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Survey of the Ethiopian linyphiid spider fauna. I. Subfamily Erigoninae (Arachnida, Araneae, Linyphiidae)

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Abstract

Eight identifiable species of the linyphild spider subfamily Erigoninae have been reviled from the Oromia Region, Ethiopia, seven of which being described as new: *Callitrichia asela* **n. sp.** (\mathcal{J}, \mathcal{Q}), *Callitrichia protegularis* **n. sp.** (\mathcal{J}, \mathcal{Q}), *Microcyba magna* **n. sp.** (\mathcal{J}, \mathcal{Q}), *Microcyba oromia* **n. sp.** (\mathcal{J}, \mathcal{Q}), *Pelecopsis arsi* **n. sp.** (\mathcal{J}, \mathcal{Q}), *Savignia ericola* **n. sp.** (\mathcal{J}, \mathcal{Q}), and *Walckenaeria* (*Tigellinus*) trivialis **n. sp.** (\mathcal{J}, \mathcal{Q}). The cosmopolitan Ostearius melanopygius (O. Pickard-Cambridge, 1880) is reported from Ethiopia for the first time.

Key words: taxonomy, dwarf spiders, new species, new records, Afrotropics, mountain fauna

Introduction

The linyphiid spider fauna of Ethiopia is still poorly known, currently comprising only 11 species. The first and only Ethiopian representative of the subfamily Erigoninae, *Oedothorax pilosus* Wunderlich, 1978, was described from a single male without precise locality from Schoa (= Oromia Region, Shewa Province) (Wunderlich 1978). The representation of the other subfamilies of Linyphiidae in Ethiopia is quite insignificant: Mynogleninae (6), Micronetinae (in traditional sense) (3), and Linyphiinae (1). Kenya, bordering Ethiopia in the south, has been better inventoried, and presently include 114 linyphiid species, 73 of which belong to the subfamily Erigoninae (Tanasevitch 2020; Koiko *et al.* 2021). The faunas of such bordering countries as Sudan and Somalia support only one species each, whereas no linyphiids are still known from the other neighboring lands, such as Djibouti and Eritrea.

In October-November 2022, I had the opportunity to work in the framework of the Joint Russian-Ethiopian Biological Expedition to Ethiopia, organized by the A.N. Severtsov Institute of Ecology and Evolution, Russian Academy of Sciences. Short field research trips were carried out at Chilimo State Forest, Arsi Mountains National Park and Suba Menagesha National Park, all in the Oromia Region, as well as in parks in the territory of the Russian Embassy, Addis-Ababa.

This is the first publication of the results of the expedition to Ethiopia, devoted solely to the linyphiid subfamily Erigoninae.

Materials and methods

This paper is based on spider material collected in several regions of Ethiopia from October 7th to November 15th, 2022, in the framework of a Joint Russian-Ethiopian Biological Expedition. The types is kept at the Zoological Museum of the Moscow State University, Russia (ZMMU), and some paratypes will be deposited in the Muséum d'histoire naturelle de Genève, Switzerland (MHNG).

Spiders were collected by sifting litter and moss, as well as by soil sampling in three National Parks (see in Introduction) and in the territory of the Russian Embassy, Addis-Ababa. Specimens preserved in 70% ethanol were studied using an MBC-9 stereomicroscope. Sample numbers are given in square brackets. Drawings were done

with a drawing tube; a Levenhuk C-800 digital camera was used for photographs. Leg chaetotaxy is presented as a formula, e.g., 2.2.1.1, which refers to the number of dorsal spines on tibiae I–IV. The sequence of leg segment measurements is as follows: femur + patella + tibia + metatarsus + tarsus. All measurements are given in mm. The terminology of copulatory organs mainly follows that of Merrett (1963) and the authors mentioned in the section "Abbreviations" given below.

Abbreviations used in text and figures

a.s.l.	above sea level
AA	additional apophysis on convector
AO	additional outgrowth on palpal tibia
ARA	anterior radical apophysis
AW	anterior wall of epigynum sensu Saaristo & Tanasevitch (1996)
С	convector <i>sensu</i> Tanasevitch (1998) = lamella characteristica in Saito (1984); Wunderlich & Li (1995);
	radix in Miller & Hormiga (2004) and in Lin et al. (2022). See N.B. below.
D	duct
DP	dorsal plate of epigynum
DSA	distal suprategular apophysis sensu Hormiga (2000)
Е	embolus
EO	embolus outgrowth
EP	embolus proper
EPL	epigynal plate
L	ligula
LDA	low distal apophysis of convector
MM	median membrane <i>sensu</i> van Helsdingen (1965) = embolic membrane <i>sensu</i> van Helsdingen (1986), Hor
	miga (2000)
MT	median tooth of DSA
MRP	median radical process of radix
N.P.	National Park
PP	posterior protrusions of DP
Pt	protegulum sensu Holm (1979)
R	radix
Re	receptacles
RS	sac of receptacle
TmI	position of trichobothrium on metatarsus I
ТР	tailpiece
UDA	upper distal apophysis of convector

N.B. For details concerning the convector, a separate, additional sclerite in the embolic division that lacks a sperm duct, see Tanasevitch (1998: 423; Tanasevitch 2015: 381).

Results

Taxonomy

Family Linyphiidae Blackwall, 1859

Erigoninae Emerton, 1882

Callitrichia Fage, 1936

Type species: Callitrichia hamifera Fage, in Fage & Simon, 1936, by original designation.

Previously considered as a small Afrotropical genus, *Callitrichia* has recently been revised based on a morphological cladistic analysis by Lin *et al.* (2022), resulting in a significant expansion of its composition to 56 species. The genus is characterized by an elongated palpal tibia carrying teeth apically, a massive paracymbium, the embolic division with a small embolus, totally reduced radix and a large convector. Convector with two distal apophyses (see UDA and LDA in Figs 2F, 4B), of which the lower one (LDA) is usually long and protruding from the bulb. As the shape of the embolic division is extremely similar in most congeners, the species mainly differ in details of the shape of the palpal tibia and carapace in the male. For more information see Lin *et al.* (2022: 458). Since the structure of the epigynum in the female is also very similar, reliable differences between congeners are only possible to reveal in the presence of the corresponding male.

Distribution. The genus mainly occurs in the eastern part of the Afrotropical Region: chiefly in Kenya, Uganda, Tanzania, thus being new to be recorded from Ethiopia.

