

ON SOME NEW SPECIES OF SPIDERS OF FAMILY
GNAPHOSIDAE (ARANEAE : ARACHNIDA)
FROM GUJARAT, INDIA

By

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(With 3 text-figures)

INTRODUCTION

Although the spiders are extremely abundant throughout our country, the representative works of Pocock (1900) and Thorell (1895) contain no references to the family Gnaphosidae. Very recently Tikader (1959, 1961) described several new species of spiders belonging to different families including Gnaphosidae.

In course of the taxonomic studies of spiders, one of the authors (BHP) collected spiders from various parts of Gujarat State during the last four years. While examining the interesting collections one of the authors (BHP) came across several new and remarkable forms of spiders. The present paper contains the descriptions of three new species of gnaphosid spiders.

The spiders of this family are of typical appearance and for the most part, dull coloured or black or brown-black. They live under stones, amongst leaves or in the roots of grasses or heather. *Scotophaeus* is normally found in the houses and out-houses. Most species are nocturnal in habit excepting *Micaria*. Some of them build silken retreats but no regular web for the capture of prey.

All the type specimens will in due course be deposited in the National Zoological Collections of Zoological Survey of India, Calcutta.

1. ***Drassodes gujaratensis* sp. n.**

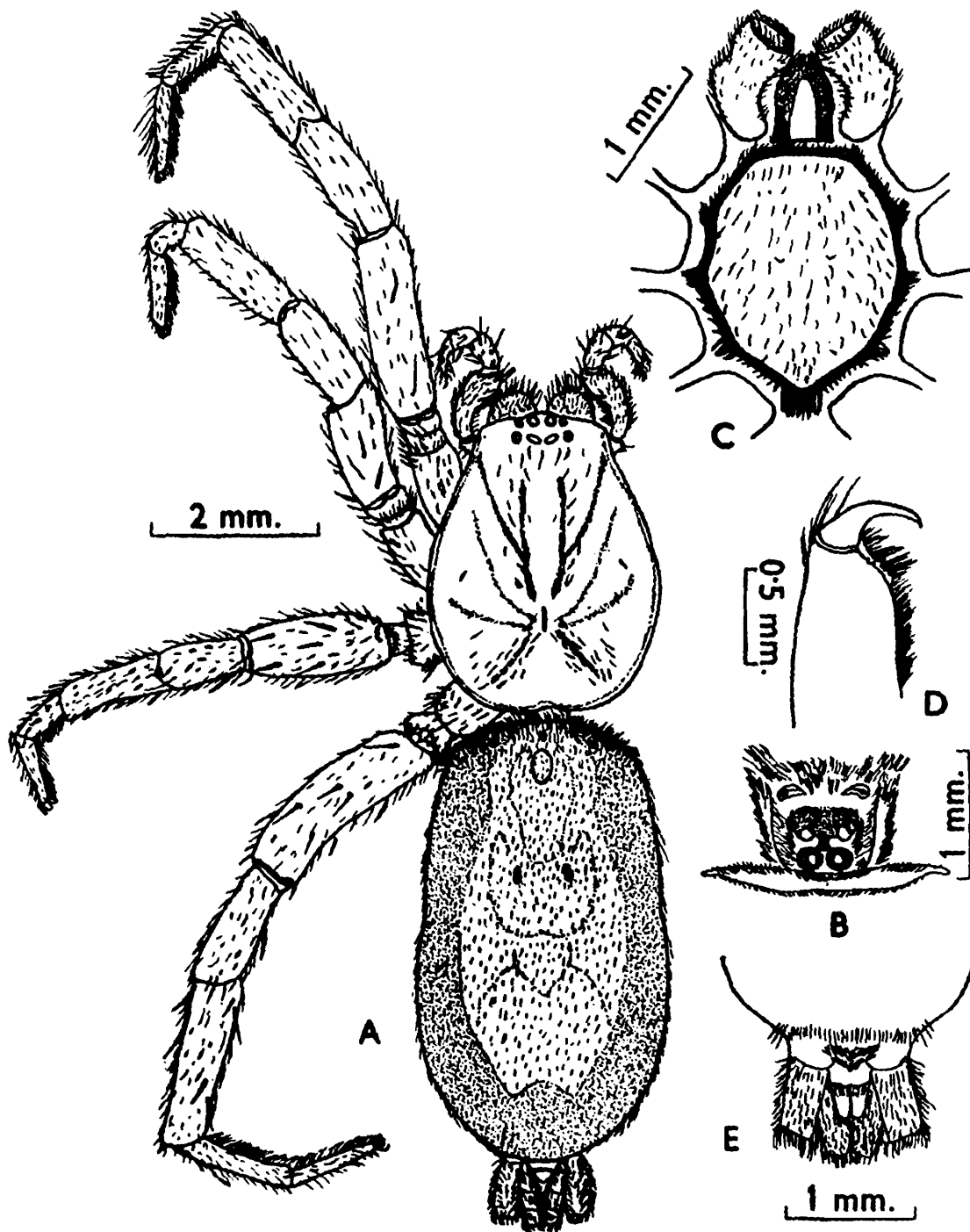
(Text-fig. 1, a-e)

