



TAXONOMY AND SYSTEMATICS

# Two new Colombian harvestmen of the genus *Vima* (Arachnida: Opiliones: Agoristenidae)

Dos nuevos opiliones colombianos del género *Vima* (Arachnida: Opiliones: Agoristenidae)

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## ABSTRACT

Two new Colombian species of the genus *Vima* Hirst, 1912 are described: *Vima dilectus* sp. nov. from the Meta department, and *Vima bellator* sp. nov. from the Santander department. Both species are consistent with the current diagnosis of *Vima*. Consequently, the genus distribution is expanded northwards. An updated distribution map and an identification key to the *Vima* species are provided.

**Keywords:** Diversity, Laniatores, Leiosteninae, taxonomy.

## RESUMEN

Se describen dos nuevas especies colombianas del género *Vima* Hirst, 1912: *Vima dilectus* sp. nov. del departamento del Meta y *Vima bellator* sp. nov. del departamento de Santander. Ambas especies se ajustan perfectamente a la diagnosis actual de *Vima*, por lo que la distribución del género es expandida hacia el norte. Se proporciona un mapa de distribución y una clave de identificación de las especies de *Vima*.

**Palabras clave.** Diversidad, Laniatores, Leiosteninae, taxonomía.

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## INTRODUCTION

In the early lineages of Gonyleptoidea there exist an undesignated grade (paraphylum), characterized by the absence of a well-defined flat ventral plate and expanded subdistal portion of the penis (Kury 2014, Kury and Villarreal 2015, Villarreal *et al.* 2022). This group has been referred to as “hammer-bearing Gonyleptoidea” by Villarreal and García (2021). At least four harvestmen families are included in the malleus-bearing Gonyleptoidea group: Agoristenidae, Cryptogeobiidae, Gerdesiidae, and Stygnidae. Among these, only Agoristenidae and Stygnidae encompass species found in Colombia.

Agoristenidae Šilhavý, 1973, comprises 26 genera and 79 species of harvestmen primarily distributed within the Neotropical region (García and Villarreal 2023; García *et al.* 2022). The most speciose subfamily, Leiosteninae (12 gen. and 61 spp.), occurs in northern South America, exhibiting notable diversity within the Amazon region and the Andes of Venezuela and Colombia (García *et al.* 2022).

Similar to other families of Neotropical harvestmen, generic diagnoses within Agoristenidae have traditionally been established using the Roewerian taxonomic system. This approach has resulted in the inclusion of unrelated species within inadequately defined genera based on minor characteristics (Villarreal *et al.* 2015, Villarreal *et al.* 2023). Efforts have been initiated to address this issue, including the development of a Leiosteninae phylogeny (Kury 1997, Villarreal and García 2021, García and Villarreal 2023). Nevertheless, determining the precise generic placement of numerous species remains a challenge.

In Colombia, the Leiosteninae subfamily is represented by eight genera and 15 species. *Vima* Hirst, 1912, was described to accommodate *V. insignis* Hirst, 1912 from Guyana (Hirst, 1912). Subsequently, *Vima* was expanded and re-diagnosed to incorporate a second species from Colombia, *V. panita* García and Kury, 2020, from the department of Caquetá (García and Kury 2020).

Recent examination of specimens from two Colombian natural history collections, we identified two undescribed species of *Vima* from the Meta and Santander departments. In this paper, we describe and illustrate two new species from the Colombian departments of Meta and Santander. Additionally, we provide a species distribution

map and offer a taxonomic key for the identification of all *Vima* species.

## MATERIALS AND METHODS

The photographs were taken with a Leica M205C stereoscope attached to a Leica DFC450 digital camera and posteriorly edited in Photoshop CC 2014 software afterwards. Coloration descriptions use the standardized names (transcribed verbatim) and their numbers of the 267 Color Centroids of the NBS/IBCC Color System (Jaffer c2001). Drawings of external morphology and penis were made with the aid of a *camera lucida* and vectorized in Inkscape (Harrington *et al.*, c2004). The collection data were transcribed verbatim from the labels, and additional interpolated information (e.g., specific locality, geographic coordinates) were estimated with Google Maps and are placed between square brackets.

Terminology for the dorsal scutum shape and the descriptions follows Villarreal and García (2021), and for the male genitalia macrosetae follows Kury and Villarreal (2015). Abbreviations: CL (carapace length), CW (maximum carapace width), DP (dorsal process), DS (dorsal scutum), DSL (dorsal scutum length), DSW (maximum dorsal scutum width), Fe (femur), LP (lamina parva), MS (macrosetae of penis), Mt (metatarsus), Pa (patella), Ta (tarsus), Ti (tibia). All measurements are in millimeters.

The examined material is deposited at ICN (Instituto de Ciencias Naturales, Universidad Nacional de Colombia, Bogotá, Colombia), and MPUJ (Museo Javeriano de Historia Natural “Lorenzo Uribe S.J.”, Pontificia Universidad Javeriana, Bogotá, Colombia).

This article has been recorded in the Official Registry of Zoological Nomenclature (Zoobank) as urn:lsid:zoobank.org:pub:BA7E4318-46F0-4AE2-BC40-8621BA4D4964.

## RESULTS

### *Vima* Hirst, 1912

**Included species.** *Vima bellator* sp. nov.; *Vima dilectus* sp. nov.; *Vima insignis* Hirst, 1912 (type-species); *Vima panita* García and Kury, 2020.

