

On two rare spiders, *Walckenaeria incisa* (O. Pickard-Cambridge, 1871) and *Oryphantes angulatus* (O. Pickard-Cambridge, 1881) from the fauna of Ukraine (Aranei: Linyphiidae)

О двух редких пауках *Walckenaeria incisa* (O. Pickard-Cambridge, 1871) и *Oryphantes angulatus* (O. Pickard-Cambridge, 1881) в фауне Украины (Aranei: Linyphiidae)

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КЛЮЧЕВЫЕ СЛОВА: пауки, Linyphiidae, *Walckenaeria incisa*, *Oryphantes angulatus*, иллюстрированные переписания.

ABSTRACT: Two Linyphiidae spider species, *Walckenaeria incisa* (O. Pickard-Cambridge, 1871) and *Oryphantes angulatus* (O. Pickard-Cambridge, 1881), are re-described and figured; their distributions in Ukraine are given.

РЕЗЮМЕ: Два редких вида пауков из сем. Linyphiidae, (*Walckenaeria incisa* (O. Pickard-Cambridge, 1871) и *Oryphantes angulatus* (O. Pickard-Cambridge, 1881)), переписаны и иллюстрированы; приводятся находки этих видов на Украине.

### Introduction

Two rare spider species, *Walckenaeria incisa* (O. Pickard-Cambridge, 1871) and *Oryphantes angulatus* (O. Pickard-Cambridge, 1881), were recently found in the North East part of Ukraine for the first time. Existing descriptions and illustrations for both species are insufficient for diagnostic purposes. Both species are re-described and figured in this paper.

In the following descriptions, names of the separate palpal structures follow Merrett [1963], with some changes according to Millidge [1977], and Saaristo & Tanasevitch [1996]. Abbreviations used in the text and figures are: C — cymbium; E — embolus; Ep — embolus proper; L — lamella characteristica; MM — median membrane; Pc — paracymbium; R — radix; Rp — radix part; Sa — supratregular apophysis; St — subtegulum; T — tegulum; Ta — terminal apophysis. Nomenclature and references for the species follows Platnick [2002].

All the material used are kept in the private collection of the author (GPC).

### Descriptions of species

*Oryphantes angulatus* (O. Pickard-Cambridge, 1881)

Fig. 1.

*Lepthyphantes angulatus* Locket & Millidge, 1953: fig. 234, 236.

*Lepthyphantes a.*: Merrett, 1963: 359, fig. 12; Miller, 1971: pl. XLIV, fig. 11–12; Palmgren, 1975: fig. 13.1–2; Heimer & Nentwig, 1991: fig. 529; Mikhailov, 1997: 71.

MATERIAL. UKRAINE: 3 ♀♀ (GPC), Sumy distr., Serednobuda region, vicinities of Staraya Guta, 8.05–22.06.2000, V.A. Gnelitsa; 7 ♀♀ ♂ (GPC), same locality, 17–18.09.2000, V.A. Gnelitsa.

DISTRIBUTION. The Palearctic region [Platnick, 2002]; in the territory of the former Soviet Union, Fennoscandia (Carelian-Kola area), Russian plain, the Urals and Estonia [Mikhailov, 1997].

HABITAT. *Sphagnum-Eriophorum* bogs, on higher ground in grass near the base of *Betula* trees.

DESCRIPTION. Male.

Total length 2.12 mm. Carapace 1.05 mm long, 0.87 mm wide, yellow (Fig. 1e,f). Posterior median eyes separated from each other by 0.5 times their diameter. Promargin of chelicera with 3 teeth. Sternum 0.53 mm long and 0.59 mm wide, light yellow, with darker margins. Legs: femur yellow, other segments grey-yellow, tibial spination 2:2:2:2; length of tibial spines/diameter of the tibia: I — 2.42, II — 1.87, III — 2.57, IV — 3.66. Each metatarsus with a spine; only metatarsus IV without trichobothrium. Position of the metatarsal trichobothrium: I — 0.18, II — 0.24, III — 0.20. Length of leg segments:

Leg	Femur	Patella	Tibia	Metatarsus	Tarsus
I	1.07	0.3	1.05	0.98	0.67
II	0.98	0.29	0.91	0.86	0.62
III	0.84	0.25	0.71	0.71	0.53
IV	1.12	0.28	1.06	1.00	0.65

Palpal structure as in Fig. 1a–d. Abdomen 1.26 mm long, 0.8 mm wide, uniformly grey.

Female.