General.—Cephalothorax and legs dark-brown, abdomen brown. Total length 8.70 mm. Carapace 3.44 mm. long, 2.73 mm. wide; abdomen 5.25 mm. long, 3.00 mm. wide.

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Cephalothorax. Slightly broader anteriorly, longer than broad, covered with few black hairs, with a fovea on the thorax and radial furrows. Eyes of anterior row straight, posterior row slightly longer and procurved, anterior medians dark in colour, rest white; anterior medians smaller than the laterals and a little closer to the laterals than to each other, posterior medians oblong, slightly larger and close to each other than to the laterals. Ocular quad longer than broad. Sternum oblong, truncate anteriorly and pointed behind, with a dark-brown margin, covered with hairs. Labium ovate reaching beyond the mid-point of maxilla as in Text-fig. 1, c. Chelicerae brown, vertical, strong, with two promarginal and three retromarginal teeth as in



Text-fig. 1. *Drassodes gujaratensis* sp. n.

(a) Dorsal view of female, legs on one side omitted; (b) Epigyne; (c) Sternum, labium and maxilla; (d) Right chelicera; (e) Spinners seen from ventral side.

Text-fig. 1, d. Legs long, stout, brown, covered with hairs and few spines. Only two dorsal spines on femora I and II; two ventral spines on metatarsus I and three on metatarsus II; spines on all segments except tarsi of III and IV. Scopulae extended nearly upto the base of metatarsi and tarsi of I and II and upto the base of tarsi III and IV. Two pectinate tarsal claws with claw tufts present.

Abdomen.—Brown, oblong, covered with fine pubescence. Dorsally pale yellowish patches marked by faint yellow lines and a pair of dark oval spots just near the anterior half. Ventrally inbetween the posterior half and the spinners, light colour chevrons present. Epigyne as in Text-fig. 1, b.

Holotype.—Female in spirit.

Type-locality.—Vallabh Vidyanagar ca. 6 kilometers West of Anand, Dist. Kaira; 9.x.1967; B. H. Patel Coll.

Distribution.—Known from the type-locality only.

This species resembles to *Drassodes malodes* Tikader, but differs as follows: (i) Anterior row of eyes straight but in *D. malodes* anterior row of eyes slightly procurved. (ii) Anterolateral corner of abdomen not angular but in *D. malodes* anterolateral corner of abdomen slightly angular. (iii) Dorsally and ventrally colour patches on abdomen but in *D. malodes* no such colour patches. (iv) Epigynal structure also differs.

2. *Scotophaeus chohanius* sp. n.

(Text-fig. 2, a-e)

General.—Cephalothorax and legs brown, abdomen dark-brown to black. Total length 5.66 mm. Carapace 2.21 mm long, 1.81 mm. wide; abdomen 3.45 mm. long, 2.18 mm. wide.

Cephalothorax.—Longer than wide, clothed with fine pubescence. Cephalic region high with depression and radial furrows, a fovea on the thorax. Eyes of both rows procurved; anterior medians round and dark and slightly smaller than the laterals, posterior medians irregular-oblong; eyes pearly white except anterior medians which are dark. Ocular quad as long as wide. Clypeus low. Sternum heart-shaped, tapering and pointed behind, brown, clothed with hairs. Labium and maxilla as in Text-fig. 2, c; labium reaching beyond the mid-point of maxilla. Chelicerae vertical, brown and robust on anterior surface as in Text-fig. 2, d. Legs brown, long, clothed with hairs and few black spines. Two dorsal and one epical prolateral spines on femora I. Two unpaired dorsal spines on femora II. Scopulae on metatarsi and tarsi of all legs; tarsi with two pectinate claws.