**Diagnosis.** See García and Kury (2020).

**Distribution.** Colombia: departments of Caquetá, Meta, and Santander. Guyana: Potaro-Siparuni region (Fig. 5).

***Vima dilectus*** sp. nov. García and Villarreal

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Figs 1, 2, 5.

**HOLOTYPE.** COLOMBIA. **Meta:** male, Acacias, vereda La Esmeralda, centro agroturístico Araguaneý Corveica, colecta manual en bosque en tronco en descomposición, [3°57'06.1"N 73°42'00.7"W], alt. 514 m, 20 abr 2004, *E. Flórez y Estudiantes Sistemática Animal (I-04)*, ICN-Ao-411.1 (ICN).

**PARATYPE.** COLOMBIA. **Meta:** one male, Acacias, same data as holotype, ICN-Ao-411 (ICN).

**Diagnosis.** Pedipalpal femur (distally), tibia and patella whitish (shared with *V. panita*; all segments concolor in *V. bellator* sp. nov. and *V. insignis*). Large dorso-distal tubercle dorsally projected on coxa IV (small in the other species). High ocularium (shared with *V. panita* and *V. insignis*; low in *V. bellator*). Connective tissue between DP and stylus with irregular peaks in all its extension (shared with *V. bellator*; just one medial peak in *V. panita*; tissue absent in *V. insignis*).

## DESCRIPTION

Measurements. See table 1.

**Dorsum.** DS outline epsilon, type 2. Ocularium elliptical and medium, without median depression, tuberculated, located medially on the carapace. Mesotergum (abdominal scutum) delimited, divided into four areas, each one with a pair of paramedial large granules (Figs 1b, d, e, 2a-b). DS widest at level of area II. Area I divided into two halves with some granules; areas II–IV undivided and with some granules (Figs 1b, 2a-b). Posterior border of scutum curved (Figs 1a-b). Free tergites I–III with a row of granules (Figs 1b, d, 2a-b).

**Venter.** Stigmatic area with a few granules and a posterior row of conspicuous granules. Stigmata oval and concave (Fig. 1c). Coxa I with a curved row of tubercles increasing in size distally, and one proximal, large, and trapezoidal

tubercle on the anterior margin of the coxa I, with a medium-sized tubercle at its base, and one small tubercle at the proximal face (Fig. 2c); coxa II longer than coxa I; coxa III longer than I and II; coxa IV backward (Fig. 1c).

**Chelicera.** Basichelicerite (segment I) trapezoid with well-marked bulla (Figs 1b, d); three large tubercles on ectal face, two large tubercles on posterior margin, and two medium-sized tubercles on the dorsomedial face (Figs 1b, d, 2a). Chelicera swollen (Figs 1, 2a, d). Anterior region of the hand with setiferous tubercles of different sizes that go from the medial region of the hand to the base of movable and fixed fingers. Fixed finger with the inner surface finely grooved. Movable finger with one trapezoid sub-basal tooth and the inner surface of the distal portion dentated (Fig. 2d).

**Pedipalps.** Trochanter with one ventral subapical tubercle. Femur with a ventroectal row of four setiferous tubercles, the two basalmost larger than the two distalmost, and one medium ventromesal setiferous tubercle in the apical portion (Figs 1c, 2e). Patella with one large mesal setiferous tubercle. Tibia ectal iIli, mesal Ili. Tarsus ectal Ili, mesal Ili (Fig. 2e).

**Legs.** Leg I filiform, legs I–IV straight and smooth. Leg IV thicker than the others; coxa IV with a large dorso-distal tubercle dorsally projected (Figs 1a, d-e, 2b); Fe IV length almost three and a half times DS length (Fig. 1a). Tarsus IV without tarsal process, claws smooth. Tarsal counts: 7(3)-8(3)/15(3)-?/7-7/8-? (holotype), 7(3)-7(3)/15(3)-?/7-7/6-6 (paratype).

**Penis.** LP small (width twice the height) and apically depressed with anterolateral blunt and not dorsoapically pointed swollen tips (Figs 2f, g). Malleus with two pairs of branched MS-A located in the dorsal half, MS-A2 located far from the base of the stylus; one pair of branched MS-B on the ventral side; MS-C absent; two pairs of medium-sized MS-D1–D2 located close to each other and near the stylus on a keel between the dorsal region of the LP and the base of the stylus; MS-E2 large and branched, MS-E1 medium-sized, conical, and located slightly distal to MS-E2 on the ventral side of the LP (Figs 2f, g). Stylus elongated, mostly straight, and surpassing the LP; connective tissue present between the sharp DP and the stylus, slightly corrugated, with irregular peaks on the apical medial region (Figs 2f, g).

**Color** (in alcohol). Background of DS, chelicerae, and mesotergal paired granules Moderate Yellow (87). Lateral borders of DS, free tergites, and mesotergal areas around the

paired granules Dark Grayish Brown (62). Pedipalpal segments of different colors: trochanter, the first half of the femur, dorsal spot of the tibia, tarsus, and claw Dark Grayish Brown (62); distal half of femur, patella, and tibia Pale Yellow (89). Legs I–IV Dark Grayish Brown (62) (Fig. 1).

Female. Unknown.

