

**A NEW SPECIES OF DRY FOLIAGE MIMICKING  
*Eriovixia* ARCHER, 1951 FROM CENTRAL WESTERN GHATS,  
INDIA (ARANEAE: ARANEIDAE)**

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**ABSTRACT**

A new species of cryptic, dry-foilage mimicking araneid, *Eriovixia gryffindori* sp. nov. is described from the unique ‘Kans’ forestlands of central Western Ghats, Karnataka, India.

**Key Words:** Araneidae, *Eriovixia*, India, Karnataka, Shivamogga, nouveau taxon, taxonomy, natural history.

**INTRODUCTION**

Members of the genus *Eriovixia* Archer, 1951 are characterized by possessing a pilose carapace, sub-triangular abdomen, tapering posteriorly with or without a caudal appendage, legs spiny; epigynum bearing a short, stout scape, with a recurved tip, to which a pair of curved sclerites bearing anterior copulatory openings are completely incorporated, and fused with. Globally represented by 20 species, four are known to occur in India. (Archer, 1951; Han & Zhu, 2010; World Spider Catalog, 2016).

A new species from the ‘Kans’ of Shivamogga, Karnataka; specialized forest lands harboring unique microclimatic conditions, and consisting of evergreen and semi-evergreen vegetation, surrounded by deciduous forest (Hemanjali *et al.*, 2015), is described, and herewith placed under the genus.

**MATERIALS AND METHODS**

Holotype female visually detected and hand collected, during a survey conducted to document the Araneae of the ‘Kans’ of central western ghats, Shivamogga, Karnataka.

Specimen photographed in-situ with a Nikon D7200 DSLR, utilizing a 50mm Yashica lens, reversed with extension tubes, and a Vivitar electronic flash paired with a homemade diffuser; subsequently euthanized and preserved in 80% ethanol.

Female genitalia excised, cleared and examined under a stereo zoom microscope; measurements provided are in mm and were taken using a digital caliper; leg measurements, as presented follow Mi, Peng, & Yin, 2010 are provided as: Total (femur, patella+tibia+meta-tarsus+tarsus).

Type material examined will be deposited in the repository of the Forest Training Institute, Chikhaldara, Amravati.

### Taxonomy

#### *Eriovixia* Archer, 1951

#### *Eriovixia gryffindori* sp. nov.

(Figures 1- 6)

#### Type specimen

Holotype female, Hosanagara taluk, Shivamogga district, Karnataka. 13.92°N 75.07°E, 19.x.2015. Sumukha J. N.

#### Etymology

This uniquely shaped spider derives its name from the fabulous, sentient magical artifact, the sorting hat, owned by the (fictitious) medieval wizard Godric Gryffindor, one of the four founders of Hogwarts School of Witchcraft and Wizardry, and stemming from the powerful imagination of Ms. J. K. Rowling, wordsmith extraordinaire, as presented in her beloved series of books, featuring everyone's favorite boy-wizard, Harry Potter. An ode from the authors, for magic lost, and found, in an effort to draw attention to the fascinating, but oft overlooked world of invertebrates, and their secret lives.

#### Diagnosis

*Eriovixia gryffindori* sp. nov. can be distinguished from all congeners by the following characteristics: epigyne sub-triangular, lateral sclerites large, distinct; scape long & stout, prominent, slightly recurved towards the tip, when viewed laterally; boundary between base of epigynum and scape clearly demarcated. Spermathecae small, oblong. Copulatory ducts stout, strongly arched, and inwardly curved, bearing a distinct coiled appearance; copulatory openings large, prominent, disk shaped, located posteriad. (Figures 3-5).

Ostensibly resembles *E. pseudocentrodes* (Bösenberg & Strand, 1906) but can be separated by the differing genital structure of the latter, namely; scape small, indistinct, not clearly demarcated from the base of epigynum; copulatory ducts long & curved; spermathecae ovoid (Tanikawa, 1999; Jäger & Praxaysombath, 2009; Han & Zhu, 2010; Mi, Peng, & Yin, 2010; Mi & Wang, 2016).

Also, similar to *E. huwena* Han & Zhu, 2010, but can be distinguished by the latter's dissimilar genitalia, namely; epigynum bearing a triangular scape; copulatory ducts twisted near narrow copulatory openings, expanding near kidney bean shaped spermathecae (Mi & Wang, 2016).

#### Description

**Female Holotype:** Prosoma 1.80mm long, 1.78mm wide. Opisthosoma 5.22mm long, 3.18mm wide. Leg measurements: I 6.81 (2.36, 2.59, 1.37, 0.49), II 5.86 (2.01, 2.17, 1.18, 0.50), III 3.03 (1.10, 1.04, 0.62, 0.27), IV 4.35 (1.27, 1.73, 0.96, 0.39).

Opisthosoma gray-brown, longer than wide, tapering posteriad, with small, irregularly spaced brown spots. A broad, dark-brown longitudinal median band, with eight distinctive, paired dark spots, irregularly edged with green, extending to the caudal tip. Prosoma orange-brown; legs following a similar color scheme.

Habitus lightly covered in two distinctive shades of setae: short, and light yellow; longer and white in coloration.