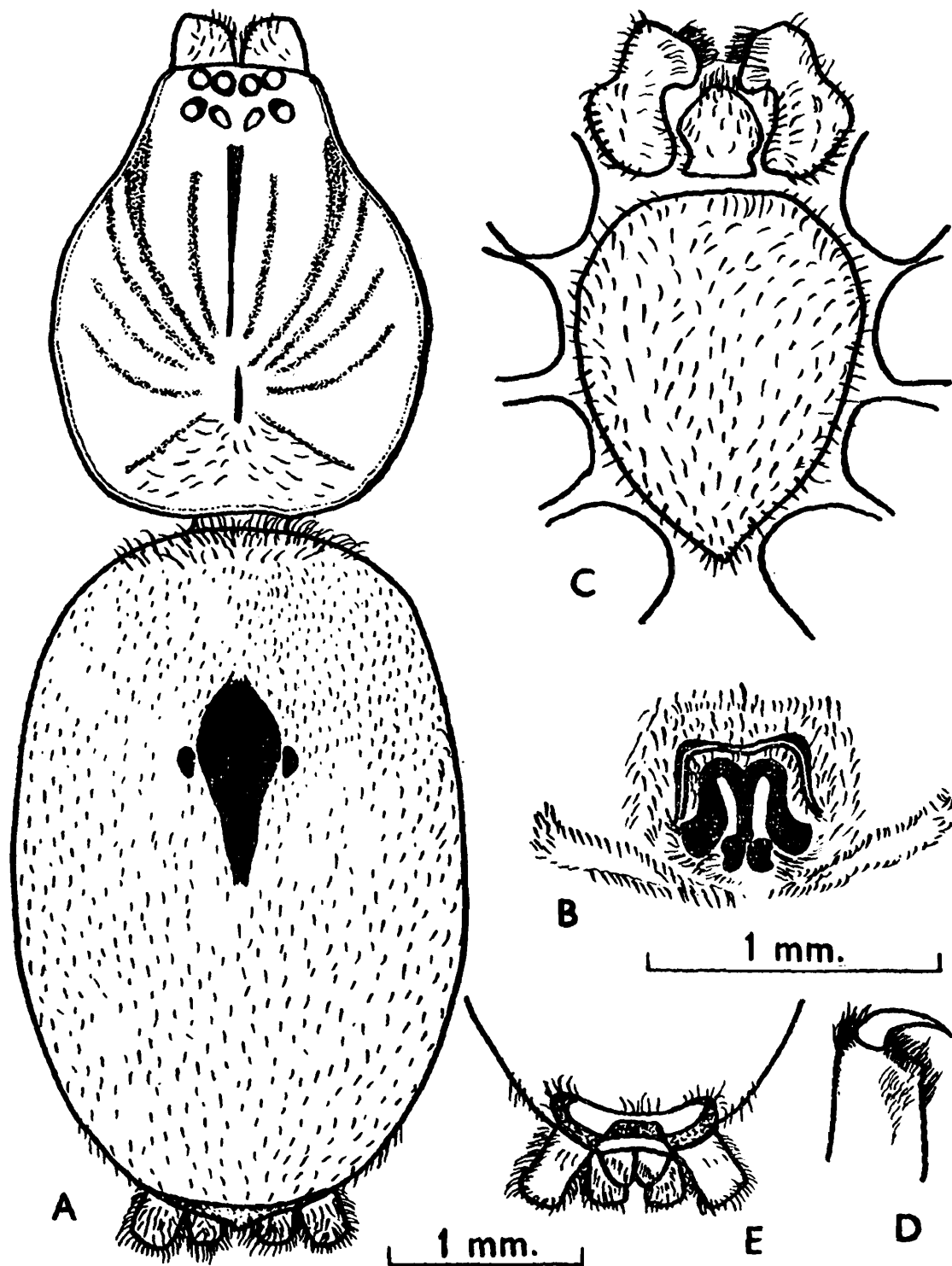
Abdomen.—Oblong, longer than broad, dark-brown to black, clothed with fine pubescence. A mid-dorsal black patch with two lateral oblong brown spots present. Ventral side lighter in colour with two black lines extending from epigastric fold upto posterior one-fourth length of abdomen. Epigyne as in Text-fig. 2, b.

