

## Two new jumping spider species from the Caucasus (Aranei: Salticidae)

### Два новых вида пауков-скакунчиков с Кавказа (Aranei: Salticidae)

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КЛЮЧЕВЫЕ СЛОВА: пауки-скакунчики, *varcha*, *Pseudicius*, новые виды, Кавказ.

ABSTRACT: Two new species of jumping spiders are described from the Caucasus: *Evarcha armeniaca* sp.n. (♂♀, SE Armenia and Azerbaijan) and *Pseudicius pseudocourtauldi* sp.n. (♂♀, SE Armenia).

РЕЗЮМЕ: Два новых вида пауков-скакунчиков описаны с Кавказа: *Evarcha armeniaca* sp.n. (♂♀, ЮВ Армения и Азербайджан) и *Pseudicius pseudocourtauldi* sp.n. (♂♀, ЮВ Армения).

### Introduction

Sorting out and studying the salticid collections from the Caucasus, I have found several new species, two of which are described herein.

Specimens for this study have been shared between the following museums: ISEA — the Zoological Museum of the Institute for Systematics and Ecology of Animals, Novosibirsk, Russia (the curator — D. V. Logunov); and ZMMU — the Zoological Museum of the Moscow State University, Moscow, Russia (the curator — K. G. Mikhailov).

Abbreviations used in the text: ap — apical; d — dorsal; Fm — femur; Mt — metatarsus; pr — prolateral; Pt — patella; rt — retrolateral; Tb — tibia; v — ventral. For the leg spination the system adopted is that used by Ono [1988]. The sequence of leg segments in measurement data is as follows: femur+patella+tibia+metatarsus+tarsus. All measurements are in mm.

### Descriptions

#### *Evarcha armeniaca* sp.n.

Figs 1–4, 9.

MATERIAL. Holotype ♂ (ISEA), Armenia, near Kafan, almond plantation, 31.05.1989, V.A. Zakharian. — Paratypes: 1 ♀ (ISEA), together with holotype; 1 ♀ (ZMMU), Azerbaijan, ca. 60 km SW of Baky, Gobustan, 7.05.1989, P.M. Dunin.

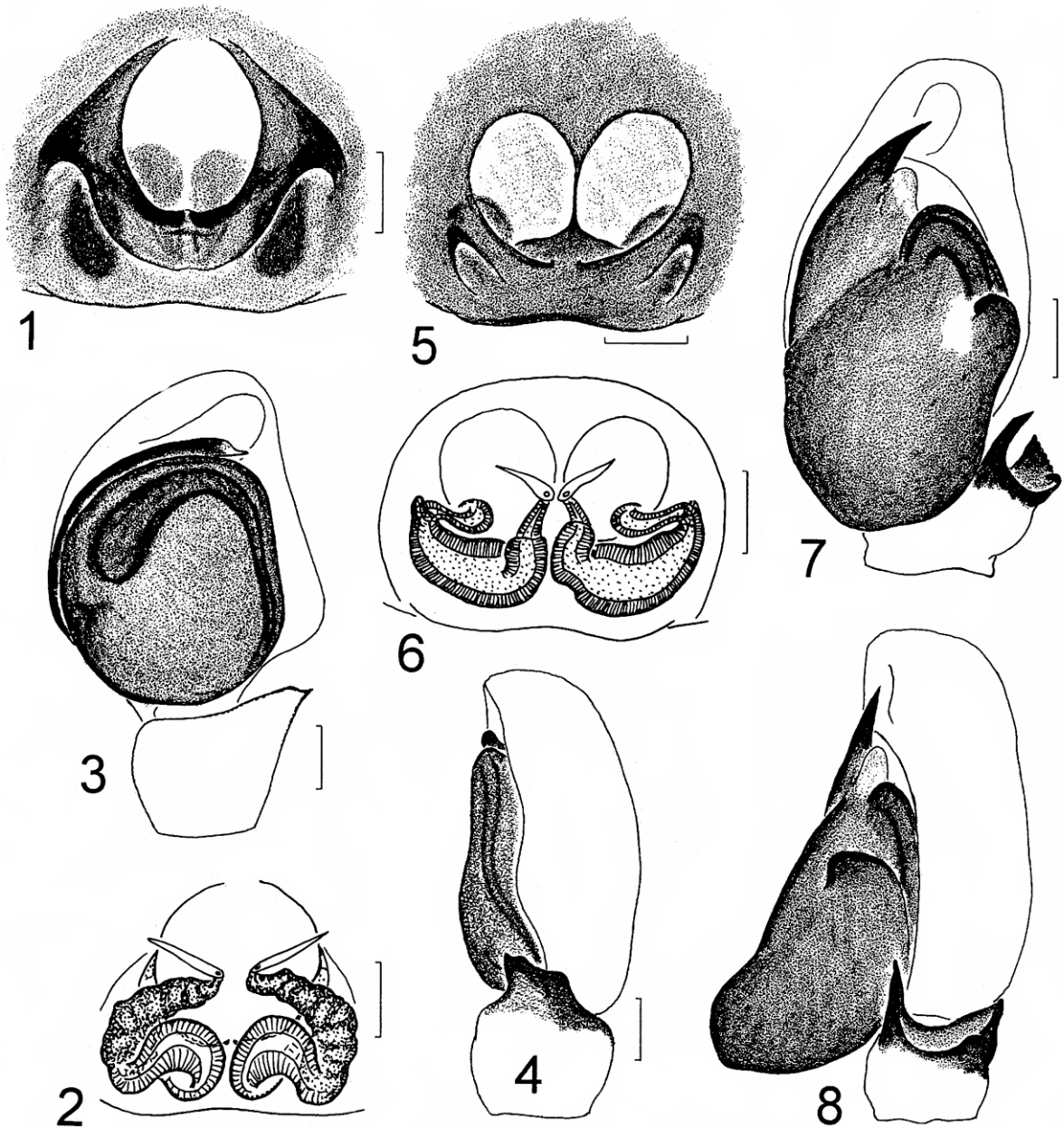
NAME. The new species is named after the terra typica, Armenia.