**Distribution and habitat.** The species is only known from the forests of the lowlands of Meta department (Acacias municipality) (Fig. 5), in the limits between the Cordillera Oriental montane forests and the ecoregion of the Apure-Villavicencio dry forests (Olson *et al.* 2001).

**Etymology.** The species is named after the late entomologist German Amat García, for his great teaching contribution to Colombian entomology. Amat is the Catalan version of the Latin surname Amatus, meaning the loved one. *Dilectus*, in Latin, has the same meaning.

***Vima bellator* sp. nov.**

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Figs 3–5.

**HOLOTYPE.** COLOMBIA. **Santander:** male, Puerto Parra, [Corregimiento] Campo Capote, en [planta de] borojó, [6°37'09.3"N 73°55'05.9"W], Mar. 2008, *Sistemática Animal*, ICN-Ao-575 (ICN).

**PARATYPES.** COLOMBIA. **Santander:** one female, [Cimitarra], [Corregimiento] Puerto Araujo, hacienda Los Manantiales, [6°30'58.8"N 74°06'03.4"W], alt. 130 m, 9 abr 2000, A. Thielp *et al.*, MPUJ\_ENT0064490 (MPUJ); one female and one male, Vélez [Cimitarra], [Corregimiento] Puerto Araujo, pitfall, alt. 300 m, 2 apr. 2000, *no collector*, MPUJ\_ENT0064488 (MPUJ).

## DESCRIPTION

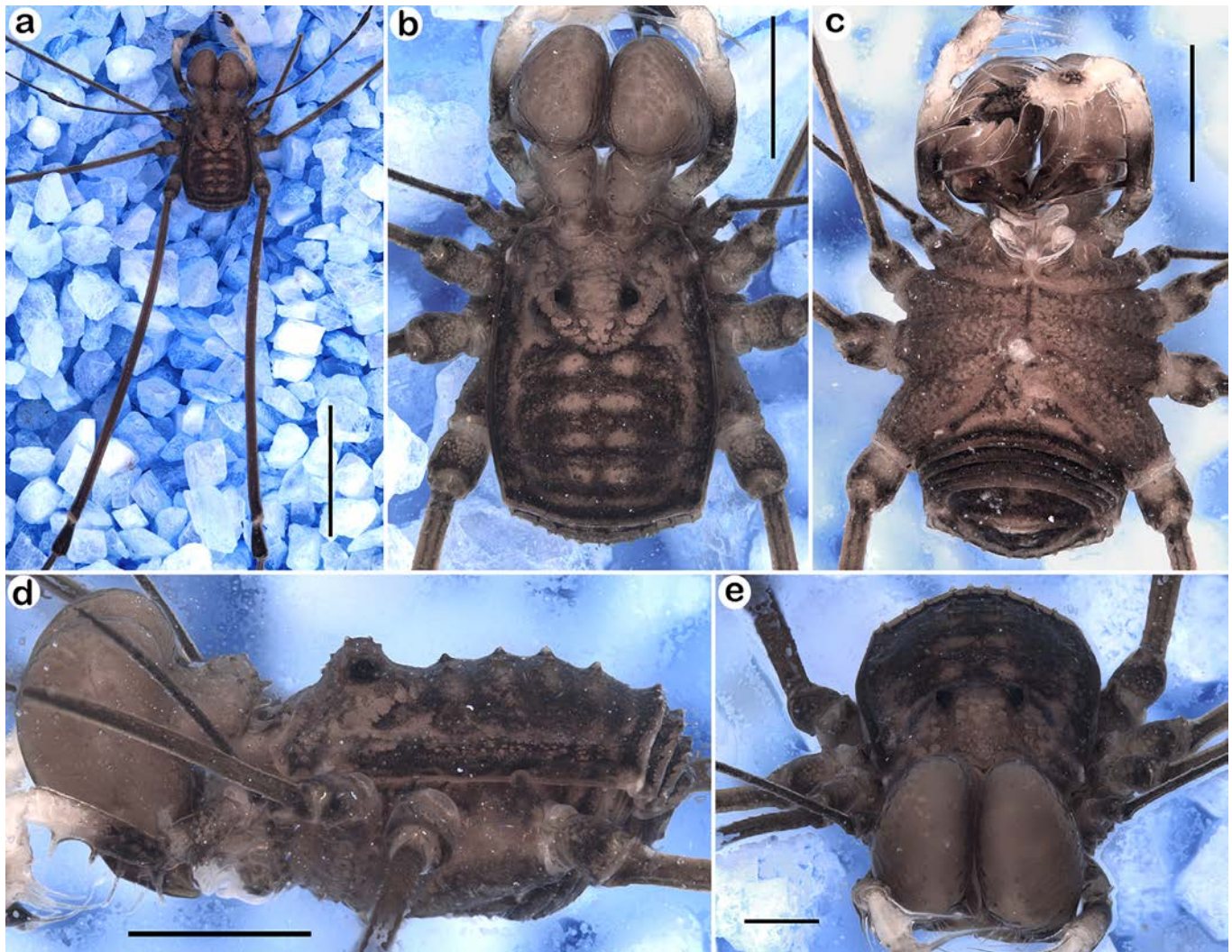
Measurements. See table 1.