Holotype.—Female, *paratype* one female in spirit.

Type-locality.—Vallabh Vidyanagar ca. 6 kilometer West of Anand,

Dist. Kaira; 3.viii.1970; B. H. Patel Coll.

Distribution.—Known from the type-locality only.



Text-fig. 2. *Scotophaeus chohanius* sp. n.

(a) Dorsal view of female, legs omitted; (b) Epigyne; (c) Sternum, labium and maxilla; (d) Right chelicera; (e) Spinners seen from ventral side.

This species closely resembles to *Scotophaeus domesticus* Tikader, but differs as follows: (i) Cephalothorax with radial furrows but in *S. domesticus* no radial furrows. (ii) Anterior median eyes slightly smaller than the laterals but in *S. domesticus* anterior medians larger than the laterals.

- (iii) Shape and arrangement of eyes of posterior row quite differ.
(iv) Femur I with two dorsal and one epical prolateral spines and femur II with two unpaired dorsal spines and no spines on tibia and metatarsi but in *S. domesticus* legs with black spines on tibiae and femora; tibiae I and II with three unpaired ventral spines; metatarsi I and II with one pair of ventral spines near the base. (v) A dorsal patch on mid-dorsal side of abdomen but in *S. domesticus* no such patch on abdomen.
(vi) Structure of labium, maxilla and epigyne also differs.

3. *Phaeocedus haribhaius* sp. n.

(Text-fig. 3, a-e)

General.—Cephalothorax, abdomen and legs light-brown. Total length 8.57 mm. Carapace 3.33 mm. long, 2.28 mm. wide; abdomen 5.24 mm. long, 3.15 mm. wide.

Cephalothorax.—Longer than wide, clothed with fine pubescence, convex with a fovea on the thorax. Cephalic region high. Eyes of anterior row straight to slightly procurved, dark in colour; anterior medians larger than the laterals; eyes of posterior row procurved, pearly white, posterior medians oblong and larger than the laterals. Ocular quad longer than wide. Sternum brown, oblong, narrowed behind, reaching inbetween the posterior coxae; broad and truncate anteriorly, covered with hairs. Labium and maxilla as in Text-fig. 3, c. Labium truncate in front, reaching beyond the mid-point of maxilla. Chelicerae brown, strong, with three promarginal and two retromarginal teeth, fang strong as in Text-fig. 3, d. Legs long, stout, covered with hairs and few spines. Two ventral spines on metatarsi I and II and on tibia I; one ventral and one prolateral spines on tibia II. Scopulae reaching nearly upto the base of metatarsi and tarsi of I and II and upto the base of tarsi of III and IV

