

## On the synonymy of *Orinocosa guentheri* (Pocock, 1899) with *Hogna radiata* (Latreille, 1817) (Aranei: Lycosidae)

### О синонимии *Orinocosa guentheri* (Почок, 1899) с *Hogna radiata* (Латрейль, 1817) (Аранеи: Лыкозиде)

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КЛЮЧЕВЫЕ СЛОВА: Аранеае, Центральная Азия, распространение, *Hogna*, таксономия.

**ABSTRACT.** The species name *Lycosa guentheri* Pocock, 1899 is proven to be a junior synonym of *Hogna radiata* Latreille, 1817. The male lectotype is designated for *L. guentheri* Pocock, 1899. Both the male lectotype and the female paralectotypes are illustrated as well.

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**РЕЗЮМЕ.** Показано, что видовое название *Lycosa guentheri* Почок, 1899 является младшим синонимом *Hogna radiata* Latreille, 1817. Для *L. guentheri* Почок, 1899 обозначен лектотип самца. Также лектотип самца и паралектотипы самки иллюстрированы.

### Introduction

According to Zamani *et al.* [2022], the lycosid fauna of Iran consists of 71 species. Some of these records are in need of confirmation and/or verification. For instance, the species *Lycosa guentheri* Pocock, 1899 was described from a single locality in north-western Iran in the late 19th century, and yet remains known from the original description only [Pocock, 1899]. Roewer [1955] transferred this species name to the genus *Orinocosa* Chamberlin, 1916, of which the type species — *O. aymara* Chamberlin, 1916 — was described from Peru [Chamberlin, 1916]. Despite the obvious ludicrousness of this decision, it has not been challenged to date. Based on a re-examination of the syntypes of *L. guentheri*, the aim of this short paper is to clarify the validity and taxonomic status of the latter species name.

The syntype series of *L. guentheri* (1♂ 2♀♀) was borrowed from the Natural History Museum (London, UK;

hereafter — NHM). The terminology follows Comstock [1910] and Logunov [2010]. Abbreviations used in the text and figures are as follows: C — functional conductor, D — described, FPP — *pars pendula*, Pl — palea, Se — synembolus, Tr — *truncus*.

### Taxonomy

#### *Hogna radiata* (Latreille, 1817)

Figs 1–8.

*Lycosa radiata* Latreille, 1817: vol. 18, p. 292 (D).

*Lycosa guentheri* Pocock, 1899: 401, pl. 26, fig. 1 (D♂♀), **Syn.n.** The ♂ lectotype from NHM is designated here; examined (Figs 1–5).

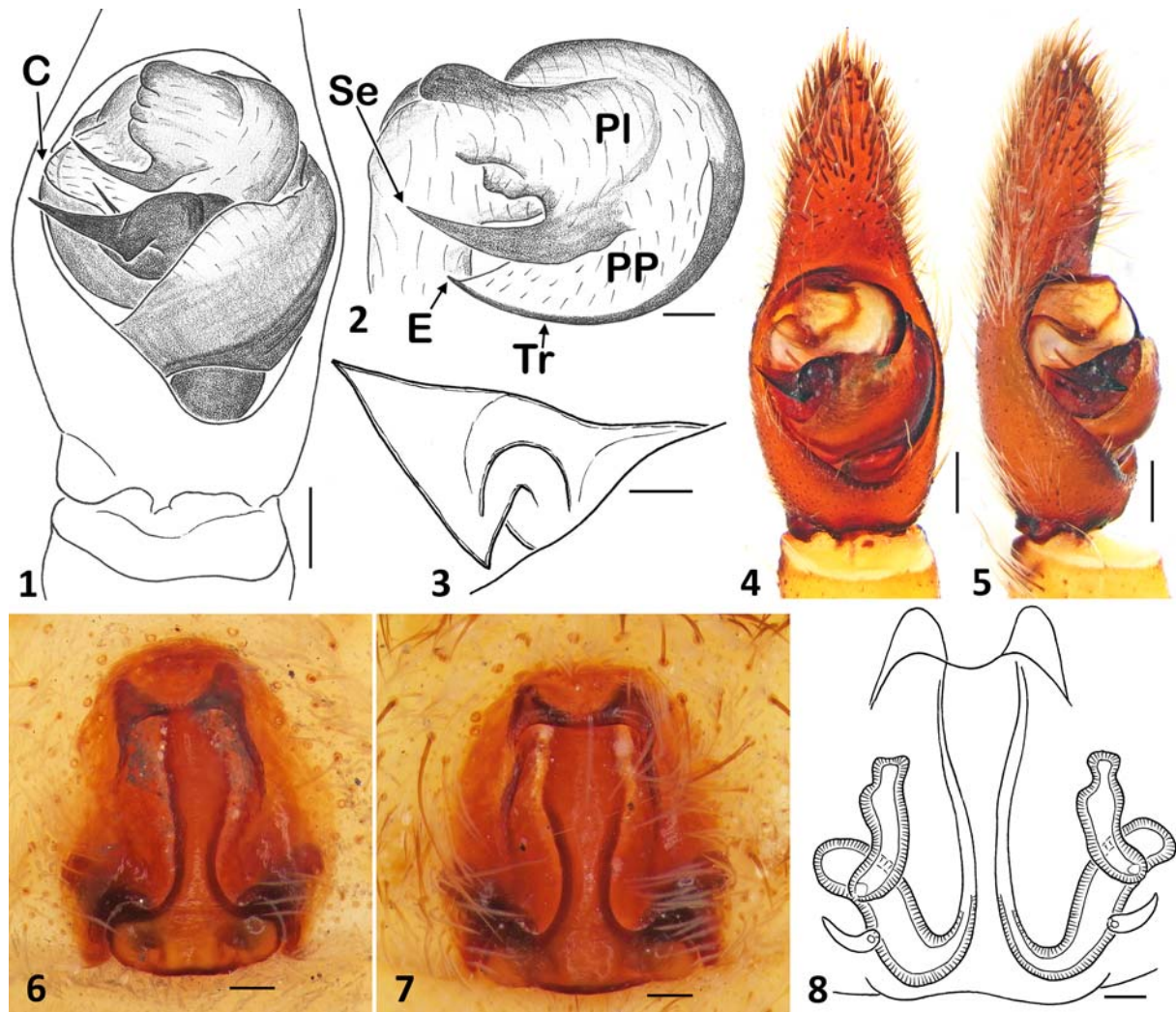
*Orinocosa guentheri* Roewer, 1955: 281.