Two species described below can easily be assigned to *Callitrichia*, being very similar to other congeners in showing the same chaetotaxy (2.2.1.1) and trichobothriotaxy (Tm I–IV present), a similar conformation of the male palp, namely, the modified palpal tibia, a short embolus with a large convector furnished with two distal apophyses, as well as by a similarly shaped epigynum plate.

Callitrichia asela new species Figs 1, 2

Type material. Holotype: \mathcal{J} (ZMMU): ETHIOPIA, Chilalo Mt., canyon, SE slope, 3125–3130 m a.s.l., 7.93414°N 39.19479°E, *Hypericum revolutum* bushes with sporadic *Schefflera abyssinica* and *Hagenia abyssinica*, grass, green mosses, sifting litter and mosses, 29.X.2022, A. Tanasevitch leg. [Eth017]. **Paratypes:** $5\mathcal{J}$, $6\mathcal{P}$ (ZMMU): same date and locality, together with holotype; $5\mathcal{J}$, $6\mathcal{P}$ (ZMMU): Chilalo Mt., canyon, steep northern slope, 3080 m a.s.l., 7.93524°N 39.19368°E, *Hypericum revolutum* bushes with sporadic *Schefflera abyssinica*, grass, green mosses, sifting litter and mosses, 24.X.2022, A. Tanasevitch leg. [Eth014]; $2\mathcal{J}$, $5\mathcal{P}$ (MHNG): Chilalo Mt., canyon, steep northern slope, 3070–3075 m a.s.l., 7.935124°N 39.19392°E, *Hypericum revolutum* bushes with sporadic *Schefflera abyssinica*, grass, green mosses, sifting litter and mosses, sifting litter and mosses, 24 & 29.X.2022, A. Tanasevitch leg. [Eth016]; $2\mathcal{J}$, $5\mathcal{P}$ (ZMMU): Oromia Region, Asela Zone, ca 35air-km SE from Asela (= Assela), Arsi Mountains N.P., road from Digelu to Ticho, top of mountains, 3755–3770 m a.s.l., 7.82377°N 39.41713°E, *Erica arborea* bushes, *Alchemilla* sp., green mosses mostly *Rhytidiadelphus triquetrus*, sifting mosses from beds of *Erica*, 21 & 31.X.2022, A. Tanasevitch leg. [Eth019]; 8 \mathcal{P} (ZMMU): Arsi Mountains N.P., road from Digelu to Ticho, 3500–3505 m a.s.l., 7.81944°N 39.35429°E, *Erica arborea* bushes, with grass and green mosses, sifting mosses, 30 & 31.X.2022, A. Tanasevitch leg. [Eth018].

Etymology. The specific epithet is a noun in apposition referring to the Asela Zone in Oromia Region, Ethiopia, the area of origin of the new species.

Diagnosis. By the shape of the palpal tibia and the structure of the embolic division, the new species seems to be especially similar to both *C. ruwenzoriensis* Holm, 1962, from Uganda, and *C. glabriceps* Holm, 1962, from both Kenya and Uganda (Holm 1962). The male of *C. asela* n. sp. clearly differs from both above congeners by the shape of the carapace, the shapes of the apical projections of the palpal tibia and the presence of a distinct notch between them (marked with an arrow in Fig. 2D). From *C. ruwenzoriensis*, the new species differs also in the low distal apophysis of the convector being smaller, and from *C. glabriceps* by the wider embolus. The female is distinguished from *C. ruwenzoriensis* by the narrower epigynal plate, and from *C. glabriceps* by the rounded shape of the epigynal plate (*vs* subrectangular).

Description. Male (Paratype from Eth017). Total length 2.35. Carapace modified, as in Figs 1A–D, 1.10 long, 0.75 wide, greyish to greyish-yellow, with dark radial stripes. Head part of carapace with a rounded elevation holding the posterior median eyes; face of carapace with a group of bristles of different length. Eyes normal, not enlarged. Chelicerae 0.40 long, a mastidion absent. Legs greyish to greyish pale yellow. Leg I 2.91 long (0.85 + 0.28 + 0.65 + 0.63 + 0.50), IV 3.36 long (0.88 + 0.30 + 0.83 + 0.85 + 0.50). Chaetotaxy 2.2.1.1, spines about as

long as 1–2 diameter of corresponding leg segment. Metatarsi I–IV with a trichobothrium each. TmI 0.60. Palp (Figs 2A–F): Tibia short, apically with a notch divided tibial distal part into two short parts: a prolateral part with a small apical claw, and retrolateral part with two apical claws. In addition, a small denticle situated at frontal surface of tibia (marked with an arrow in Figs. 2E and 2C). Paracymbium large, thick, unciform. Tegulum somewhat elongated, distally membraneous, slightly bent apically. Distal suprategular apophysis short, wide, with a small and narrow tooth at middle. Median membrane small, poorly visible. Embolus short, claw-shaped. Convector massive, its upper distal apophysis small, claw-shaped; low distal apophysis as a small tubercle. Opistosoma 1.20 long, 0.80 wide, dorsal pattern as in Fig. 1A.



FIGURE 1. Photographs of male (A, B, C, D) and female (E, F, G) of *Callitrichia asela* n. sp., paratypes from Eth017. A, E, habitus, dorsal view; B, same, lateral view; C, prosoma, antero-lateral view; D, F, habitus frontal view; G, opisthosoma, ventral view. Scale bars: 0.5mm.



FIGURE 2. Details of male palpal structure (A–G) and female epigynum (H, I) of *Callitrichia asela* **n. sp.**, paratypes from Eth017. **A**, **B**, right palp, retrolateral and prolateral view, respectively; **C**, tibia and paracymbium, postero-prolateral view; **D**, tibia, dorsal view; **E**, same, frontal view; **F**, **G**, distal suprategular apophysis and embolic division, prolateral and retrolateral view, respectively; **H**, **I**, cleared epigynum, ventral and dorsal view, respectively. Scale bars: 0.1mm.

Female (Paratype from Eth017). Total length 2.65. Carapace unmodified, as in Figs 1E, F, greyish to greyish-yellow, with dark radial stripes, 1.03 long, 0.75 wide. Chelicerae 0.43 long. Legs greyish to greyish-pale brown. Leg I $2.76 \log (0.75 + 0.30 + 0.63 + 0.60 + 0.48)$, IV $3.15 \log (0.82 + 0.30 + 0.78 + 0.80 + 0.45)$. Chaetotaxy and thrichobothriotaxy as in male TmI 0.59. Opisthosoma 1.75 long, 1.10 wide, dorsal pattern as in Fig. 1E. Epigynum (Figs 1G, 2H, I): Epigynal plate oval, receptacles elongated, bean-shaped, directed forward and slightly apart.