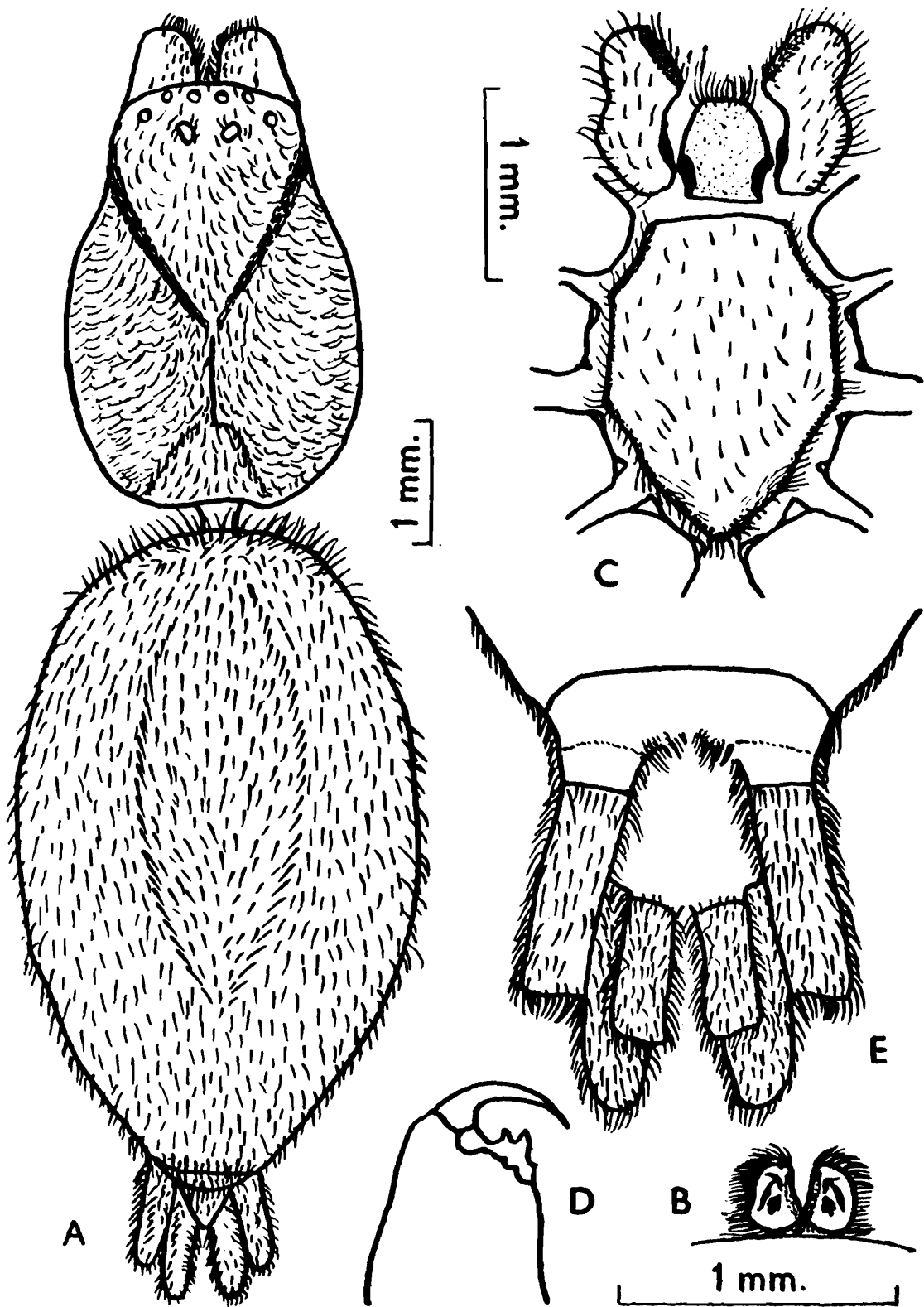
Abdomen.—Pale-brown, oval, clothed with fine pubescence, longer than broad, tapering posteriorly, with a yellowish-brown colour on anterior mid-dorsal portion. Epigyne simple as in Text-fig. 3, b.

Holotype.—Female in spirit.

Type-locality.—Vallabh Vidyanagar ca. 6 kilometers West of Anand, Dist. Kaira; 3.viii.1970; *B. H. Patel* Coll.

Distribution.—Known from the type-locality only.

This species resembles to *Phaeocedus mosambaensis* Tikader, but differs as follows: (i) Eyes of anterior row unequal but in *P. mosambaensis* eyes of anterior row equal. (ii) Abdomen pale brown, oblong, tapering posteriorly with an anterior mid-dorsal yellowish-brown colour but in *P. mosambaensis* abdomen dark-brown, posterior half of dorsal surface with deep-brown chevrons. (iii) Sternum oblong narrowed behind, reaching inbetween the posterior coxae, broad and truncate anteriorly, covered with few hairs but in *P. mosambaensis* sternum oval and narrowed behind. (iv) Structure of labium, maxilla and epigyne also differs.

Text-fig. 3. *Phaeocedus haribhaii* sp. n.

(a) Dorsal view of female, legs omitted; (b) Epigyne; (c) Sternum, labium and maxilla; (d) Right chelicera; (e) Spinners seen from the ventral side.

SUMMARY

Three species of spiders are described in this paper. All the species were collected from Vallabh Vidyanagar, Dist. Kaira, Gujarat. The new species belong to three different genera contained in the family Gnaphosidae.

ACKNOWLEDGEMENT

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