# NEW GENUS AND SPECIES OF SPIDERS <br> OF THE SUBFAMILY ZODARIINAE (ARANEAE, ZODARIIDAE) FROM PAKISTAN 

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#### Abstract

New Genus and Species of Spiders of the Subfamily Zodariinae (Araneae, Zodariidae) from Pakistan. Ovtchinnikov S. V. - Indozodion inayatullahi Ovtchinnikov, gen. et sp. n. from Pakistan is described. The spider family Zodariidae is recorded from Pakistan for the first time.


Key words: Indozodion, new genus, new species, Pakistan.
Новые род и вид пауков подсемейства Zodariinae (Araneae, Zodariidae) из Пакистана. Овчинников С. В. - Описан Indozodion inayatullahi Ovtchinnikov, gen. et sp. n. из Исламабада. Пауки из семейства Zodariidae в Пакистане отмечены впервые.

Ключевые слова: Indozodion, новый род, новый вид, Пакистан.


#### Abstract

Available literature contains no records of spiders of the family Zodariidae from Pakistan. While collecting in the area in 2003, the author found an undescribed species, which belonged to a new genus close to Zodarion Walckenaer, 1826. The new genus and species are described herein.

The following commonly accepted abbreviations are used in this article: ALE, anterior lateral eyes; AME, anterior median eyes; PLE, posterior lateral eyes; PME, posterior median eyes. Measurements are in millimetres. Scale unit on all figures is 0.5 mm . Type specimens will be deposited in the Zoological Museum of Moscow State University, Moscow (curator Dr. K. G. Mikhailov).


## Indozodion Ovtchinnikov, gen. n.

Type species: Indozodion inayatullahi Ovtchinnikov, sp. n.
Diagnosis. Close to genus Zodarion differing as follows. Tibial process of male palpus bearing a brush of thickly set coarse bristles at base, on outer margin with a single long coarse bristle inserted in the middle and running parallel the tibial process, subconvergent towards its apex. Male cymbium on inner surface with serrate setae extending almost over its entire length. Females with a peculiar epigynum bearing a pair of widely separated closed recesses on anterior margin, while its downward bent part is formed by a broad sclerotized longitudinal field.

Etymology. The name is combined from a latinized toponymic of the Indus River and a shortened form of Zodarion.

Composition. One species (type species).

## Indozodion inayatullahi Ovtchinnikov, sp. n. (fig. 1-4)

Type material. Holotype, ơ, Pakistan, National Park north to Islamabad Town, $33^{\circ} 44^{\prime} \mathrm{N}, 73^{\circ} 03^{\prime} \mathrm{E}$, 10.07.2003. Paratypes: $\sigma^{\circ}$, ○, same as holotype; $\odot$, Pakistan, North-West Frontier Province, Peshavar, $34^{\circ} 01^{\prime} \mathrm{N}, 71^{\circ} 33^{\prime} \mathrm{E}, 4.09 .2004$; ¢, Pakistan, Kagan Valley, Shogran, 26.08.2004 (Ovchinnikov).

Diagnosis. Follows the diagnosis for the genus, as the latter is monotypic.
Description. Male. Total length 3.25 (holotype), 3.50 (paratype); length of carapace 1.68 , width of carapace 1.29 , with length: breadth ratio 1.3 . Head part of cara-


Fig. 1-4. Indozodion inayatullahi: $1-$ male tibia and cymbium, right retrolateral view; $2-$ same, ventral view (holotype); 3 - female epigynum, ventral view; 4 - same, dorsal view. Scale bar 0.5 mm .
Рис. 1-4. Indozodion inayatullahi: 1 - голень и цимбиум правого пальпуса самца, ретролатерально; 2 то же, вентрально (голотип); 3 - эпигина самки, вентрально; 4 - то же, дорсально. Масштабная линейка 0,5 мм.
pace $1 / 3$ entire length of carapace, short and broad, somewhat broader posterad; its width at the level of PME 0.71 , at base 0.86 . Length of head part of carapace $0.61,0.86$ times as width as long. Clypeus not vertical, inclined anteroventrally, almost entirely visible in dorsal view including its anterior margin. Sides of anterior margin of clypeus converging to form rounded angle. Each AME 2.5 its diameter distant from anterior margin of carapace. Medial eyes make equilateral square. AME 0.13 , AME-AME 0.06, PME-PME 0.19 . Sternum anteriorly almost straight, truncated, rather sharply pointed between hind coxae. Sternum 1.13 times as long as broad. Leg formula 4123. Femora I-III dorsally each bearing 3 spines, femur IV with one spine. All tibiae, apart from apical spines, ventrally with 2 pairs of conspicuous spines. Metatarsi II-IV ventrally and sublaterally with several irregularly placed spines. Spines on metatarsi I indistinct under covering hairs. Flattened lanceolate weakly modified adpressed hairs only present near apex on femora III and IV. Femoral organ with 4 flattened setae.