Distribution. Known only from the mountains of Oromia Region, Ethiopia, ranging from 3070 to 3770 m a.s.l.

Callitrichia protegularis new species

Figs 3, 4

Type material. Holotype: $\stackrel{\circ}{\bigcirc}$ (ZMMU): ETHIOPIA, Oromia Region, 67 air-km E of Addis-Ababa, 5 air-km NNE from Ginchi, Chilimo State Forest, spring valley near road, 9.07061°N 38.15804°E, 2584 m a.s.l., *Podocarpus falcatus* forest with *Juniperus procera*, *Prunus africana*, *Olea europaea*, *Hagenia abyssinica*, *Apodytes dimidiata*, *Ficus* spp., *Erythrina brucei*, etc, grass, sifting litter and humus, 15.X.2022, A. Tanasevitch leg. [Eth008]. **Paratypes:** $2\stackrel{\circ}{\bigcirc}$, $2\stackrel{\circ}{\bigcirc}$ (ZMMU): same date and locality, together with holotype.



FIGURE 3. Photographs of male (A–D) and female (E, F, G, H) of *Callitrichia protegularis* n. sp., paratypes from Eth008. A, E, habitus, dorsal view; B, prosoma, dorsal view; C, same, lateral view; D, habitus frontal view; F, opisthosoma, ventral view; G, H, epigynum and cleared epigynum, respectively, ventral view. Scale bars: A–F, 0.5mm; G, H, 0.1mm.



FIGURE 4. Details of male palpal structure (A-E) and female epigynum (F) of *Callitrichia protegularis* n. sp., paratypes from Eth008. A, B, right palp, retrolateral and prolateral view, respectively; C, tibia and paracymbium, prolateral view; D, same, dorsal view; E, embolic division, prolateral view; F, cleared epigynum, ventral view. Scale bars: 0.1mm.

Etymology. The specific epithet is the Latin adjective referring to a long protegulum bent towards the embolic division.

Diagnosis. The male of the new species is diagnosed by the peculiar shape of the carapace, as shown in Figs 3A–D, the slightly broadened apical part of the palpal tibia ending with two small and sharp denticles; the long and distally bent protegulum, the presence of a special apophysis in addition to the upper distal apophysis of the convector (AA in Figs 4A, B, E), as well as by the long low distal apophysis extended far beyond the bulb. The female is charaterized by the oval epigynal plate, receptacles being directed obliquely forward, as well as by the presence of a sac on each receptacle. Based on the conformation of the embolic division, the new species is similar to numerous congeners, yet especially so to *C. hamifera* Fage, 1936, *C. monticola* (Tullgren, 1910), and *C. silvatica* Holm, 1962, all mainly distributed in the eastern part of the Afrotropical realm. The shape of the male carapace slightly resembles that of *C. afromontana* Scharff, 1990. From all these species, the male of *C. protegulus* n. sp. differs by the peculiar shape of the carapace, the structure of the distal part of the palpal tibia, as well as by the shape of a long and curved protegulum. The female can be distinguished by the structure of the epigynum, namely, the presence of a sac on each receptacle (RS in Figs 3H, 4F).

Description. Male (Paratype from Eth008). Total length 2.65. Carapace modified, as shown in Figs 3A–D, 1.28 long, 0.93 wide, greyish to greyish-pale brown, with dark radial stripes. Head part of carapace with a low, conical

and hairy elevation, and a shallow hollow before posterior median eyes. Eyes normal, not enlarged. Chelicerae 0.48 long, a mastidion absent. Legs greyish to greyish-pale brown. Leg I 3.48 long (0.95 + 0.30 + 0.85 + 0.83 + 0.55), IV 3.81 long (1.05 + 0.30 + 0.98 + 0.98 + 0.50). Chaetotaxy 2.2.1.1, spines about as long as 1–2.5 diameter of corresponding leg segment. Metatarsi I–IV with a trichobothrium each. TmI 0.73. Palp (Figs 4A–E): Tibia dorsally extended into a long process, slightly broadened apically and carrying two small claws. Paracymbium large, its proximal part much smaller than distal one. Anterior part of tegulum elongated, with a wide and long protegulum, distally curved towards embolic division. Distal suprategular apophysis relatively long and narrow, with a small tooth at middle. Median membrane small, poorly visible. Embolus short, wide at base, its embolus-proper part as a narrow, small spike. Convector massive, its proximal part much narrowed than a distal one. Anterior part of convector wide, upper distal apophysis thin, short, claw-shaped, low distal apophysis long and extended far beyond bulb; an additional apophysis situated near base of embolus (AA in Figs 4A, B, E). Opistosoma 1.38 long, 0.90 wide, dorsal pattern as in Fig. 3A.

Female (paratype from Eth008). Total length 3.05. Carapace unmodified, an in Fig. 3E, 1.23 long, 0.92 wide, greyish to greyish-pale brown, with dark radial stripes. Chelicerae 0.48 long. Legs greyish to greyish-pale brown. Leg I 3.84 long (1.03 + 0.35 + 0.95 + 0.93 + 0.58), IV 4.18 long (1.12 + 0.35 + 1.03 + 1.08 + 0.60). Chaetotaxy 2.2.1.1, spines about as long as 1–2 diameter of corresponding leg segment. Metatarsi I–IV with a trichobothrium each. TmI 0.70. Opisthosoma 2.00 long, 1.20 wide, dorsal pattern as in Fig. 3E. Epigynum (Figs 3F, G, H, 4F): Epigynum plate oval, relatively high, receptacles directed obliquely forward, sacs of receptacles almost touching.

Distribution. Known only from the type locality, the Chilimo State Forest (2584 m a.s.l.), Oromia Region, Ethiopia.

Genus Microcyba Holm, 1962

Type species: Microcyba falcata Holm, 1962, by original designation.

Remarks. *Microcyba* is a relatively small Afrothropical genus presently known to contain 18 species, all occurring in mountainous regions. Members of the genus *Microcyba* can easily be recognized by the small size (1.20–1.60 mm), the carapace high in lateral view in both sexes, the chaetotaxy formula 1.1.1.1, and the absence of a trichoboth-rium on metatarsus IV. The male palp is characterized by the modified tibia, the distal suprategular apophysis moderately long, an elongated and often curved radix with a relatively short embolus. The female is diagnosed by the compact, well-sclerotized, protruded epigynum; openings covered by an overhanging ventral plate, the well-developed dorsal plate, as well as the subspherical receptacles.