DIAGNOSIS. *Evarcha armeniaca* is most closely related both to *E. praecincta* (Simon, 1890) from the Near East [s. Wesolowska & van Harten, 1994: figs 52–56] and *E. nenilini* Rakov, 1997 from Middle Asia [s. Rakov, 1997], but it can be separated by the narrower embolus (Fig. 3) and clearly separated (not touching) terminal sections of the spermathecae (Fig. 2).

DISTRIBUTION. SE Armenia and Azerbaijan (Fig. 9), but the occurrence in Iran is quite possible.

DESCRIPTION. MALE (holotype). Measurements. Carapace 2.13 long, 1.65 wide, 1.05 high at PLE. Ocular area 1.13 long, 1.35 wide anteriorly and 1.43 wide posteriorly. Diameter of AME 0.43. Abdomen 1.88 long, 1.33 wide. Cheliceral length 0.65. Clypeal height 0.15. Length of leg segments: leg I — 1.28+0.73+1.08+0.80+0.43; leg II — 1.08+0.56+0.78+0.53+0.40; leg III — 1.56+0.70+0.83+0.78+0.50; leg IV — 1.20+0.50+0.70+0.75+0.48. Leg spination. Leg I: Fm d 0-1-1-4; Pt pr and rt 0-1-0; Tb pr 1-1, v 2-2-2ap; Mt v 2-2ap, pr 1ap. Leg II: Fm d 0-1-1-4; Pt pr and rt 0-1-0; Tb pr 1-1, v 1-2-2ap; Mt v 2-2ap, pr 1ap. Leg III: Fm d 0-1-1-3ap, pr 0-0-1-1; Pt pr and rt 0-1-0; Tb pr and rt 1-1-1, v 2ap; Mt pr and rt 1-1ap, v 2-2ap. Leg IV: Fm d 0-1-1-2ap; Pt pr and rt 0-1-0; Tb pr and rt 1-1-1, v 1-2ap; Mt pr and rt 1-1-2ap, v 2-2ap. Coloration. Carapace brown, with eye field densely covered with white adjoining scales and two white bands of scales beneath the line AME-PLE. Black around eyes. Clypeus densely white haired. Hair-pencil well marked and situated beneath PME. Sternum, maxillae, labium and chelicerae brown. Abdomen: dorsum brown-grey, with a longitudinal white band of adjoining scales; venter brown-yellow. Book-lung covers and spinnerets brown. Legs yellow-brownish, with brown rings and patterns. Leg I darker, almost completely dark brown, with femora, patellae and tibiae possessing dorsal and ventral rows of dense, protruded, black hairs. Palpal structure as in Figs 3 & 4.

