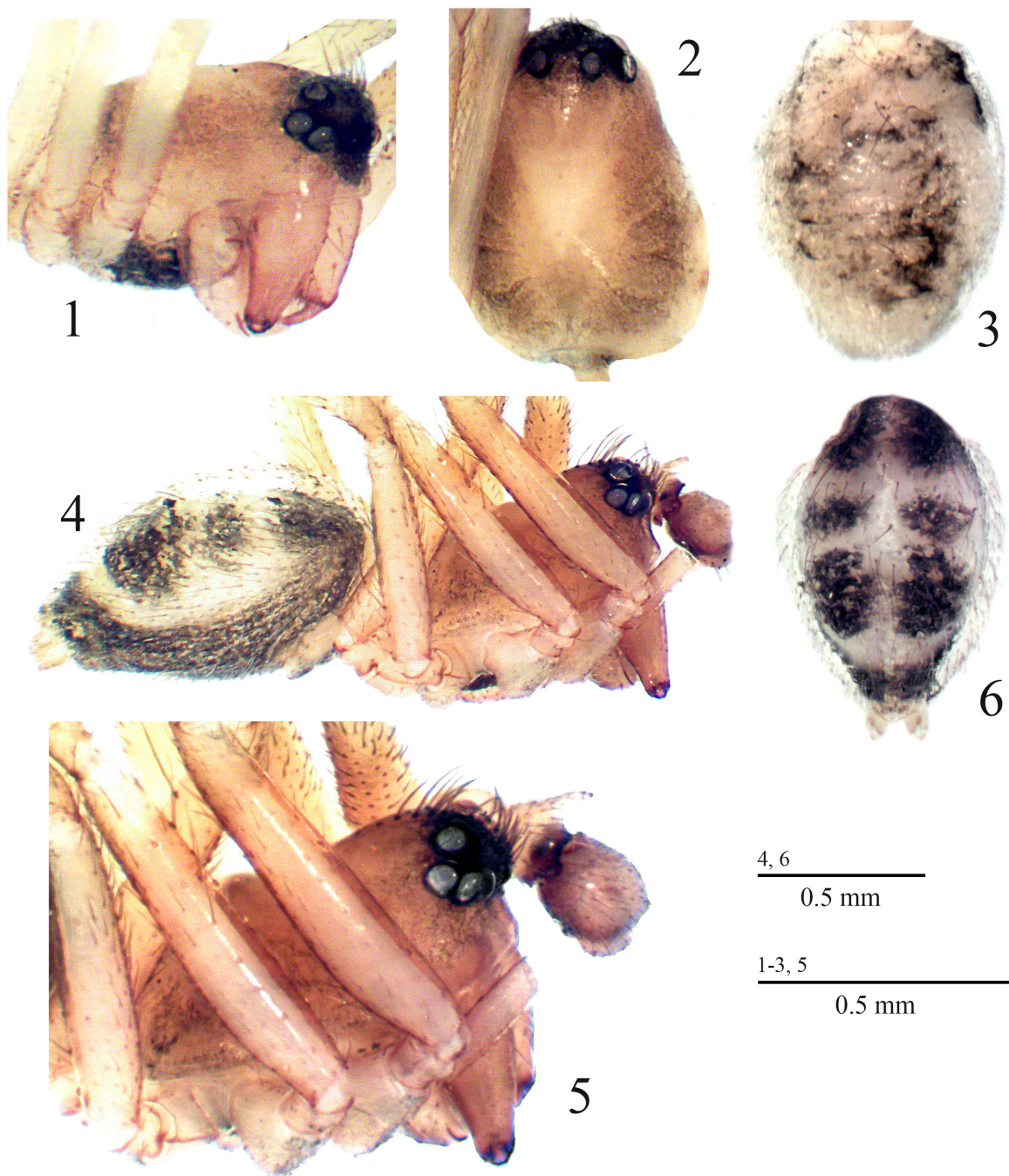
#### *Oedothorax unciger* sp.n.