Total length 2.4 mm. Carapace 0.92 mm long, 0.70 mm wide, yellow. Posterior median eyes separated from each other by 0.5 times their diameter. Promargin of chelicera with 3 teeth. Sternum 0.56 mm long, 0.50 mm wide. Legs: tibial spination 2:2:2:2; length of tibial spines/diameter of the tibia: I — 1.88, II — 2.22, III — 2.85, IV — 3.28. Each metatarsus with a spine, only metatarsus IV without trichobothrium. Position of the metatarsal trichobothrium: I — 0.21, II — 0.23, III — 0.28. Length of leg segments:

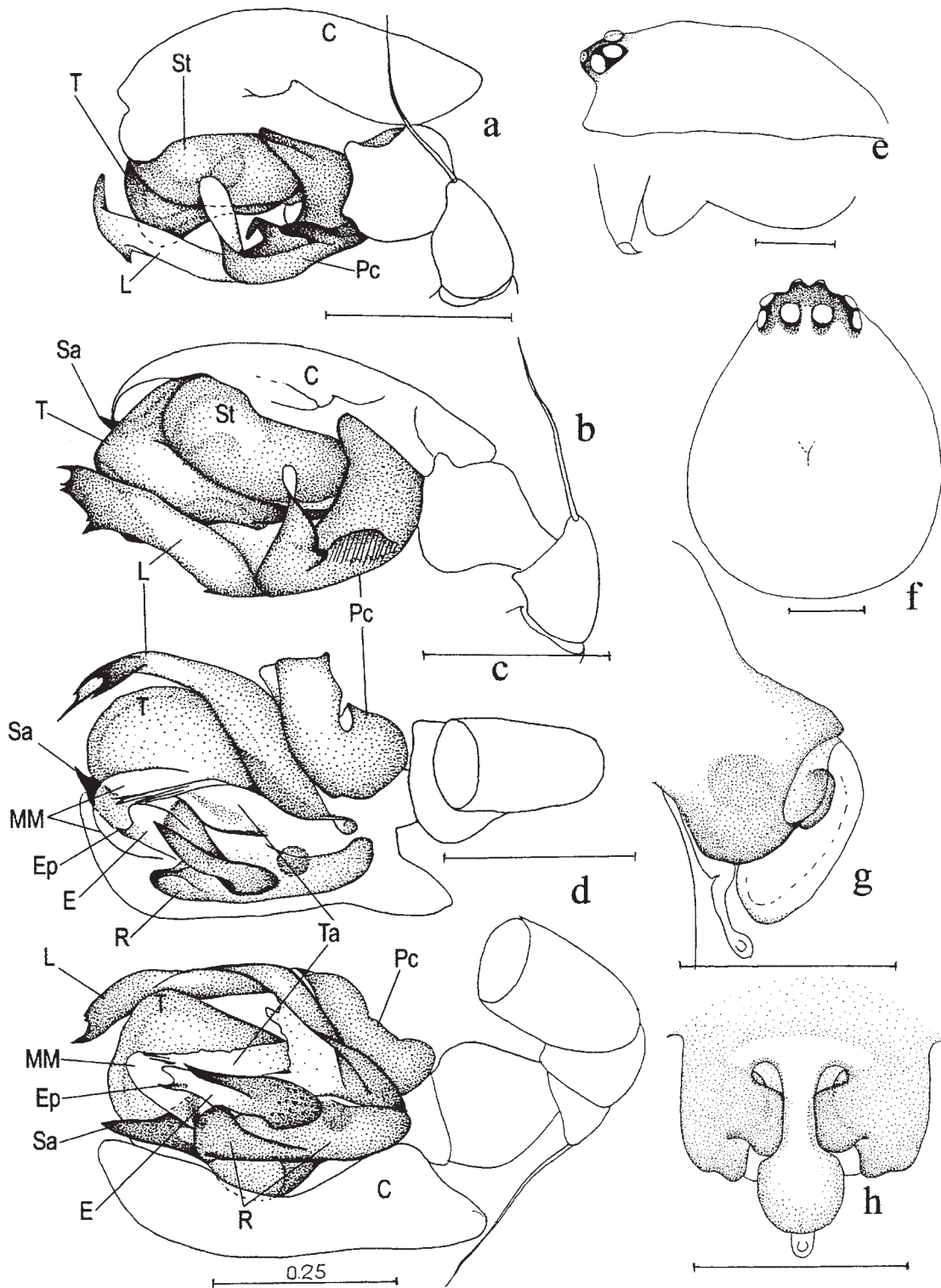
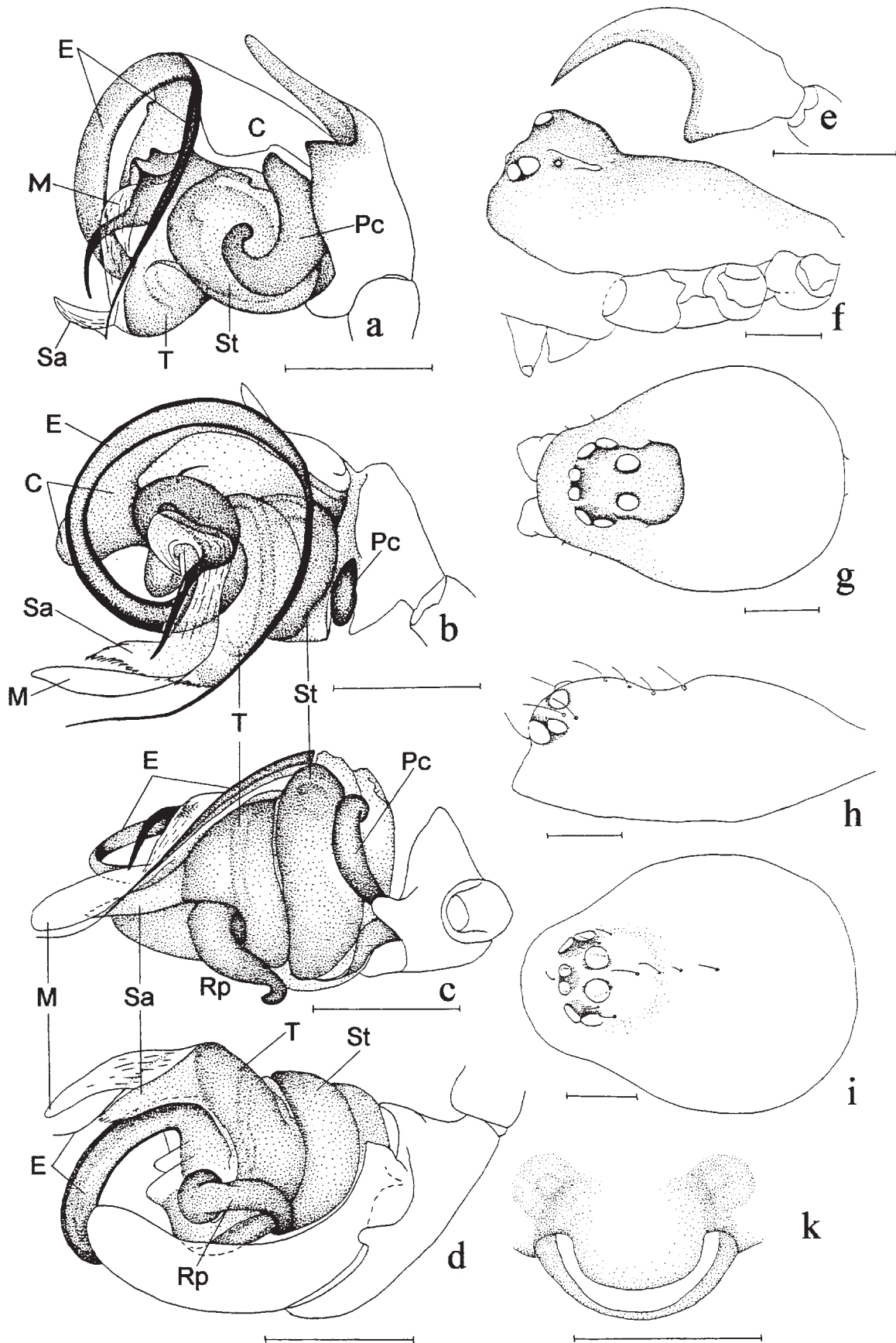


