

## Redescription of the female and first description of the male of *Runcinia ghorpadei* Tikader, 1980 (Araneae, Thomisidae) from India

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**ABSTRACT:** *Runcinia* spider is distinguished by a cephalothorax that is slightly wider than it is long, with a cephalic region featuring prominent ocular tubercles covered in hairs and spines. Its legs are long and robust, with the first and second pairs significantly longer than the others. The abdomen is elongated, adorned with spines, tapering at the rear, and marked by prominent longitudinal muscular corrugations along the lateral sides. *Runcinia ghorpadei* Tikader, 1980 (only female specimen) described by the original author was poor in the light of modern taxonomy or specimen was immature, hence this redescription of the female along with the description of the male. © 2026 Association for Advancement of Entomology

**KEY WORDS:** Taxonomy, sexual dimorphism, crab spider, genitalia.

The spider genus *Runcinia* Simon, 1875, is characterized by a cephalothorax that is slightly wider than it is long, with a cephalic region bearing prominent ocular tubercles covered in hairs and spines. The legs are long and sturdy, with the first and second pairs being notably longer than the others. The abdomen is elongated, adorned with spines, tapering at the rear, and features distinct longitudinal muscular corrugations along the lateral sides. Type species is *Thomisus lateralis* C.L. Koch, 1837 [now *Runcinia grammica* (C.L. Koch, 1837) as Roberts (1995) synonymised]. They are distributed all over the world excepting Nearctic region.

*Runcinia* Simon is known by 27 species till today throughout the World (World Spider Catalogue,

2025) while 7 species recorded so far from India (World Spider Catalogue, 2025). *Runcinia ghorpadei* Tikader, 1980 (only female specimen) was described by B. K. Tikader that was not enough in the light of modern taxonomy or specimen was immature. Moreover, there was no record of male specimen and description too. Therefore, the female species is redescribed, and a hitherto unknown male morph is also described here.

Specimens were obtained through hand collection as well as by beating vegetation and using sweep nets. Additional samples were recovered by hand from the nests of crab spider. Genital structures were cleared in lactic acid and examined in temporary mounts embedded in glycerol. Photographic documentation was carried out using

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an MC170 HD camera mounted on a Leica EZ4 HD stereo zoom binocular microscope, and a DFC 500 camera attached to a Leica M205A stereomicroscope. Line illustrations were produced with the aid of a Leica MZ16 stereo zoom binocular microscope fitted with a camera lucida. All examined material is deposited in the National Zoological Collections of the Zoological Survey of India, Western Ghat Regional Centre, Calicut (ZSIK).

#### Abbreviations used in text and figures:

AER = anterior eye row; ALE = anterior lateral eyes; AME = anterior median eyes; CD = copulatory duct; CO = copulatory opening; E = embolus; FD = fertilisation duct; MOA = median ocular area; OL = opisthosoma length; OW = opisthosoma width; PER = posterior eye row; PL = prosoma length; PLE = posterior lateral eyes; PME = posterior median eyes; PW = prosoma width; RTA = retrolateral tibial apophysis; S = spermatheca; SD = sperm duct; TL = total length; VTA = ventral tibial apophysis.

#### Family: Thomisidae

#### *Runcinia ghorpadei* Tikader 1980

Tikader, B. K. (1980). Thomisidae (Crab-spiders). Fauna India (Araneae) 1: 64

**Diagnosis:** The carapace has a chalk-white patch in the middle, while the clypeus bears a row of three forward-pointing spines, with the middle spine directed downward. A prominent, strong spine originates just behind each posterior lateral eye. The legs are long and robust, with the first and second pairs being significantly longer than the others. Tibiae I and II possess seven and 3 pairs of ventral spines, respectively, while the metatarsi of legs I and II bear 14 and four pairs of ventral spines, respectively. The posterior legs are devoid of spines. The epigynum is approximately triangular, resembling a ring with an open region at the top. The copulatory ducts are ampulla-shaped and coiled, the spermathecae are pear-shaped, and the fertilization ducts are long and coiled, initially directed upward and then downward.

#### Description: Female

**General** (Fig. A): Cephalothorax and abdomen red

to deep brown, legs pale. Total length 8.00mm. Carapace 3.25mm. long, 1.50mm. wide; abdomen 5.00mm. long, 1.70mm. wide. **Cephalothorax** (Fig. A): Slightly longer than wide, the carapace is spined and features broad longitudinal deep brown patches along the sides, with conspicuous whitish bands along the lateral margins. Medially, it displays a chalk-white patch, truncated at the front with four tiny protuberances. The ocular area is raised and laterally divergent. The eyes are black, arranged in two rows, with the anterior row more strongly recurved than the posterior row. The ocular quadrangle is longer than wide, narrowing at the front, and each posterolateral eye is accompanied by a prominent spine.