**Diagnosis.** Segments of pedipalp concolor (as in *V. insignis*; in *V. panita* and *V. dilectus* the distal femur, patella, and tibia are withish). Anteroproximal tubercle of coxa I with three marked peaks (smooth in the rest of the species). Low ocularium (high in the rest of the species).

**Table 1.** Measurements (in mm) of body and appendages of *Vima dilectus* sp. nov. and *Vima bellator* sp. nov. Abbreviations: DSL (abdominal scutum length), DSW (maximum dorsal scutum width), ChL (chelicera length), CL (carapace length), CW (maximum carapace width), DSL (dorsal scutum length), Fe (femur), IOD (interocular distance), Mt (metatarsus), Pa (patella), Ta (tarsus), Ti (tibia), Tr (trochanter).

<i>Vima dilectus</i> sp. nov. Male holotype ICN-Ao-411.1								
	Body	Pedipalp	Leg	I	II	III	IV	
CL	0.87	Tr	0.44	Tr	0.33	0.44	0.5	0.54
AL	1.37	Fe	0.74	Fe	3.52	7.99	5.68	8.07
DSL	2.24	Pa	0.43	Pa	0.61	0.89	0.87	0.85
CW	1.46	Ti	0.58	Ti	2.67	6.51	3.37	4.36
DSW	1.69	Ta	0.45	Mt	4.82	10.06	6.71	9.06
IOD	0.51	Claw	0.42	Ta	1.27	2.75	1.71	1.8
ChL	1.42	Total	3.06	Total	13.22	28.64	18.84	24.68
<i>Vima dilectus</i> sp. nov. Male paratype ICN-Ao-411								
	Body	Pedipalp	Leg	I	II	III	IV	
CL	0.83	Tr	0.33	Tr	0.26	0.38	0.51	0.50
AL	1.25	Fe	0.78	Fe	3.54	8.12	5.73	8.26
DSL	2.08	Pa	0.34	Pa	0.49	0.74	0.86	0.88
CW	1.32	Ti	0.50	Ti	2.46	6.03	3.41	4.48
DSW	1.55	Ta	0.41	Mt	4.30	9.29	6.22	9.24
IOD	0.41	Claw	0.46	Ta	1.23	2.10	1.65	1.72
ChL	1.09	Total	2.82	Total	12.28	26.66	18.38	25.08
<i>Vima bellator</i> sp. nov. Male holotype ICN-Ao-575								
	Body	Pedipalp	Leg	I	II	III	IV	
CL	0.93	Tr	0.40	Tr	0.21	0.35	0.43	0.43
AL	1.28	Fe	0.83	Fe	3.84	8.22	5.88	7.96
DSL	2.21	Pa	0.40	Pa	0.47	0.57	0.93	0.86
CW	1.49	Ti	0.52	Ti	2.91	6.58	3.13	4.58
DSW	1.68	Ta	0.34	Mt	5.08	10.22	6.45	10.13
IOD	0.45	Claw	0.52	Ta	1.01	3.06	1.58	1.74
ChL	1.04	Total	3.01	Total	13.52	29.00	18.4	25.7
<i>Vima bellator</i> sp. nov. Female paratype MPUJ_ENT0064488								
	Body	Pedipalp	Leg	I	II	III	IV	
CL	0.63	Tr	0.19	Tr	0.32	0.33	0.36	0.34
AL	1.05	Fe	0.48	Fe	3.49	6.71	5.02	7.48
DSL	1.68	Pa	0.48	Pa	0.46	0.63	0.67	0.75
CW	1.27	Ti	0.42	Ti	2.11	5.02	2.52	3.53
DSW	1.39	Ta	0.54	Mt	3.94	4.83	5.51	8.26
IOD	0.35	Claw	0.30	Ta	1.11	?	1.32	1.33
ChL	0.63	Total	2.41	Total	11.43	17.52	15.40	21.69