Figs 1–3, 7–12.

**HOLOTYPE** ♂ (ZMMU), INDIA, Meghalaya, Sohra, plateau, 1320 m a.s.l., 14–26.XII.2013, leg. K.P. Tomkovich.

**PARATYPE.** 1 ♂ (ZMMU), together with holotype.

**NAME.** The specific epithet is a noun in apposition, meaning “bearing a hook”, referring to the presence of a characteristic hook on the convector of the male palp.

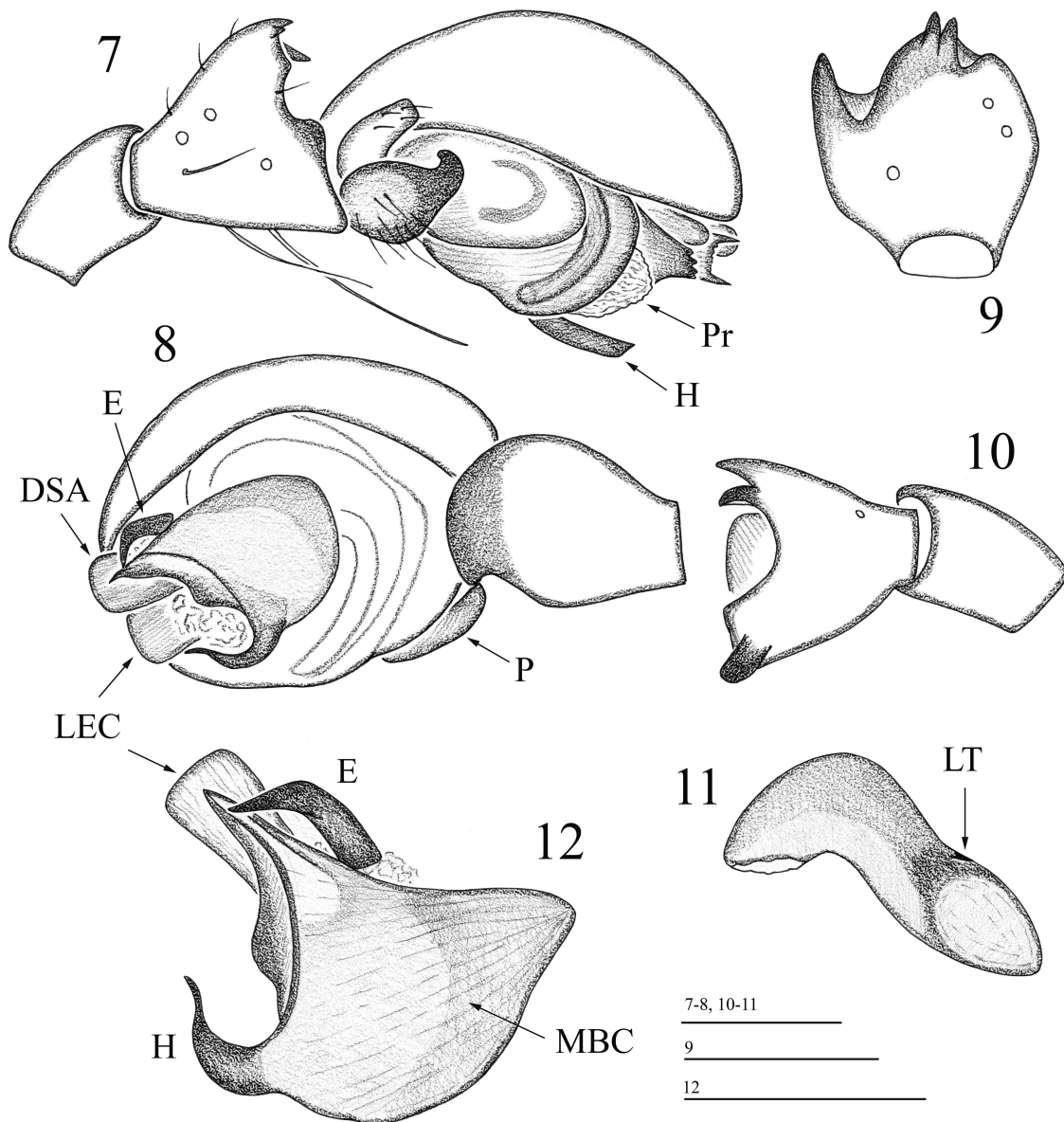


Figs 1–6. Pictures of *Oedothorax unciger* sp.n. (1–3), ♂ holotype, and *O. sohra* sp.n. (4–6), ♂ holotype. 1 — prosoma, anterolateral view; 2, 5 — prosoma, dorsal and lateral views, respectively; 3, 6 — abdomen, dorsal view; 4 — habitus, lateral view.

Рис. 1–6. Фотографии *Oedothorax unciger* sp.n. (1–3), голотип ♂ и *O. sohra* sp.n. (4–6), голотип ♂. 1 — головогрудь, вид спереди и сбоку; 2, 5 — головогрудь, вид сверху и сбоку, соответственно; 3, 6 — брюшко, вид сверху; 4 — внешний вид сбоку.

**DESCRIPTION.** Male (holotype). Total length 1.70. Carapace unmodified, 0.75 long, 0.65 wide, pale brown to yellow, with a wide, grey margin. Head part of carapace not elevated, ocular area with numerous, short, slightly curved spines, as shown in Figs 1–2. Chelicerae 0.28 long, unmodified, a mastidion absent. Legs yellow. Leg I, 3.48 long ( $1.00 + 0.20 + 0.85 + 0.85 + 0.58$ ), IV, 3.19 long ( $0.90 + 0.18 + 0.80 + 0.83 + 0.48$ ). Chaetotaxy: 2.2.1.1.1, spines 2–3x

as long as diameter of corresponding leg