FEMALE (paratype from Kafan). Measurements. Carapace 2.38 long, 1.88 wide, 1.20 high at PLE. Ocular area 1.13 long, 1.63 wide anteriorly and 1.50 wide posteriorly. Diameter of AME 1.50. Abdomen 2.55 long, 1.95 wide. Cheliceral length 0.63. Clypeal height 0.15.



Figs 1-8. The copulatory organs of *Evarcha armeniaca* sp.n. (1-4) (♂ holotype and ♀ paratype from Kafan, Armenia) and *Pseudicius pseudocourtauldi* sp.n. (5-8) (♂ holotype and ♀ paratype from Megri, Armenia): 1, 5 — epigyne, dorsal view; 2, 6 — spermathecae; 3, 7 — male palp, ventral view; 4, 8 — ditto, retrolateral view. Scale: 0.1 mm.

Рис. 1-8. Копулятивные органы *Evarcha armeniaca* sp.n. (1-4) (♂ голотип и ♀ паратип из Кафана, Армения) и *Pseudicius pseudocourtauldi* sp.n. (5-8) (♂ голотип и ♀ паратип из Мегри, Армения): 1, 5 — эпигина, сверху; 2, 6 — сперматеки, сверху; 3, 7 — пальпа самца, вентрально; 4, 8 — то же, ретро-латерально. Масштаб: 0,1 мм.

Length of leg segments: leg I —  $1.18+0.78+0.81+0.50+0.45$ ; leg II —  $1.13+0.68+0.70+0.50+0.45$ ; leg III —  $1.75+0.81+0.88+0.83+0.76$ ; leg IV —  $1.40+0.60+0.75+0.83+0.53$ . Leg spination. Leg I: Fm d 0-1-1-4; Pt pr 0-1-0; Tb pr 1-1, v 2-2-2ap; Mt v 2-2ap. Leg II: Fm d 0-1-1-5; Pt pr 0-1-0; Tb pr 1-1, v 1-1-2ap; Mt v 2-2ap. Leg III: Fm d 1-1-2, pr 0-0-1-1; Pt pr and rt. 0-1-0; Tb pr and rt 1-1-1, v 2ap; Mt pr and rt 1-2ap, v 2-2ap. Leg IV: Fm d 0-1-1-2; Pt pr and rt 0-1-0; Tb pr 0-1, rt 1-1-1, v 1-2ap; Mt pr and rt 1-2ap, v 2-2ap. Coloration. Carapace yellow-brown, dense-

ly covered with white adjoining scales. Black around eyes. Clypeus densely white haired. Hair-pencil well marked and situated beneath PME. Sternum brownish-yellow, densely covered with white hairs. Labium, maxillae and chelicerae brown. Abdomen: dorsum brown, with a longitudinal fir-shaped white band; sides yellow; venter yellow, with a longitudinal wide brown band getting narrow before spinnerets. Book-lung covers yellow. Spinnerets yellow-brown. All legs yellow, with numerous brown rings and patterns. Palps completely

yellow. Epigyne and spermathecae as in Figs 1 & 2.

*Pseudicius pseudocourtauldi* sp.n.

Figs 5–9.

**MATERIAL.** Holotype ♂ (ISEA), Armenia, near Megri, almond plantation, 3.06.1989, V.A. Zakharian. — Paratypes: 1 ♀ (ISEA), 1 ♀ (ZMMU), together with holotype.

**NAME.** The specific epithet refers to the closeness of the new species to *Pseudicius courtauldi*.

**DIAGNOSIS.** The new species is most closely related to *P. courtauldi* Bristowe, 1935 from Asia Minor and Central Asia [s. Logunov, 1993: fig. 4], but differs in having the stronger, scoop-shaped tibial apophysis (Fig. 7) and the shape and arrangement of the receptacles (Fig. 6).