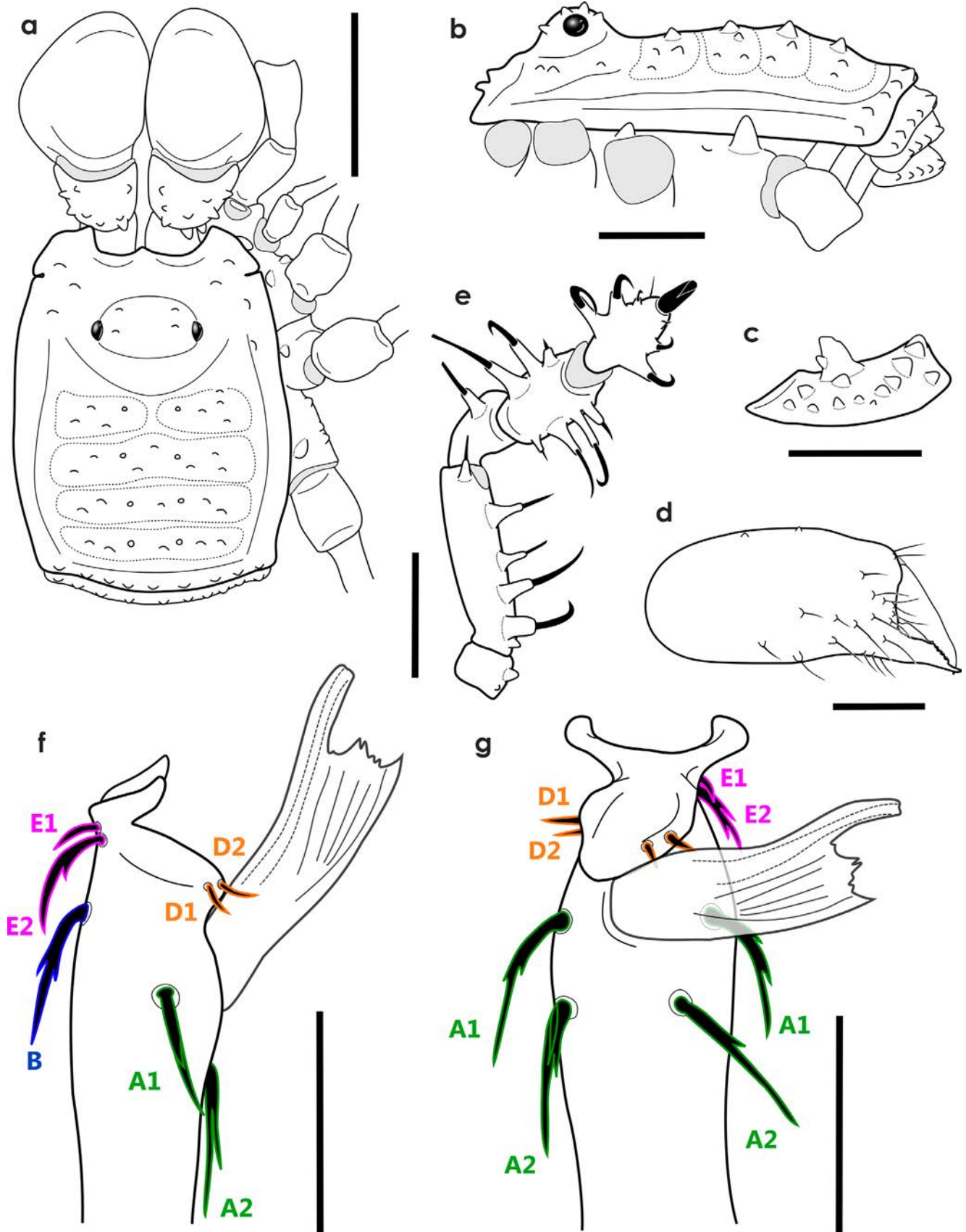
**Figure 1.** Photographs of the habitus of *Vima dilectus* sp. nov. (ICN-Ao-411.1), male holotype: a. panoramic, b. dorsal, c. ventral, d. lateral, e. frontal. Scale bars: a = 3 mm, b, c, e = 1 mm, d = 0.5 mm.

Peaks on the connective tissue between DP and stylus higher at medial region (same height in *V. bellator*; mostly smooth and with just one medial peak in *V. panita*; tissue absent in *V. insignis*).

Dorsum. DS outline epsilon, type 2. Ocularium medium, located medially on the carapace, without median depression and smooth. Mesotergum delimited and divided into four areas each one with a pair of paramedial low granules (Figs 3b, d, e, 4a-b). DS widest at level of area II. Area I divided into two halves, ornate with some granules; areas II–IV undivided and with some granules (Figs 3b, 4a-b). Posterior border of scutum convex (Figs 3b, 4a). Free tergites I–III with a row of granules (Figs 3b, d, 4a-b).

Venter. Stigmatic area with few granules. Stigmata oval and transverse (Fig. 3c). Coxa I with a sigmoidal row of tubercles increasing in size distally, one proximal, large, tricapitated tubercle on the anterior margin, and one medium-sized tubercle on the posterodistal region (Fig. 4c); coxa II longer than coxa I; coxa III slightly longer than I and II; coxa IV backward (Fig. 3c).

Chelicera. Basichelicerite trapezoid, with well-marked bulla (Figs 3b, d); two large tubercles on the ectal face, three large tubercles on the posterior margin, and some medium-sized tubercles on the dorsomedial face (Figs 3b, d, 4a). Chelicera swollen (Figs 3, 4a). Anterior region of the hand with small setiferous tubercles on the medial region, and a group of medium-sized/large tubercles close to the base of the movable and fixed fingers. Fixed finger



**Figure 2.** Drawings of *Vima dilectus* sp. nov. Male holotype (ICN-Ao-411.1): a. Habitus in dorsal view, b. same, lateral view; c. coxa I, ventral view; d. chelicera, frontal view; e. left pedipalp, mesal view. Genitalia of male paratype (ICN-Ao-411): f. lateral view, g. dorsal view (the letters A-D refers to the chaetotaxy system of Kury and Villarreal (2015)). Scale bars: a = 1 mm, b-e = 0.5 mm, f, g = 0.1 mm.





**Figure 3.** Photographs of the habitus of *Vima bellator* sp. nov. (ICN-Ao-575), male holotype: a. panoramic, b. dorsal, c. ventral, d. lateral, e. frontal. Scale bars: a = 3 mm, b, d = 1 mm, c, e = 0.5 mm.