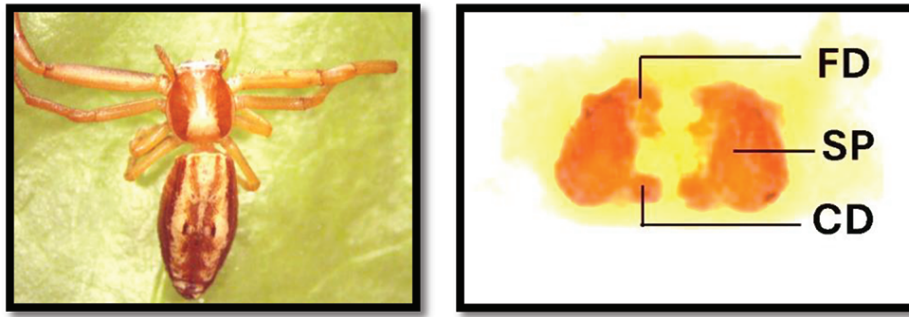
The clypeus bears a row of three forward-directed spines, with the middle spine angled downward, and a strong, conspicuous spine emerges just behind each posterior lateral eye. The legs are long and robust, with the first and second pairs significantly longer than the others. Tibiae I and II have seven and three pairs of ventral spines, respectively, while the metatarsi of legs I and II are armed with 14 and four pairs of ventral spines, respectively. The posterior legs lack spines entirely.

Legs: I 3.40 (1.20, 0.56, 0.90, 0.44, 0.30); II 3.12 (0.77, 0.55, 0.81, 0.55, 0.44); III 2.27 (0.44, 0.51, 0.63, 0.51, 0.18); IV 2.10 (0.44, 0.30, 0.77, 0.38, 0.21). Leg formula 1234.

**Abdomen** (Fig. A): Long, cylindrical, spined, narrow behind, highly overlapping the posterior region of cephalothorax, dorsum with a long median broad, chalk white pigmented irregular lines from the base to the end, two longitudinal black depressions medially. Sides with conspicuous U-like muscular corrugations and prominent muscular ridges, each provided with a row of spines. Venter red brown to deep brown.

**Epigyne-Internal genitalia** (Fig. B-D): Epigynum more or less triangular ring like excepting a free region upside; copulatory ducts (CD) ampulla like and coiled; spermathecae (SP) pear shaped; fertilization ducts (FD) long, coiled, first upwardly then downwardly directed.

**Material examined:** Kerala; 1, ♀, Kakkayem, 22.



**Fig. A** - General habitus: *Runcinia ghorpadei* (Female); **Fig. B** - Internal genitalia (Photograph)



**Fig. C** - Epigynum (hand drawing)

**Fig. D** - Internal genitalia (hand drawing)



**Fig. E** - General habitus: *Runcinia ghorpadei* (male)



**Fig. F** - Male genitalia, ped-palp (Photograph)



**Fig. G** - Male genitalia, ped-palp (Photograph)



**Fig. H** - Male genitalia, ped-palp (Photograph)

xii. 2015, coll. J. Palot & party (Reg. No. ZSI/WGRC/IR.INV /5232).

**Description: (New male morph)**

**General** (Fig. E): Cephalothorax and abdomen red to deep brown, legs pale. Total length 2.8mm. Carapace 1.15mm. long, 1.00mm. wide; abdomen 1.65mm. long, 1.15mm. wide. **Cephalothorax** (Fig. E): Minutely longer than wide, the carapace is spined and features broad longitudinal light brown with fawn white patches along the sides, with sharp whitish bands along the lateral margins. Medially, it displays a chalk-white patch, truncated at the front with four tiny protuberances. The ocular area is raised and laterally divergent. The eyes are black, arranged in 2 rows, anterior more strongly recurved than the posterior. The ocular quadrangle is longer than wide, narrowing at the front, and each posterolateral eye is accompanied by a prominent spine.

The clypeus bears a row of three forward-directed spines, with the middle spine angled downward, and a strong, conspicuous spine emerges just behind each posterior lateral eye.

Two rows of eyes; anterior one on frontal lobe, posterior one on dorsal side; lateral eyes placed on carina both rows slightly recurved; lateral eyes larger than median. Median ocular quadrangle wider posteriorly than anteriorly. The legs are long and robust, with the first and second pairs significantly longer than the others. Tibiae I and II have seven and three pairs of ventral spines, respectively, while the metatarsi of legs I and II are armed with 14 and four pairs of ventral spines, respectively. The posterior legs lack spines entirely.

Legs: I 2.37 (1.00, 0.35, 0.68, 0.24, 0.10); II 2.22 (0.47, 0.35, 0.61, 0.45, 0.34); III 1.47 (0.24, 0.31, 0.43, 0.31, 0.18); IV 1.10 (0.24, 0.10, 0.47, 0.18, 0.11). Leg formula 1234.

**Abdomen** (Fig. E): Long, cylindrical, spined, narrow posterior, minutely overlapping the posterior of cephalothorax, dorsum with a long median broad, chalk white pigmented irregular lines from the base to the end, two longitudinal black depressions

medially. Sides with prominent U-like muscular corrugations and muscular ridges, each provided with a row of spines. Venter red brown to deep brown.

**Pedi-palp** (Fig. F-H): Palp with two tibial apophyses; ventral one hooklike in appearance; retro-lateral apophysis longer and thinner, extending almost half the length of tegulum.

**Material examined:** Himachal Pradesh:1, ♂, Sundernagar, 12. viii.2016, coll. Chhavi and Party (Reg. No. ZSI/WGRC/IR.INV/5246).

**Distribution:** India: Karnataka, Himachal Pradesh and Kerala.

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