Distribution. The genus is distributed in the mountains of Cameroon, the Democratic Republic of the Congo, Gabon, Kenya, Tanzania, Uganda (Word Spider Catalog 2023), presently being recorded from Ethiopia as well.

Two species described below can easily be assigned to *Microcyba*, being very similar to other congeners in showing the same chaetotaxy (1.1.1.1) and trichobothriotaxy (Tm I–III present, TmIV absent), a similarly modified carapace in both sexes (high in lateral view), the conformation of the male palp, namely, the modified palpal tibia, the peculiar structure of the embolic division, as well as a similarly shaped epigynal plate.

Microcyba magna new species

Figs 5, 6

Type material. Holotype: $\bigcirc (ZMMU)$, ETHIOPIA, Addis-Ababa, Russian Embassy Area, 9.03491°N 38.78236°E, 2446 m a.s.l., grove with *Eucalyptus*, *Juniperus*, etc, bushes, tall grass, sifting litter and humus, 12.X.2022, A. Tanasevitch leg. [Eth006]. **Paratypes:** $4\bigcirc, 23\heartsuit$ (ZMMU), $3\bigcirc, 9\heartsuit$ (MHNG), same date and locality, together with holotype; $2\bigcirc, 4\heartsuit$ (ZMMU), Addis-Ababa, Russian Embassy Area, 9.037774°N 38.785607°E, 2488 m a.s.l., sifting litter and humus under single-standing broad-leaved tree, 07.X.2022, A. Tanasevitch leg. [Eth001]; $6\heartsuit$ (ZMMU), same area, 9.03593°N 38.78579°E, 2478 m a.s.l., *Juniperus, Acacia, Eucalyptus*, etc, bushes, sifting litter and humus, 07.X.2022, A. Tanasevitch leg. [Eth002]; $3\bigcirc, 13\heartsuit$ (ZMMU), same area, 9.03638°N 38.78541°E, 2470 m a.s.l., *Eucalyptus* grove with *Juniperus*, etc, bushes, sifting litter and humus, 08.X.2022, A. Tanasevitch leg.

[Eth003]; 11 \bigcirc (ZMMU), same area, 9.0350476°N 38.7836601°E, 2467 m a.s.l., *Eucalyptus* grove with *Juniperus*, *Acacia*, etc, bushes, sifting litter and humus, 10.X.2022, A. Tanasevitch leg. [Eth004]; 9 \bigcirc 42 \bigcirc (ZMMU), same area, 9.03617°N 38.78549°E, 2467 m a.s.l., grove with *Juniperus*, *Eucalyptus*, palm trees, etc, bushes, sifting litter and humus, 11.X.2022, A. Tanasevitch leg. [Eth005]; 10 \bigcirc (ZMMU), same area, 9.03468°N 38.78379°E, 2454 m a.s.l., *Eucalyptus* grove with sporadic *Juniperus*, *Acacia*, etc, bushes, sifting litter and humus, 09.XI.2022, A. Tanasevitch leg. [Eth023]; 1 \bigcirc , 4 \bigcirc (ZMMU), Oromia Region, 67 air-km E of Addis-Ababa, 5 air-km NNE from Ginchi, Chilimo State Forest, spring valley near road, 9.07061°N 38.15804°E, 2584 m a.s.l., *Podocarpus falcatus* forest with *Juniperus procera*, *Prunus africana*, *Olea europaea*, *Hagenia abyssinica*, *Apodytes dimidiata*, *Ficus* spp., *Erythrina brucei*, etc, grass, sifting litter and humus, 15.X.2022, A. Tanasevitch leg. [Eth008]; 2 \bigcirc (ZMMU), Oromia Region, 62, 2530 m a.s.l., *Juniperus procera* forest with *Acacia melanoxylon*, etc, bushes, grass, sifting litter and humus, 11.XI.2022, A. Tanasevitch leg. [Eth025].

Etymology. The specific epithet is the Latin adjective meaning "large", referring to the largest body size among the *Microcyba* species.



FIGURE 5. Photographs of male (A–C) and female (D–G) of *Microcyba magna* n. sp., paratypes from Eth001. A, D, habitus, dorsal view; B, prosoma, lateral view; C, E, habitus, frontal view; F, opisthosoma, ventral view; G, epigynum, ventral view. Scale bars: A–F, 0.5mm; G, 0.1mm.



FIGURE 6. Details of male palpal structure (**A**–**D**) and female epigynum (**E**, **F**) of *Microcyba magna* **n. sp.**, paratypes from Eth004. **A**, **B**, right palp, retrolateral and prolateral view, respectively; **C**, tibia, dorsal view; **D**, distal suprategular apophysis and embolic division, prolateral view; **E**, **F**, epigynum, ventral and dorsal view, respectively. Scale bar: 0.1mm.

Diagnosis. The new species seems to be a largest among the presently known representatives. Besides this, the male is diagnosed by the presence of sulci on the carapace, a massive and strongly sclerotized paracymbium, the characteristic shapes of the palpal tibial outgrowths, the peculiar structure of the embolic division, as well as by the shape of the epigynum in the female. The male of the new species seems to be especially similar to *M. tridentata* Holm, 1962, known from Kenya and Uganda (Holm 1962), but it differs well by the larger size (1.75 vs 1.35), the presence of sulci, the length and shapes of the palpal tibial outgrowths, the much wider radix, as well as by the expanded base of the embolus. The female seems to be is particularly similar to *M. affinis*, known from Uganda (Holm 1962), but, in addition to the larger size (1.70 vs 1.30), its epigynum is more strongly elongated, with widely spaced receptacles.

Description. Male (Paratype from Eth006). Total length 1.75. Carapace modified, as shown in Figs 5A–C, 0.80 long, 0.65 wide, reddish brown to dark brown, with radial stripes, finely reticulate, high in lateral view, with a sharp slope at back. Clypeus slightly sloping, bearing a group of short spines. Sulci presense, very small. Eyes normal, not enlarged. Chelicerae 0.25 long, a mastidion absent. Legs pale brown to brown. Leg I 2.25 long (0.59 + 0.20 + 0.53 + 0.44 + 0.29), IV 2.03 long (0.60 + 0.17 + 0.54 + 0.42 + 0.30). Chaetotaxy 1.1.1.1, spines about 1–1.5 as long as a diameter of corresponding leg segment. Metatarsi I–III with a trichobothrium each. TmI 0.38. Palp

(Figs 6A–D): Tibia with two outgrowths apically: a wide and narrow ones, situated on prolateral and retrolateral side, respectively. Paracymbium large, massive, L-shaped. Distal suprategular apophysis relatively long and wide, distally rounded, with a small and sharp tooth at middle. Median membrane short and wide. Radix wide proximally, narrowed at middle, its distal part black, curved, vague in shape; embolus short. Opisthosoma 0.95 long, 0.75 wide, grey (Fig. 5A).