segment. Each metatarsus with a trichobothrium. TmI 0.78. Palp (Figs 7–12): Length of patella subequal to tibia. Tibia slightly elongated dorsally, faintly bifid apically. Distal part of paracymbium bearing numerous, somewhat curved spines. Protegulum well-developed. Distal suprategular apophysis short, spoon-shaped. Embolus very small, bent near middle. Convector large, its distal apophysis relatively short, pointed.



Figs 7–12. Details of male palpal structure of *Oedothorax unciger* sp.n., paratype. 7–8 — right palp, retro- and ventro-prolateral views, respectively; 9 — palpal tibia, dorsal view; 10 — palpal tibia and patella retrolateral view; 11 — distal suprategular apophysis; 12 — embolic division.

Рис. 7–12. Детали строения пальпы самца *Oedothorax unciger* sp.n., paratype. 7–8 — правая пальпа, ретро- и вентро-пролатерально, соответственно; 9 — голень пальпы, вид сверху; 10 — голень пальпы и колено, пролатерально; 11 — дистальный супратегулярный отросток; 12 — эмболюсный отдел.

Lateral extension of convector large, a flat and wide apophysis. Abdomen in poor condition, 0.80 long, 0.60 wide, dorsal pattern partly obliterated, as shown in Fig. 3. Paratype completely devoid of an abdomen.

Female unknown.

**TAXONOMIC REMARKS.** The new species differs distinctly from other congeners by the presence of a characteristic hook-shaped outgrowth in the lower part of the convector.