Fig.1 *Oryphantes angulatus*: a — male palp, retrolaterally; b — ditto, medially; c-d — ditto, ventrally; e — male carapace, laterally; f — ditto, dorsally; g — epigyne, laterally; h — ditto, ventrally.

Рис.1 *Oryphantes angulatus*: а — палец самца, ретролатерально; б — тоже, медиально; с-д — тоже, снизу; е — карапак самца, сбоку; ф — тоже, сверху; г — эпигина, сбоку; h — тоже, снизу.

Fig. 2 *Walckenaeria incisa*: a — male palp, retrolaterally; b — ditto, medially; c-d — ditto, ventrally; e — palpal tibia, dorsally; f — male carapace, laterally; g — ditto, dorsally; h — female carapace, laterally; i — ditto, dorsally; k — epigyne, ventrally.

Рис. 2 *Walckenaeria incisa*: а — палец самца, ретролатерально; б — тоже, медиально; с-д — тоже, снизу; е — голень пальпы, сверху; ф — карапак самца, сбоку; г — тоже, сверху; h — карапак самки, сбоку; и — тоже, сверху; k — эпигина, снизу.



Leg	Femur	Patella	Tibia	Metatarsus	Tarsus
I	1.06	0.29	0.96	0.85	0.68
II	0.98	0.28	0.85	0.79	0.62
III	0.82	0.27	0.70	0.65	0.49
IV	1.05	0.28	0.98	0.88	0.61

Epigyne as in Fig. 1g, h.