Female (Paratype from Eth006). Total length 1.70. Carapace unmodified as shown in Figs 5D, E, 0.68 long, 0.55 wide, high in lateral view, brown to dark brown, with radial stripes, clypeus high, vertical. Chelicerae 0.33 long. Legs pale brown to brown. Leg I 1.64 long (0.49 + 0.17 + 0.39 + 0.30 + 0.29), IV 1.73 long (0.53 + 0.18 + 0.42 + 0.33 + 0.27). Chaetotaxy 1.1.1.1, spines about as long as diameter of corresponding leg segment. Metatarsi I–III with a trichobothrium each. TmI 0.45. Opistosoma 1.15 long, 0.95 wide, grey (Fig. 5D). Epigynum, as in Figs 5F, G, 6F, G, well-sclerotized, slightly protruded, ventral plate tapering and wedge-shaped posteriorly, dorsal plate broadened proximally, conical distally.

Distribution. Known only from the mountains of Oromia Region, Ethiopia, ranging from 2446 to 2584 m a.s.l.

Microcyba oromia new species

Figs 7, 8

Types. Holotype: 3° (ZMMU), ETHIOPIA, Oromia Region, Asela Zone, ca 34–35 air-km SE from Asela (= Assela), Arsi Mountains N.P., road from Digelu to Ticho, top of mountains, 3755–3770 m a.s.l., 7.82377°N 39.41713°E, *Erica arborea* bushes, *Alchemilla* sp., green mosses mostly *Rhytidiadelphus triquetrus*, sifting mosses in beds of *Erica*, 21.X.2022, A. Tanasevitch leg. [Eth019]. **Paratypes:** 13° , 8° (ZMMU), same date and locality, together with holotype; 13° , 4° (ZMMU), Oromia Region, Asela Zone, ca 32 air-km SE from Asela, Arsi Mountains N.P., road from Digelu to Ticho, top of mountains, 3780–3866 m a.s.l., 7.82472°N 39.41659°E, *Erica arborea* bushes, sedge, *Alchemilla* sp., green mosses, sifting humus and mosses, 18.X.2022, A. Tanasevitch leg. [Eth010]; 23° , 2° (MHNG), Asela Zone, ca 30 air-km SE from Asela, Arsi Mountains N.P., road from Digelu to Ticho, 3500–3505 m a.s.l., 7.81944°N 39.35429°E, *Erica arborea* bushes, grass, green mosses, sifting mosses, 30.X.2022, leg. A. Tanasevitch [Eth018].

Etymology. The specific epithet is a noun in apposition referring to the Oromia Region, Ethiopia, the area of origin of the species.

Diagnosis. The male of the new species is diagnosed by the C-shaped palpal tibia when viewed from above (also known only in *M. projecta* Holm, 1962), by the peculiar structure of the embolic division in the male, namely, by the shape of a relatively long embolus, and the presence of an outgrowth at its base. The female is distinguishable by the presence of two protrusions (PP in Figs 7E–F, 8F, G) of the dorsal plate extended from under the ventral plate. The male of *M. oromia* n. sp. seems to be most similar to *M. projecta*, known from Uganda (Holm 1962), but differs by the presence of a truncate process on the retrolateral side of the palpal tibia, as well as by a straight and longer embolus (*vs* screw-shaped). The female of the new species is very similar to that of *M. magna* sp.n., but is readily distinguishable by the smaller size (1.35 vs 1.70), the shorter epigynum, the less spaced receptacles, as well as by the presence of two protrusions of the dorsal epigynal plate extended from under the ventral plate.

Description. Male (Paratype from Eth019). Total length 1.28. Carapace modified, as shown in Figs 7A–C, 0.60 long, 0.53 wide, brown to reddish-brown, with radial stripes, high in lateral view, with a sharp slope at its back. Clypeus high, vertical. Sulci very small, poorly visible. Eyes relatively small. Chelicerae 0.23 long, a mastidion absent. Legs pale brown. Leg I 1.55 long (0.45 + 0.36 + 0.17 + 0.30 + 0.27), IV 1.47 long (0.42 + 0.15 + 0.36 7 + 0.30 + 0.24). Chaetotaxy 1.1.1.1, spines about as long as diameter of corresponding leg segment. Metatarsi I–III with a trichobothrium each. TmI 0.45. Palp very small (Figs 8A–E): Tibia C-shaped in dorsal view, with a long, serrate, tapering distally prolateral process, retrolateral outgrowth abruptly ending. Paracymbium small, narrow, L-shaped. Distal suprategular apophysis short, sharpened distally. Median membrane short and wide. Embolic division Z-shaped, proximal part of radix broadened; distal part with a black outgrowth at base of embolus. Embolus relatively wide, narrowing distally. Opisthosoma 0.70 long, 0.55 wide, grey (Figs 7A, B).

Female (Paratype from Eth019). Total length 1.35. Carapace 0.58 long, 0.50 wide, brown to reddish-brown, with radial stripes, high in lateral view, with a sharp slope at back. Clypeus high, vertical. Chelicerae 0.28 long.

Legs pale brown. Leg I 1.43 long (0.42 + 0.15 + 0.33 + 0.27 + 0.26), IV 1.52 long (0.44 + 0.15 + 0.38 + 0.29 + 0.26). Chaetotaxy 1.1.1.1, spines about as long as diameter of corresponding leg segment. Metatarsi I–III with a trichobothrium each. TmI 0.44. Opisthosoma 0.90 long, 0.68 wide, grey to dark grey (Fig. 7D). Epigynum (Figs 7E, F, G, 8F, G) well-sclerotized, slightly protruded, ventral plate tapering wedge-shaped posteriorly. Dorsal plate posteriorly with two protrusions extended from under the ventral plate. Receptacles subspherical.

Distribution. Known only from the highlands of Arsi Mountains N.P. (3500–3866 m a.s.l.), Oromia Region, Ethiopia.