**TYPES.** Male lectotype (NHM; designated here; Figs 1–5), “*Orinocosa guentheri* (Pocock, 1899), = *Lycosa guentheri* Pocock, 1899 type, 1900.1.15.7–8, Seir, Lake Urmi, Persia (no date)”, coll. by R.J. Günther; [Lake Urmia, approximate coordinates: 37°42'N, 45°22'E]. — Paralectotypes: 2♀♀ (NHM), together with the lectotype.

**COMMENTS.** The examined syntypes of *L. guentheri* possess all the diagnostic characters in the copulatory organs of *H. radiata*: viz., the wide, triangle median apophysis (Fig. 3), the wide embolus with the well-developed and marked *truncus* and *pars pendula* (*sensu* Comstock [1910]; Fig. 2), the paired, markedly separated epigynal pockets (Figs 6, 7), and the recognizable vulva (Fig. 8); see Nenwig *et al.* [2022] for comparative figures by various authors. Therefore, it is safe to conclude that the name *Lycosa guentheri* is to be synonymized with *Hogna radiata*.

**DESCRIPTION.** See Pocock [1899: 401–402: sub *L. guentheri*] or Nenwig *et al.* [2022].

**DISTRIBUTION.** The common species *H. radiata* is known from the west Mediterranean to Central Asia [Nenwig *et al.*, 2022], and it has been repeatedly recorded from Iran [Zamani *et al.*, 2022]. The present record lies within the known range of the species.



Figs 1–8. Copulatory organs of *Hogna radiata* (Latreille, 1817) (1–2 — the ♂ lectotype of *Lycosa guentheri*; 6–8 — the ♀ paralectotypes of *L. guentheri*): 1, 4 — right male palp, ventral view; 2 — palea and embolus, ventral view; 3 — median apophysis, ventral view; 5 — right male palp, retrolateral view; 6–7 — epigyne, ventral view; 8 — vulva, dorsal view. Scale bars: 0.1 mm (2, 3, 8), 0.25 mm (1), 1 mm (6, 7), 2 mm (4, 5). Abbreviations: C — functional conductor, E — embolus, PP — *pars pendula*, PI — palea, Se — synembolus, Tr — *truncus*.

Рис. 1–8. Копулятивные органы видов *Hogna radiata* (Latreille, 1817) (1–2 — лектотип самец *Lycosa guentheri*; 6–8 — паралектотипы самки *L. guentheri*): 1, 4 — правая пальпа самца, вентрально; 2 — палеа и эмболюс, вентрально; 3 — медиальный апофиз, вентрально; 5 — правая пальпа самца, сбоку-сзади; 6–7 — эпигина, вентрально; 8 — вульва, дорзально. Масштаб: 0,1 мм (2, 3, 8), 0,25 мм (1), 1 мм (6, 7), 2 мм (4, 5). Сокращения: С — функциональный кондуктор, Е — эмболюс, PP — *pars pendula*, PI — палеа, Se — синэмболюс, Tr — *truncus*.

## Discussion

With the established synonymy in mind and based on reliable records, the *Hogna* fauna of Iran currently consists of two valid species: viz., *H. radiata* and *H. effera* (O. Pickard-Cambridge, 1872), both having been repeatedly recorded from the country [Zamani *et al.*, 2022]. The third Iranian species — *H. nigrichelis* (Roewer, 1955) — is likely to be *nomen nudum* [Logunov, 2020]. It is interesting to mention that while describing *Lycosa guentheri*, Pocock [1899: 402] compared this species to the west Mediterranean *H. ferox* (Lucas, 1838). The records of the latter species from

the east Mediterranean and the Near East were shown [Logunov, 2020] to actually belong to *H. effera*, which could be seen as additional evidence that, to date, only two *Hogna* species have been reliably recorded from Iran. All other *Hogna* species known from the neighbouring territories, for instance, the Caucasus and Egypt (at least eight species), are currently in need of verification of their taxonomic status and validity, see Logunov [2020] for further details.

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