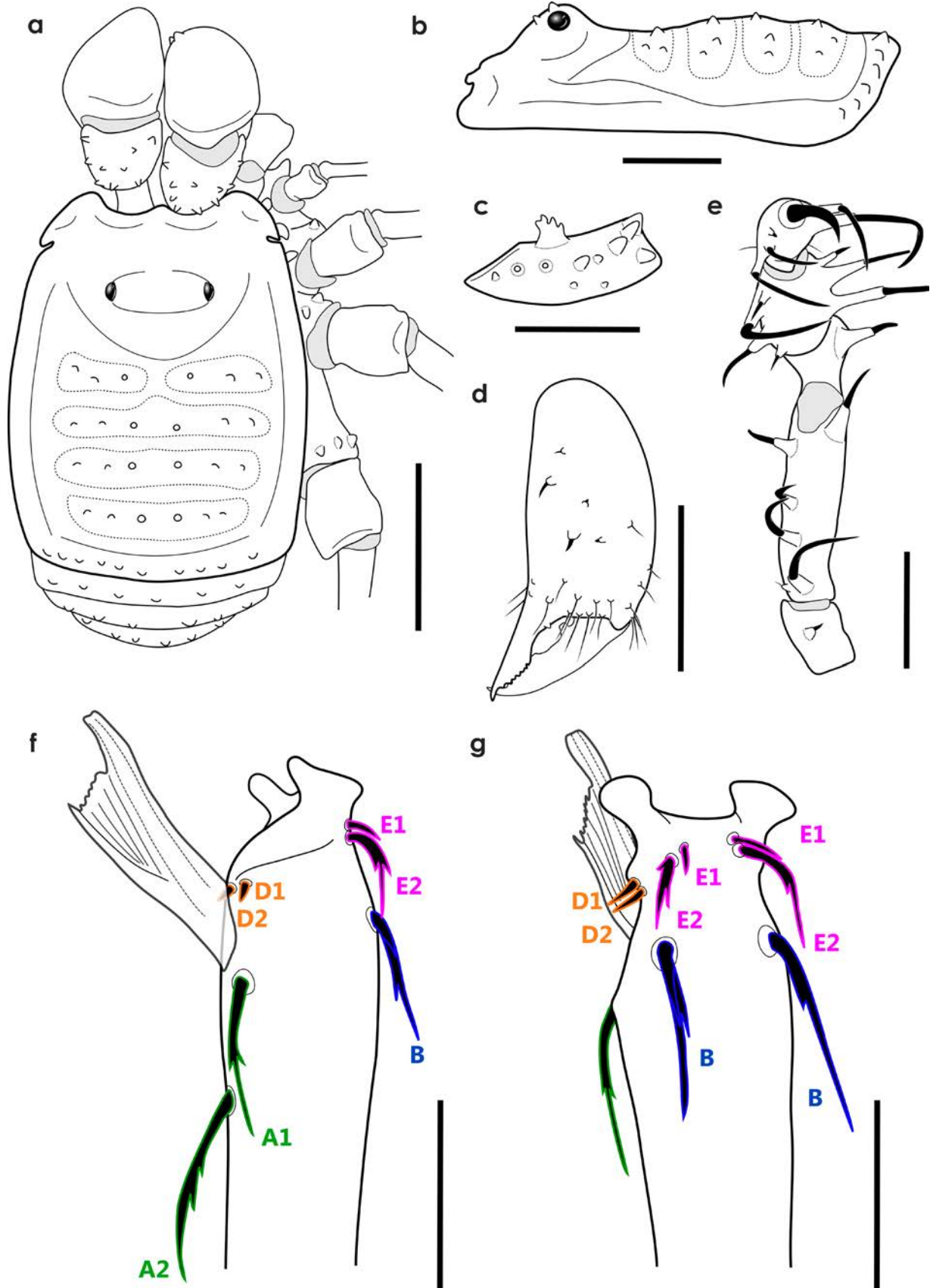
with the inner surface finely grooved. Movable finger with one trapezoid sub-basal tooth, and with the inner surface on the distal portion dentated (Fig. 4d).

**Pedipalps.** Trochanter with one ventral, subapical, and medium-sized tubercle. Femur with a ventroectal row of four setiferous tubercles, the two basalmost larger than the two distalmost, and one medium-sized ventromesal setiferous tubercle on the distal portion (Figs 3c, d, 4e). Patella with one large, mesal, setiferous tubercle. Tibia ectal IIIi, mesal IIIi. Tarsus ectal IIIi, mesal IIIi (Fig. 4e).

**Legs.** Leg I filiform, legs I–IV straight and smooth. Leg IV thicker than the others; coxa IV with one small dorso-distal tubercle dorsally projected (Fig. 3a); Fe IV length almost four times DS length (Fig. 3a). Tarsus IV without

tarsal process, claws smooth. Tarsal formula of holotype: 7-7/?-15/7-7/7-7.

**Penis.** LP small (width twice the height) and apically depressed, with an anterolateral blunt and not swollen tips dorsoapically pointed, and with a wide distal cleft (Figs 4f, g). Malleus with two pairs of branched MS-A located almost dorsally. MS-A2 located far from the base of the stylus; one pair of branched MS-B; MS-C absent; two pairs of medium-sized MS-D close to each other and near to the stylus. MS-D1–D2 located on a keel between the dorsal region of the LP and the base of the stylus; MS-E2 large and branched, MS-E1 medium-sized, conical, and located slightly distal to MS-E2 on the ventral side of the LP (Figs 4f, g). Stylus elongated, mostly straight, and surpassing the LP; connective tissue present between the sharp dorsal



**Figure 4.** Drawings of *Vima bellator* sp. nov. Male holotype (ICN-Ao-575): a. Habitus in dorsal view, b. same, lateral view; c. coxa I, ventral view; d. chelicera, frontal view; e. right pedipalp, mesal view. Genitalia of male paratype (MPUJ\_ENT 0064488): f. lateral view, g. ventral view (the letters A-D refers to the chaetotaxy system of Kury and Villarreal (2015)). Scale bars: a = 1 mm, b-e = 0.5 mm, f, g = 0.1 mm.



process and the stylus, slightly corrugated, with irregular peaks on the apical medial region (Figs 4f, g).