FIGURE 7. Photographs of male (A–C) and female (D–G) of *Microcyba oromia* **n. sp.**, paratypes from Eth019. A, D, habitus, dorsal view; **B**, same, lateral view; **C**, prosoma, frontal view; **E**, **F**, opisthosoma, ventral view, different specimens; G, epigynum, ventral view. Scale bars: A–F, 0.5mm; G, 0.1mm.



FIGURE 8. Details of male palpal structure (A–E) and female epigynum (F, G) of *Microcyba oromia* **n. sp.**, paratypes from Eth010. **A**, **B**, right palp, retrolateral and prolateral view, respectively; **C**, distal part of palp, retrolateral view; **D**, tibia, and paracymbium, prolateral view; **E**, tibia, dorsal view; **F**, **G**, epigynum, ventral and dorsal view, respectively. Scale bar: 0.1mm.

Ostearius Hull, 1911

Type species: *Tmeticus nigricauda* O. Pickard-Cambridge, 1908; synonym of *Ostearius melanopygius* (O. Pickard-Cambridge, 1880).

Ostearius melanopygius (O. Pickard-Cambridge, 1880)

Material. 1 (ZMMU): ETHIOPIA, Addis-Ababa, Russian Embassy Area, 9.03519°N 38.78506°E, 2453 m a.s.l., grove with *Acacia*, palm trees, *Eucalyptus*, *Juniperus*, bushes, sifting litter, 13.X.2022, A. Tanasevitch leg. [Eth007].

Remarks. This cosmopolitan species seems to have been introduced to the embassy's park, Addis-Ababa. *Ostearius melanopygius* is being recorded here from Ethiopia for the first time.

Pelecopsis Simon, 1864

Type species: Micryphantes inaequalis C. L. Koch, 1841; synonym of Pelecopsis elongata (Wider, 1834).

Pelecopsis arsi new species

Figs 9, 10

Type material. Holotype: \Diamond (ZMMU): ETHIOPIA, Oromia Region, Asela Zone, ca 35air-km SE from Asela (= Assela), Arsi Mountains N.P., road from Digelu to Ticho, top of mountains, 3755–3770 m a.s.l., 7.82377°N 39.41713°E, *Erica arborea* bushes, *Alchemilla* sp., green mosses mostly *Rhytidiadelphus triquetrus*, sifting mosses from beds of *Erica*, 21 & 31.X.2022, A. Tanasevitch leg. [Eth019]. **Paratypes:** $1\Diamond$, $1\heartsuit$ (ZMMU): same locality, together with holotype.

Etymology. The specific epithet is a noun in apposition referring to the Arsi Mountains N.P., the area of origin of the new species.

Diagnosis. The new species can easily be assigned to *Pelecopsis* Simon, 1864, based on the same chaetotaxy (1.1.1.1), a similarly modified carapace, the presence of an abdominal scutum in the male, as well as by a similar conformation of the male palp, i.e., a modified palpal tibia, a fusiform embolic division with a long tailpiece and a coiled embolus. The shape of the median epigynal plate in the female is similar to that of most of the Afrotropical congeners.

The structure of the male palp is uniform in all members of the genus, differences between specific lying in minor details of the palpal tibia, cymbium, tailpiece, and embolus. The structure of the palp, especially that of the embolic division of *P. arsi* n. sp., resembles that of many congeners, but the new species is clearly distinguished amongst the known members of the genus, by the presence of a cuticula-free space, i.e. a rectangular glandular area on the face of the male carapace (see Figs 9D, E). Such a prosomal structure I know of is only observed in the North African *P. pavesii* Bosmans & Hervé, 2021, from Tunis, but its glandular area is divided into two narrow and poorly visible parts. Besides this, the male of *P. arsi* n. sp. differs by the shape of the palpal tibia when viewed from above, the highest (among Afrotropical congeners) dorsal tubercle on the proximal part of the cymbium, as well as by the large and complex median membrane which protrudes far beyond the palp. As the epigynum of the female resembles that in many Afrotropical congeners, e.g., *P. hamata* Bosmans, 1988, *P. humiliceps* Holm, 1979, *P. infusca* Holm, 1962, *P. pasteuri* (Berland, 1936), etc., a reliable determination of this species seems to be possible only in the presence of a conspecific male.

Description. Male (Paratype from Eth019). Total length 1.88. Carapace modified, as shown in Figs 9A–E, 0.88 long, 0.65 wide, brown to reddish-brown, with dark radial stripes. Head part of carapace with a pale and rounded elevation bearing posterior median eyes. A pale, cuticula-free, rectangular field placed above anterior median eyes and probably representing a glandular area. Sulci small, rounded. Eyes normal, not enlarged. Chelicerae 0.33 long, a mastidion absent. Legs brown to pale brown. Leg I 1.98 long (0.55 + 0.25 + 0.45 + 0.40 + 0.33), IV 2.32 long (0.65 + 0.23 + 0.58 + 0.53 + 0.33). Chaetotaxy 1.1.1, spines very short, poorly visible. Metatarsi I–IV with a trichobothrium each. TmI 0.68. Palp (Figs 10A–E): Patella long, gradually expanding towards its distal edge. Tibia extended distally into a long, narrow and conical process, claw-shaped apically; prolateral edge of patella with very small denticles. Paracymbium small, narrow, curved forming a loop. Distal suprategular apophysis relatively short and narrow. Median membrane very large, complex, protrudes far ahead. Embolic division fusiform, tailpiece narrow, pointed proximally. Embolus long, slightly expanded at middle, with a small membraneous widening apically. Opisthosoma 1.13 long, 0.58 wide, dark grey, 3/4 covered with a scutum, as in Figs 9A–C.

Female (Paratype from Eth019). Total length 2.10. Carapace unmodified, dark brown, almost black, 1.23 long, 0.58 wide. Chelicerae 0.30 long. Legs brown. Leg I 2.09 long (0.60 + 0.25 + 0.48 + 0.43 + 0.33), IV 2.54 long (0.73 + 0.25 + 0.63 + 0.58 + 0.35). Chaetotaxy 1.1.1.1, spines about as long as 0.5–1 diameter of corresponding leg segment. Metatarsi I–IV with a trichobothrium each. TmI 0.71. Opistosoma 1.40 long, 1.13 wide, dark grey, scutum

absent, muscle spots distinct, small, as in Figs 9F. Epigynum (Figs 9G, H, 10F, G): Anterior wall with a projection dividing the epigynal socket almost into two parts, receptacles subspherical, widely spaced.

Distribution. Known only from the type locality in the highlands of Arsi Mountains N.P. (3755–3770 m a.s.l.), Oromia Region, Ethiopia.