Eye field with black spot extending over AME and reaching ALE and PLE, encompassing PLE over half of circumference; PME outside of black spot. Carapace yellow-brown; its head part sepia-brown fuscous, this infuscation ending posteriorly along U-shaped line at beginning of median furrow of carapace, from which several lines run toward legs II and III. Posterior part of carapace clearly lighter than its ante-

Table 1. Length of legs (male/female)
Таблица 1. Длина члеников ног (самец/самка)

| Legs | Femur | Patella | Tibia | Metatarsus | Tarsus | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| I | $2.00 / 1.57$ | $0.63 / 0.60$ | $1.80 / 1.31$ | $2.21 / 1.74$ | $1.40 / 1.03$ | $8.04 / 6.25$ |
| II | $1.88 / 1.49$ | $0.58 / 0.60$ | $1.46 / 1.21$ | $2.07 / 1.69$ | $1.07 / 0.97$ | $7.06 / 5.96$ |
| III | $1.79 / 1.53$ | $0.60 / 0.54$ | $1.40 / 1.20$ | $2.03 / 1.79$ | $0.86 / 1.03$ | $6.68 / 6.09$ |
| IV | $2.43 / 2.04$ | $0.64 / 0.71$ | $2.28 / 1.80$ | $2.72 / 2.41$ | $1.19 / 1.00$ | $9.26 / 7.79$ |

rior part, contrasting with dark infuscation. Legs and palpi testaceous except femora I and II in apical half slightly darkened on sides. Sternum yellow with very narrow brown margin. Abdomen above black, anterior to spinnerets with a small oblong spot, paleyellow below; running from ventral surface upwards and forward onto sides of abdomen is a narrow white strip.

Male palpus of peculiar structure (fig. 1, 2). Lateral process of palpal tibia long and evenly curved at apex, nearly following the contour of embolus. Long and coarse bristle inserted at fixed position in distal half of process; the process at base also bearing brush of coarse bristles. Tegular apophysis (retinaculum) oblong, curved, furnished with robust hook at apex.

Female (paratype). Total length 4.3; length of carapace 1.96 , width of carapace 1.33 , length: breadth ratio 1.47 . Head part of carapace 0.41 times entire length of carapace, rather broad, with sides parallel, width at PME 0.96 , same at base; 0.84 times as long as broad. Length of head part 0.81 . AME more than 3 their diameters distant from anterior margin of carapace, farther than in male. Medial eyes make almost perfect square. Head part of carapace 0.41 times entire length of carapace. Leg formula 4123. Femora I and II with 3 dorsal spines, femora III and IV with single spine each. Modified hairs on femora more numerous than in male, covering distal half on femora III and IV; female thus showing sexual dimorphism in these two characters. Spinning glands of common for Zodariinae type, numbering 3 pairs. Epigynum (fig. 3, 4) ventrally flat uniformly except near epigastral fissure, where two shallow, indistinctly delimited impressions visible. Anterior margin of epigynum with two widely separated closed recesses. Spermathecae of moderate size, roundish to oval, widely separated. Opening inconspicuous, wide apart (tabl. 1).

Notes. Apparently, with haematodocha unfolded the embolus lies on the palpal tibial process, which facilitates induction of the embolus into the epigynal opening. As the latter is fissiform and normally closed, some mechanical friction between contacting parts should necessarily occur as a result.

Along with adult specimens, one male and one female have been collected, both subadult. These have flattened adpressed hairs on femora much more abundant (especially in the male) than in adult specimens.

Etymology. The species is named in acknowledgment of Prof. Dr. Mian Inayatullah's kind assistance in administrative matters enabling the author to study arthropod fauna of North-Western Pakistan.

Distribution. North-Western Pakistan (near Islamabad).

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