Epigyne as in Diagnosis. Male unknown.

#### Distribution

Presently known only from Shivamogga district, Karnataka, India.



**Figure 1** *Eriovixia gryffindori* sp. nov.  
- Anterodorsal view



**Figure 2** *Eriovixia gryffindori* sp. nov.  
- Lateral view



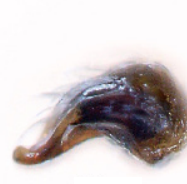
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**Figure 3** Epigyne  
- Ventral view



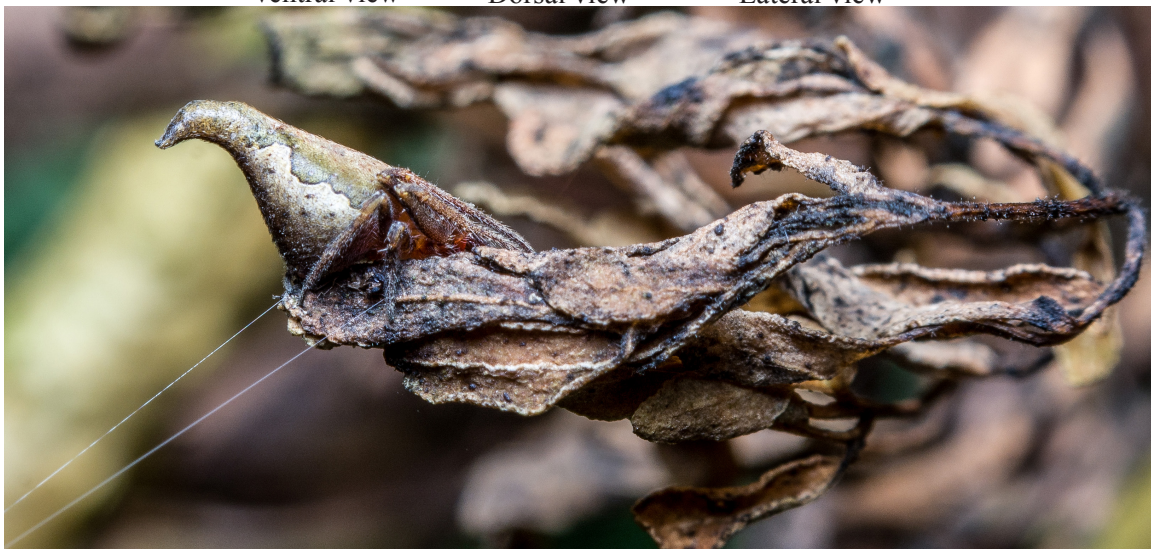
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**Figure 4** Epigyne  
- Dorsal view



0.2mm

**Figure 5** Epigyne  
- Lateral view



**Figure 6** *Eriovixia gryffindori* sp. nov. showing resemblance to dried foliage



### Natural History

A small, cryptic, nocturnal araneid which takes refuge in, and mimics dried foliage, during daylight hours (Figure 6).

Holotype female located among dried leaves of an unidentified shrub, 4 feet from ground level (approx). Web Vertical; orb-shaped.

### Remarks

Tanikawa (1999) mentions a certain variability in the epigynal structure of *E. pseudocentrodes*, which though profusely illustrated by various authors (Tanikawa, 1999; Jäger & Praxaysombath, 2009; Han & Zhu, 2010; Mi, Peng, & Yin, 2010), has never been succinctly compared and described.

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### REFERENCES

- Archer, A.F. (1951).** Studies in the orbweaving spiders (Argiopidae). 1. *American Museum Novitates*, 1487: 1-52.
- Han, G.X. & Zhu M.S. (2010).** Taxonomy and biogeography of the spider genus *Eriovixia* (Araneae: Araneidae) from Hainan Island, China. *Journal of Natural History*, 44: 2609-2635.
- Hemanjali, A.M., Pramodkumar G.R., Somashekar R.K. & Nagaraja B.C. (2015).** Assessment of forest encroachment in Shimoga district of Western Ghats, India, using remote sensing and GIS. *International Journal of Advanced Technology & Engineering Research*, 5(1): 25-30.
- Jäger, P. & Praxaysombath B. (2009).** Spiders from Laos: new species and new records (Arachnida: Araneae). *Acta Arachnologica*, Tokyo 58: 27-51.
- Mi, X.Q. & Wang, C. (2016).** First description on the female of *Eriovixia huwena* and the male of *E. poonaensis* (Araneae, Araneidae). *Sichuan Journal of Zoology*, 35(5): 728-733.
- Mi, X.Q., Peng X.J. & Yin C.M. (2010).** The orb-weaving spider genus *Eriovixia* (Araneae: Araneidae) in the Gaoligong mountains, China. *Zootaxa*, 2488: 39-51.
- Tanikawa, A. (1999).** Japanese spiders of the genus *Eriovixia* (Araneae: Araneidae). *Acta Arachnologica*, Tokyo 48: 41-48.
- World Spider Catalog (2016).** World Spider Catalog. Natural History Museum Bern, online at <http://wsc.nmbe.ch>, version 17.5, accessed on {2-12-2016.}