FIGURE 9. Photographs of male (**A**–**E**) and female (**F**–**H**) of *Pelecopsis arsi* **n. sp.**, **A**, holotype; **B**–**H**, paratypes from Eth019. **A**, **B**, **F**, habitus, dorsal view; **C**, same, lateral view; **D**, same, frontal view; **E**, same, fronto-lateral view; **G**, opisthosoma, ventral view; **H**, epigynum, ventral view. Scale bars: **A**–**G**, 0.5mm; **H**, 0.1mm.



FIGURE 10. Details of male palpal structure (**A**–**E**) and female epigynum (**F**, **G**) of *Pelecopsis arsi* **n. sp.**, paratypes from Eth019. **A**, **B**, right palp, retrolateral and prolateral view, respectively; **C**, tibia, dorsal view; **D**, **E**, distal suprategular apophysis and embolic division, prolateral and retrolateral view, respectively; **F**, **G**, epigynum and cleared epigynum, ventral view. Scale bars: **A**–**G**, 0.1mm.

Savignia Blackwall, 1833

Type species: Savignia frontata Blackwall, 1833.

Savignia ericola new species

Figs 11, 12

Type material. Holotype: ♂ (ZMMU): ETHIOPIA, Oromia Region, Asela Zone, ca 30 air-km SE from Asela (= Assela), Arsi Mountains N.P., road from Digelu to Ticho, 3500–3505 m a.s.l., 7.81944°N 39.35429°E, *Erica arborea* bushes, with grass and green mosses, sifting mosses, 30.X.2022, leg. A. Tanasevitch [Eth018].

Etymology. The specific epithet is a Latin adjective meaning a heather-dweller (Erica arborea).

Diagnosis. Based on the formula of chaetotaxy (2.2.1.1) and trichobothriotaxy (Tm I–III present, TmIV absent), the modified carapace, as well as the hypertrophied distal suprategular apophysis, the new species is evidently a member of the *Savignia*-genus group *sensu* Millidge (1977). Among the genera of this group, the new species

seems most appropriate to be provisionally assigned to *Savignia* Simon, 1884, as certain resemble is observed in the structure of the embolic division, namely, the peculiar shape of the embolus, as well as by the presence of a narrow process at its base (MRP in Fig. 12E). The shape of the embolus is similar to that in many Asian congeners, e.g. *S. amurensis* Eskov, 1991, *S. eskovi* Marusik, Koponen & Danilov, 2001, *S. saitoi* Eskov, 1988, *S. zero* Eskov, 1988, etc., all of which also show a median radical process in the embolic division. However, the new species stands apart among other congeners in lacking of a mesal outgrowth on the distal suprategular apophysis (MOSA in Tanasevitch & Trilikauskas 2006, figs 2, 4), a significant generic synapomorphy. Besides this, *Savignia ericola* n. sp. possesses a characteristic "*Bisetifer*-like" palpal tibia which bears three long, strong, lateral setae absent from other congeners of *Savignia*-genus group. This new species is only conditionally to be placed in *Savignia*, so at least until a female is found. If the structure of the epigynum turns out to be similar to that of *Savignia* (namely, with a bisected ventral plate), then the placement of the new species into the genus will become justified. At the same time, it is possible that the new species represents a new genus of the *Savignia*-genus group.



FIGURE 11. Photographs of male holotype (A–D) of *Savignia ericola* n. sp. A, habitus, dorsal view; B, C, same, lateral and anterolateral view, respectively; D, same, frontal view. Scale bar: 0.5mm.

Description. Male holotype. Total length 1.83. Carapace slightly modified as shown in Figs 11A–C, 1.03 long, 0.63 wide, pale greyish brown to greyish yellow. Anterior part of carapace somewhat protruded anteriorly, eyes relatively small. Chelicerae 0.22 long, a mastidion absent. Legs yellow. Leg I 2.06 long (0.63 + 0.22 + 0.48 + 0.40 + 0.33), IV 2.19 long (0.63 + 0.20 + 0.58 + 0.48 + 0.30). Chaetotaxy 2.2.1.1, spines about as long as 0.5–1 diameter of corresponding leg segment. Metatarsi I–III with a trichobothrium each. TmI 0.41. Palp (Figs 12A–G): Patella slightly elongated. Tibia with a dorsal, conical, apically rounded outgrowth and a small projection bearing

three long, stout and slightly curved setae. Paracymbium J-shaped. Distal suprategular apophysis very large, massive, ending with a strong, straight spike. Radix rounded proximally, with a membranous tissue near middle, a flat, subtrapeziform, anterior apophysis (ARA in Fig. 12E), and an relatively long, narrow, apically unciform process (Figs 12E, F) situated at base of embolus. Embolus starting from middle of radix as a narrow stripe, sharply curved in middle part to gradually taper thereafter into a thin and curved tip. Opisthosoma 0.90 long, 0.58 wide, pale grey (Figs 11A–C).

Female unknown.

Distribution. Known only from the type locality in the highlands of Arsi Mountains N.P. (3500–3505 m a.s.l.), Oromia Region, Ethiopia.



FIGURE 12. Details of male palpal structure (A-G) of holotype of *Savignia ericola* **n. sp. A**, left palp, retrolateral view; **B**, tibia, dorsal view; **C**, tegulum, distal suprategular apophysis and embolic division, prolateral view; **D**, distal suprategular apophysis, lateral view; **E**, embolic division, mesal view; **F**, apex of median radical process; **G**, apex of embolus. Scale bars: **A**–**E**, 0.1mm; **G**, **F**, not to scale.

Walckenaeria Blackwall, 1833

Type species: Walckenaeria acuminata Blackwall, 1833.

Walckenaeria (Tigellinus) trivialis new species

Figs 13, 14

Type material. Holotype: ♂ (ZMMU): Oromia Region, Asela Zone, ca 7–8 air-km EES from Asela (= Assela), Chilalo Mt., canyon, steep northern slope, 3070–3075 m a.s.l., 7.935124°N 39.19392°E, *Hypericum revolutum* bushes with sporadic *Schefflera abyssinica*, grass, green mosses, sifting litter and mosses, 29.X.2022, leg. A. Tanas-

evitch [Eth016]. **Paratypes:** 1 (ZMMU): same date and locality, together with holotype; 2 (ZMMU): Chilalo Mt., canyon branch, SE slope, 3125–3130 m a.s.l., 7.93414°N 39.19479°E, *Hypericum revolutum* bushes with sporadic *Schefflera abyssinica* and *Hagenia abyssinica*, grass, green mosses, sifting litter and mosses, 29.X.2022, A. Tanasevitch leg. [Eth017]; 1 (ZMMU): Arsi Mountains N.P., road from Digelu to Ticho, 3500–3505 m a.s.l., 7.81944°N 39.35429°E, *Erica arborea* bushes, grass, green mosses, sifting mosses, 30.X.2022, A. Tanasevitch leg. [Eth018].