**DISTRIBUTION.** The type locality (Fig. 9), but the occurrence in Iran is quite possible.

**DESCRIPTION. MALE (holotype).** Measurements. Carapace 2.28 long, 1.50 wide, 0.68 high at PLE. Ocular area 0.98 long, 1.18 wide anteriorly and 1.23 wide posteriorly. Diameter of AME 0.38. Abdomen 2.60 long, 1.65 wide. Cheliceral length 0.73. Clypeus not marked. Length of leg segments: leg I — 1.30+0.90+1.18+0.75+0.40; leg II — 0.90+0.53+0.58+0.53+0.35; leg III — 0.93+0.50+0.59+0.68+0.40; leg IV — 1.13+0.59+0.78+0.78+0.40. Leg spination. Leg I: Tb pr 0-2; Mt v 2-2ap. Leg II: Fm d 1ap; Mt v 1-2ap. Leg III: Mt v 3ap. Leg IV: Mt 4ap. Coloration. Carapace yellowish-brown, with a white longitudinal band of scales in the area of fovea. Eye field densely covered with adjoining white scales. Black around eyes. Carapace margins possessing wide white bands of adjoining scales. Clypeus densely white haired. Sternum, maxillae, labium and chelicerae brown. Abdomen: dorsum brown, with a pair of wide, longitudinal, white bands; venter brownish, with two narrow, longitudinal, yellow stripes. Book-lung covers yellow. Spinnerets brown. Leg I brown and almost two times as heavy as remaining legs. Legs II–IV yellowish, with brown patterns. Palpal structure as in Figs 7 & 8.

**FEMALE (paratype).** Measurements. Carapace 2.03 long, 1.43 wide, 0.68 high at PLE. Ocular area 0.90 long, 1.10 wide anteriorly and 1.20 wide posteriorly. Diameter of AME 0.35. Abdomen 3.40 long, 1.98 wide. Cheliceral length 0.55. Clypeus not marked. Length of leg segments: leg I — 0.93+0.54+0.63+0.45+0.35; leg II — 0.80+0.45+0.49+0.40+0.33; leg III — 0.83+0.44+0.49+0.60+0.40; leg IV — 1.06+0.48+0.78+0.73+0.41. Leg spination. Leg I: Tb pr 0-2; Mt v 2-2ap. Leg II: Mt 2ap. Leg III–IV: Mt 3ap. Coloration. Carapace yellowish-brown, completely covered with white adjoining scales. Clypeus densely

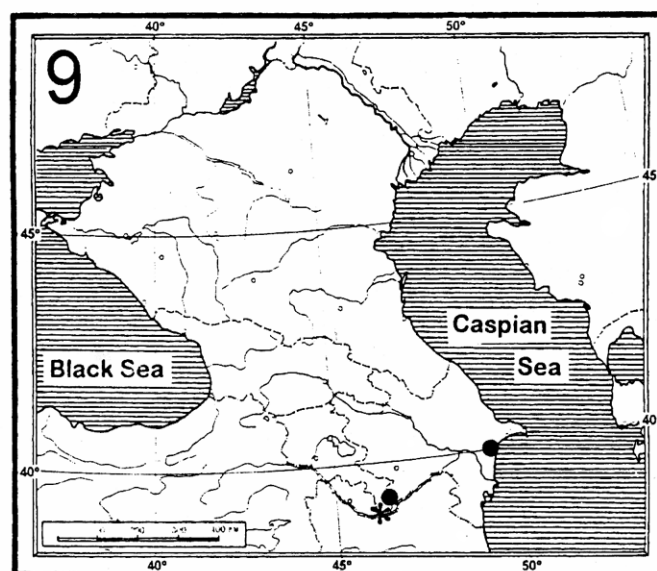


Fig. 9. Localities of *Evarcha armeniaca* sp.n. (closed circles) and *Pseudicius pseudocourtauldi* sp.n. (asterisk) in the Caucasus.

Рис. 9. Местонахождения *Evarcha armeniaca* sp.n. (закрашенные кружки) и *Pseudicius pseudocourtauldi* sp.n. (звездочка) на Кавказе.

white haired. Sternum, maxillae, labium and chelicerae brownish-yellow. Abdomen yellow, but dorsum with a pair of brown longitudinal bands of scales. All legs yellow, with pale brown patterns. Epigyne and spermathecae as in Figs 5 & 6.

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