Color (in alcohol). Background of DS and chelicerae Moderate Yellow (87). Lateral borders of DS and free tergites Dark Grayish Brown (62). Mesotergal areas Moderate Brown (58) with transverse bands Moderate Yellow (87), pedipalps, and legs I-IV Moderate Brown (58) (Fig. 3).

Sexual dimorphism: Female with not hypertelic chelicera.

**Distribution and habitat.** The species is known from the forests of the lowlands of Santander department (Cimitarra and Puerto Parra municipalities) (Fig. 5) situated in the ecoregion of the Magdalena Valley montane forests (Olson *et al.* 2001).

**Etymology.** This species is named after the Colombian entomologist German Amat García. The name German, the Slavic form of Herman, is a masculine given name from an ancient Germanic name formed by harja (army

and mann (man), meaning warrior. *Bellator*, in Latin, has the same meaning.

**Key to the species of *Vima* Hirst, 1912 (males)**

**1a** Mesotergal areas II-III armed with a dorsal yellowish hump (García and Kury, 2020: fig. 2), penis stylus without connective tissue between the dorsal process and the stylus (García and Kury, 2020: fig. 4) ..... *Vima insignis*

**1b** Mesotergal areas unarmed (without dorsal yellowish hump), penis stylus with connective tissue between the dorsal process and the stylus (Fig. 2f) ..... **2**

**2a** All pedipalpal segments with the same coloration, brown in reticulated pattern; anteroproximal tubercle of coxa I with apical peaks on its surface (Fig. 4c) ... *Vima bellator* sp. nov.

**2b** Pa and Ti of pedipalpus with different coloration than the other segments, lighter; anteroproximal tubercle of

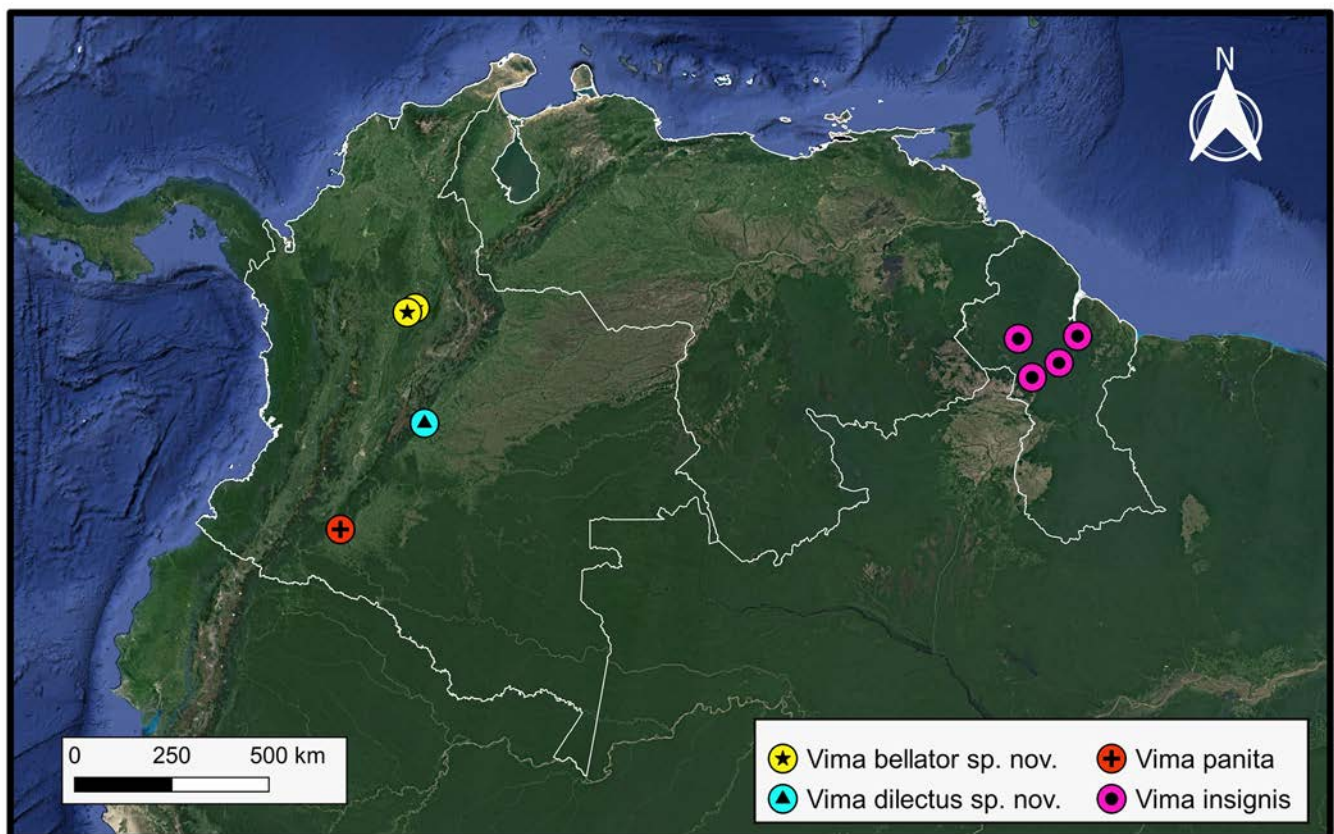


Figure 5. Map showing the distribution of the species of *Vima* in northern South America.