*Walckenaeria incisa* (O. Pickard-Cambridge, 1871)  
Fig. 2.

*Wideria polita* Locket & Millidge, 1953: fig. 122

*Prosopotheca incisa* Locket & Millidge, 1953: fig. 125

*Prosopotheca incisa* Wiehle, 1960: fig. 293

*Walckenaeria incisa* Heimer & Nentwig, 1991: fig. 715.

MATERIAL. UKARINE: 2 ♀♀ (GPC), Yampol region, Sumy distr., vicinities of Prudische, 14.09.1999, V. A. Gnelitsa.

DISTRIBUTION. Europe [Platnick, 2002]; this is the first record for the territory of the former Soviet Union.

HABITAT. *Quercus* forest (on the ground under logs).

DESCRIPTION. Male.

Total length 2.5 mm. Carapace 0.98 mm long, 0.78 mm wide, yellow-brown; cephalic region darker, elevated, and with lateral hollow (Fig. 2f,g). Posterior median eyes separated from each other by 0.5 times their diameter. Chelicerae narrow (length/width — 3.6), with 4 teeth on their promargins; retromargin with 5 small, closely-spaced teeth. Sternum 0.61 mm long, 0.61 mm wide. Legs yellow, tibial spination 2:2:1:1; tibial spines shorter than tibial diameter. Position of the metatarsal trichobothrium: I — 0.45, II — 0.44, III — 0.43, IV — 0.53. Length of leg segments:

Leg	Femur	Patella	Tibia	Metatarsus	Tarsus
I	1.09	0.31	0.98	0.98	0.69
II	0.99	0.28	0.99	0.82	0.60
III	0.86	0.25	0.78	0.75	0.53
IV	1.13	0.26	1.05	0.99	0.62

Palpal structure as in Fig. 2 (a–d).

Female.

Total length 2.5 mm. Carapace 1.10 mm long, 0.90 mm wide, yellow-brown (Fig. 2h, i). Posterior median eyes separated from each other by 0.5 times their diameter. Promargin of chelicera with 4 teeth; retromargin with 5 small, closely-

spaced teeth. Sternum 0.77 mm, long 0.63 mm wide. Legs: tibial spination 2:2:1:1; length of spines equal to the tibial diameter. Position of the metatarsal trichobothrium: I — 0.44, II — 0.42, III — 0.40, IV — 0.52. Length of leg segments:

Leg	Femur	Patella	Tibia	Metatarsus	Tarsus
I	1.33	0.35	1.28	1.12	0.75
II	1.21	0.30	1.16	0.98	0.60
III	1.10	0.28	0.96	0.87	0.58
IV	1.40	0.26	1.32	1.21	0.70

Epigyne: Fig. 2k.

## References

- Heimer S., Nentwig W. 1991. Spinnen Mitteleuropas: Ein Bestimmungsbuch. Berlin u. Hamburg: Verlag Paul Parey. 543 S.
- Locket G.H., Millidge A.F. 1953. British spiders. London: Ray Society. Vol.2. 449 p.
- Merrett P. 1963. The palpus of male spiders of the family Linyphiidae // Proc. zool. Soc. Lond. Vol.140. P.347–467.
- Mikhailov K.G. 1997. Catalogue of the spiders of the territories of the former Soviet Union (Arachnida, Aranei) // Sbornik trudov Zoologicheskogo Muzeya MGU. Vol.37. 416 p.
- Miller F. 1971. Pavouci-Araneida // Klič zvireny ČSSR. Praha. Vol.4. P.51–306.
- Millidge A.F. 1977 The conformation of the male palpal organs of linyphiid spiders, and its application to the taxonomic and phylogenetic analysis of the family (Araneae: Linyphiidae) / Bull. Br. arachnol. Soc. Vol.4. P.1–60.
- Palmgren P. 1975. Die Spinnenfauna Finnlands und Ostfennoskandiens VI. Linyphiidae 1 // Fauna fennica. Vol.28. S.1–102.
- Platnick, N. I., 2002, The World Spider Catalog, Version 3.0, American Museum of Natural History (Linyphiidae pages were last updated on July 17, 2002). <http://research.amnh.org/entomology/spiders/catalog81-87/index.htm>
- Saaristo, M. I. & A. V. Tanasevitch. 1996. Redelimitation of the subfamily Micronetinae Hull, 1920 and the genus *Leptyphantès* Menge, 1866 with descriptions of some new genera (Aranei, Linyphiidae) // Ber. nat.-med. Verein Innsbruck. Bd.83. P.163–186.
- Wiehle H. 1960. Spinnentiere oder Arachnoidea (Araneae). XI. Micryphantidae-Zwergspinnen // Tierwelt Deutschlands. Lfg.47: i–xi 620 S.