FIGURE 13. Photographs of male paratype from Eth016 (**A**–**E**) and female paratype from Eth017 (**F**–**I**) of *Walckenaeria* (*Tigellinus*) *trivialis* **n. sp. A**, **F**, habitus, dorsal view; **B**, prosoma, dorsal view; **C**, same, frontal view; **D**, **E**, same, lateral view, different specimens; **G**, habitus, ventral view; **H**, **I**, epigynum, ventral and dorsal view, respectively. Scale bars: **A**–**G**, 0.5mm; **H**, **I**, 0.1mm.



FIGURE 14. Details of male palpal structure (**A**–**E**) and female epigynum (**F**) of *Walckenaeria* (*Tigellinus*) *trivialis* **n. sp.**, male paratype from Eth018, female paratype from Eth017. **A**, **B**, right palp, retrolateral and prolateral view, respectively; **C**, **D**, tibia, dorsal view; **E**, same, dorsolateral view; **F**, cleared epigynum, dorsal view. Scale bars: 0.1mm.

Etymology. The specific epithet is a Latin adjective referring to the shape of the male carapace typical for the subgenus *Tigellinus* Simon, 1884 of *Walckenaeria* Blackwall, 1833.

Diagnosis. Based on the shape of the carapace (see Figs 13A–E), the new species belongs to the subgenus *Tigellinus*. Presently, at least 12 of the 18 *Walckenaeria* species currently known from the Afrotropical Region belong to *Tigellinus*. All of these species are extremely similar to each other, mainly differing by the presence or shapes of the dorsal palpal tibial outgrowth(s) and, partly, by the shape of a "turret" on the carapace.

The new species seems to be most similar to the Tanzanian *Walckenaeria (Tigellinus) uzungwensis* Scharff, 1990, but is distinguishable by a wider distal part of the "turret" of the carapace, by the presence of an additional outgrowth on the palpal tibia (AO in Figs 14C–E), as well as by the somewhat longer embolus. The female differs well by the non-enlarged eyes and the considerably less spaced receptacles.

Description. Male (Paratype from Eth016). Total length 2.00. Carapace modified, as shown in Figs 13A–E, 0.93 long, 0.72 wide, pale brown to brown, carapace with a "turret". Eyes slightly enlarged. Chelicerae 0.30 long, a mastidion absent. Legs brown. Leg I 2.57 long (0.68 + 0.25 + 0.63 + 0.58 + 0.43), IV 2.84 long (0.75 + 025 + 0.73 + 0.68 + 0.43). Chaetotaxy 2.2.1.1, spines about as long as 1–1.5 diameter of corresponding leg segment. Metatarsi I–IV with a trichobothrium each. TmI 0.50. Palp (Figs 14A–E): Tibia with a sickle-shaped prolateral process, and a small denticle at its base; dorso-retrolaterally with a small projection of different shape depending on an angle of view (AO in Figs 14C–E). Paracimbium L-shaped. Distal suprategular apophysis relatively short, narrowing distally. Median membrane short, poorly visible. Radix fusiform, with a long tailpiece. Embolus long, forming a loop, with a small, narrow, transparent "ligula"-shaped outgrowth at its base (L in Figs 14A, B). Opisthosoma 1.13 long, 0.70 wide, grey, as in Fig. 13A.

Female (Paratype from Eth017). Total length 2.45. Carapace unmodified (Fig. 13F), pale brown, 1.00 long, 0.78 wide. Chelicerae 0.38 long. Legs pale brown. Leg I 2.60 long (0.80 + 0.30 + 0.55 + 0.55 + 0.40), IV 3.07 long

(0.83 + 0.28 + 0.80 + 0.73 + 0.43). Chaetotaxy 2.2.1.1, spines about as long as 1–1.5 diameter of corresponding leg segment. Metatarsi I–IV with a trichobothrium each. TmI 0.55. Opistosoma 1.60 long, 1.08 wide, grey, as in Figs 13F, G. Epigynum (Figs 13 G–I, 14F): Epigynal plate oval, receptacles and seminal ducts well-sclerotized.

Distribution. Known from the mountains of Oromia Region, Ethiopia, 3070-3505 m a.s.l.

Discussion

Taking into account the above new records, the erigonine spider fauna of Ethiopia currently includes eight species belonging into six genera, two of which, *Callitrichia* and *Microcyba*, are virtually Afrotropical. The genus *Pelecopsis* is quite diverse in the Afrotropics: 32 species (one third of the world fauna of the genus) occur in and are restricted to the Region (World Spider Catalog 2023). The genus *Walckenaeria* includes 185 species in the world fauna, 18 of which are represented in and restricted to the Afrotropical realm. It seems noteworthy that at least 12 of the currently known 18 Afrotropical *Walckenaeria* belong to the subgenus *Tigellinus* which is characterized by the presence of a peculiar "turret" on the carapace. The species described above in *Savignia* is awaiting further study: the finding of a conspecific female should clarify its taxonomic position. *Ostearius melanopygius* is a clearly introduced element in the Ethiopian fauna. Thus, basically the Ethiopian erigonine fauna is a typically Afrotropical and highly characteristic.

Some eight erigonine species currently found in Ethiopia are obviously only a small part of the fauna of this mountainous country. In contrast, the fauna of the neighboring Kenya, with approximately similar landscapes and climate, contains 73 species of erigonines. All species collected in Ethiopia, including an introduced cosmopolitan *Ostearius melanopygius*, have been found to occur in highlands, at altitudes ranging from 2400 up to 3900 m a.s.l. in mountain forests and/or *Erica* heathlands.

A significant increase in fauna due to arid areas with sparsely wooded mountains and savannah plains can hardly be expected. It is quite obvious that the bulk of linyphild spiders, a hygrophilous group, should be confined to highlands, where there do exist more or less suitable conditions. Unfortunately, there are increasingly few mountain forests and *Erica arborea* heathlands remaining in Ethiopia every year: forests are mercilessly cut down, being replaced by grass vegetation which cattle use for grazing. Further degradation of the forest cover in the country is likely to lead to the disappearance of both described and still unknown species.

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