coxa I with smooth surface (Fig. 2c; García and Kury 2020: figs 3g, 6c).....3

**3a** Distal Fe of pedipalpus yellowish or whitish; mesotergal areas I-IV discolor (medial region yellowish) (Fig. 1b), LP of the penis with distal cleft (Fig. 2g) ..... ***Vima dilectus***  
**sp. nov.**

**3b** All Fe of pedipalpus brown; mesotergal areas I-IV concolor (uniformly brown) (García and Kury, 2020: fig. 5); LP of the penis without distal cleft (García and Kury 2020: fig. 7)..... ***Vima panita***

## DISCUSSION

When describing *Vima panita*, the second known species of the genus, García and Kury (2020) noted the presence of a dorsal process of the stylus connected by a dorsal keel. This is a condition shared with the genera *Barinas* González-Sponga, 1987 and some species of *Avima* Roewer, 1949 (e.g., *A. wayuunaiki* García, González & Gutiérrez, 2022). García and Ahumada-C. (2022) proposed the generic synonym between *Barinas* and *Vimina*, referring to the dorsal keel present in *Barinas virginis* (González-Sponga, 1987) as a “connective tissue”. Subsequently, García and Ahumada-C. (2022) described the species *Barinas guanenta* García and Ahumada-C., 2022, which lacks the mentioned connective tissue but possesses a dorsal process. In *Vima*, all the species exhibit a dorsal process in the stylus, with most (except the type species *V. insignis*) also having the connective tissue. Furthermore, the tip of the stylus in *Vima* is thick and curved towards the dorsal part, resembling the condition observed in species of *Barinas*, albeit with a more abrupt curvature. While the presence of the connective tissue may be homoplastic in *Vima* and *Barinas* (Villarreal and García 2021), an alternative hypothesis (García and Villarreal, 2023) suggests a closer relationship between them and challenges the monophyly of *Vima*. According to this latter hypothesis, the presence of the connective tissue is a derived trait shared by species of a larger clade encompassing *Barinas*, *Vima* and *Avima tuttifrutti* García and Pastrana, 2021, despite the latter lacking it. Furthermore, it appears that four species in *Avima*, namely *A. flavomaculata* (González-Sponga, 1987), *A. granulosa* (González-Sponga, 1998), *A. chiguaraensis* (González-Sponga, 1987), and *A. wayuunaiki*, exhibit a similar morphology of the stylus,

although only simplified schematic drawings of their genitalia are available for some of them. To re-diagnose *Vima* and establish a phylogenetic hypothesis of Leiosteninae genera, a comprehensive analysis of all known species of *Barinas* and *Vima*, as well as a case-by-case review of the species of *Avima* is imperative.

In the context of neotropical harvestmen, numerous genera exhibit species concentrations in one or few biogeographical areas, contiguous or not, for example, *Ocoita* González-Sponga, 1987, *Oligovonones* Caporiacco, 1951, *Neocynorta* Roewer, 1915, *Rhaucoides* Roewer, 1912, *Stygnoplus* Simon, 1879 (González-Sponga 2002, Medrano *et al.* 2019, Villarreal *et al.* 2021a, b, Medrano *et al.* 2022). Notably, the genus *Vima* also exhibits an intriguing disjunct distribution: *V. insignis* and *V. panita* have records in Guyana and the Colombian Andean-Amazonian foothill region, despite being separated by 1,500 km (García and Kury 2020: fig. 8; Fig. 5). According to the Köppen-Geiger climate classification (Köppen 1884; Beck *et al.* 2018), this region corresponds to a wide area of Tropical rainforest climate (Af), characterized as equatorial, fully humid with minimal fluctuation in both temperature and moisture levels (McKnight and Hess 2000).

In contrast, the two species described here are geographically close to each other (Fig. 5) but distributed in a different region (highlighted in light green in García and Kury 2020: fig. 8) characterized by a Tropical monsoon climate (Am). This climate type is known for its windy seasons and lower precipitation rates compared to Af, resulting in drier months (McKnight and Hess 2000). Nevertheless, the genus appears to be associated with lowlands (none exceeding 700 m), where constant precipitation rates and warm temperatures prevail. This suggests the possibility of finding *Vima* species in neighboring countries with similar climatic conditions, such as Brazil and Venezuela. This could potentially help address the current Wallacean shortfalls.

## AUTHORS' CONTRIBUTIONS

AFG led the project, did a primary identification of the species, made the figure plates, and wrote the descriptions. OVM participated in the identification of the species and writing of the manuscript, complemented the descriptions and outlined the discussion. Both authors wrote the manuscript.

## CONFLICT OF INTEREST

The authors declare that there is no conflict of interest.

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