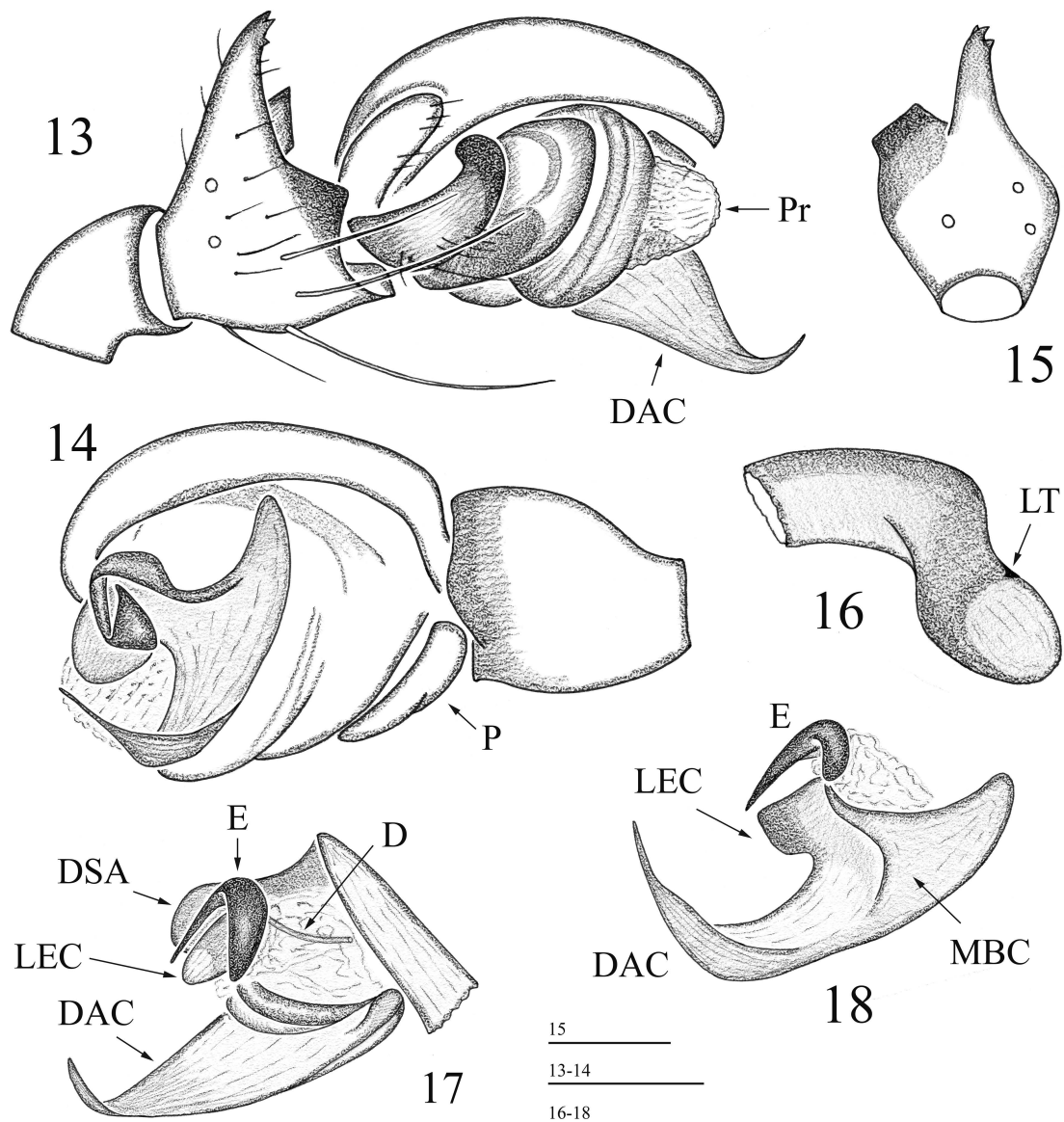
**DISTRIBUTION.** Only known from the type locality.

***Oedothorax sohra* sp.n.**

Figs 4–6, 13–18.

**HOLOTYPE** ♂ (ZMMU), INDIA, Meghalaya, Sohra, plateau, 1320 m a.s.l., 14–26.XII.2013, leg. K.P. Tomkovich.

**NAME.** The specific name is a noun in apposition taken from the name of the type locality.



Figs 13–18. Details of male palpal structure of *Oedothorax sohra* sp.n., ♂ holotype. 13–14 — right palp, retro- and ventro-prolateral views, respectively; 15 — palpal tibia, dorsal view; 16 — distal supratregular apophysis; 17–18 — embolic division, different aspects.

Рис. 13–18. Детали строения пальпы самца *Oedothorax sohra* sp.n., голотип ♂. 13–14 — правая пальпа, ретро- и вентро-пролатерально, соответственно; 15 — голень пальпы, вид сверху; 16 — дистальный супратегулярный отросток; 17–18 — эмболюсный отдел, различные аспекты.

**DESCRIPTION.** Male (holotype). Total length 1.98. Carapace unmodified, 0.98 long, 0.75 wide, pale brown. Head part of carapace slightly protruded forward, bearing numerous, short, slightly curved spines, as shown in Figs 4–5. Chelicerae 0.38 long, unmodified, a mastidion absent. Legs pale brown to yellow. Leg I, 3.28 long ( $0.90 + 0.25 + 0.85 + 0.78 + 0.50$ ), IV, 3.37 long ( $0.93 + 0.25 + 0.88 + 0.83 + 0.48$ ). Chaetotaxy: 2.2.1.1, spines 2–2.5x as long as diameter of corresponding leg segment. Each metatarsus with a trichobothrium. TmI 0.61. Palp (Figs 13–18): Patella shorter

than tibia. Tibia dorsally with a long and slender process terminating in 2–3 denticles. Prolateral tibial outgrowth keel-shaped. Paracymbium relatively large, its distal part bearing strong, somewhat curved spines. Protegulum well-developed. Distal supratregular apophysis short, spoon-shaped. Embolus very small, bent near middle. Convectator large, complex, its distal apophysis very long, gradually tapering and curved distad. Lateral extension of convectator short and wide. Abdomen 1.10 long, 0.70 wide, dorsal pattern as in Fig. 6.

Female unknown.

**TAXONOMIC REMARKS.** *Oedothorax sohra* sp.n. seems to be especially similar to *O. myanmar* Tanasevitch, 2017, the latter species described from Myanmar [Tanasevitch, 2017]. The new species is distinguished by the thinner dorsal tibial process, as well as by both the distal supratibial apophysis and the distal apophysis of the connector being longer. The shape of the distal supratibial apophysis resembles that of *O. uncus* Tanasevitch, 2015; the structure of the embolic division is similar to that of *O. cunur* Tanasevitch, 2015. From these two latter species, *O. sohra* sp.n. differs clearly by small, but distinct structural details of the palp.

**DISTRIBUTION.** Only known from the type locality.

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## References

- Hormiga G. 2000. Higher level phylogenetics of erigonine spiders (Araneae, Linyphiidae, Erigoninae) // Smithsonian Contributions to Zoology. No.609. P.1–160.
- Merrett P. 1963. The palpus of male spiders of the family Linyphiidae // Proceedings of the Zoological Society of London. Vol.140. P.347–467.
- Tanasevitch A.V. 1998. New *Oedothorax* Bertkau, 1883 from Nepal (Arachnida, Araneae, Linyphiidae) // Bonner Zoologische Beiträge. Bd.47. Nr.3–4. P.429–441.
- Tanasevitch A.V. 2015. Notes on the spider genus *Oedothorax* Bertkau, 1883 with description of eleven new species from India (Linyphiidae: Erigoninae) // Revue suisse de Zoologie. T.122. Fasc.2. P.381–398.
- Tanasevitch A.V. 2016. A case of disjunct montane linyphiid species (Araneae) in the Palaearctic, with notes on synonymy and the description of a new species // Revue suisse de Zoologie. T.123. Fasc.2. P.235–240.
- Tanasevitch A.V. 2017. New species and new records of linyphiid spiders from the Indo-Malayan Region (Araneae: Linyphiidae) // Zootaxa. Vol.4227. No.3. P.325–346.
- Thaler K. 1987. Über einige Linyphiidae aus Kashmir (Arachnida: Araneae) // Courier Forschungsinstitut Senckenberg. Bd.93. S.33–42.

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