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The Goblin Spider Genus Simonoonops (Araneae, Oonopidae)

NORMAN I. PLATNICK¹ AND NADINE DUPÉRRÉ¹

ABSTRACT

The goblin spider genus *Simonoonops* Harvey has been known only from its Venezuelan type species, but the group occurs also in Guyana and the Lesser Antilles. Most of its members have been misplaced in the genus *Dysderina* Simon; *D. princeps* Simon, *D. spinigera* Simon, *D. craneae* Chickering, *D. globina* Chickering, *D. soltina* Chickering, and *D. zinona* Chickering are transferred to *Simonoonops*. Members of *Simonoonops* resemble those of *Dysderina* in having three transverse ridges on the sternum, but differ in lacking a groove connecting the anterior spiracles and having a more complex embolic region on the male palp. Two specific names are newly synonymized: *S. orghidani* (Dumitrescu and Georgescu) with *S. craneae*, and *S. zinona* with *S. soltina*. Six new species are described: *S. simoni*, *S. grande*, and *S. andersoni* from Venezuela, *S. lutzi* from Guyana, *S. etang* from Grenada, and *S. chickeringi* from Saint Vincent.

INTRODUCTION

The present paper, part of a series on the complex of Neotropical genera including *Dysderina* Simon (1891), focuses on *Simonoonops* Harvey (2002), which was established as a replacement name for *Eusimonia* Dumitrescu and Georgescu (1987). *Eusimonia* was described for a goblin spider species from Venezuela, but that generic name is preoccupied in the Solifugae by *Eusimonia* Kraepelin (1899).

We were initially puzzled by the description of *Eusimonia*, as Dumitrescu and Georgescu separated their new genus from *Dysderina* primarily by the presence of transverse ridges on the sternum. Those ridges are actually characteristic of *Dysderina*. The source of the error became

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clear when we realized that the only *Dysderina* specimens those authors studied belong to *D. loricata* (Simon, 1873) from Mallorca. That species, like all the other Old World taxa that have been assigned to *Dysderina* over the years, was misplaced (see Platnick and Dupérré, 2011); it was transferred to *Silhouettella* Benoit (1979) by Saaristo (2001). Dumitrescu and Georgescu (1987) were thus correct in recognizing that their Venezuelan species is not congeneric with *D. loricata*, and merely failed to take into account that even though *Dysderina* is a Simon name, its type is a Keyserling species from Colombia, not a Simon species from the Mediterranean.

Although we therefore initially regarded *Simonoonops* as a straightforward synonym of *Dysderina*, subsequent study of the large available collections indicates that the many members of the *Dysderina* complex that share the putatively synapomorphic sternal ridges do not all belong to a single genus. Dumitrescu and Georgescu's type species, *S. orghidani*, differs from the type species of *Dysderina* (*D. principalis* Keyserling) and its close relatives in lacking a groove connecting the anterior spiracles and in having a much more complex embolic region on the male palp, comprised of characteristically elaborate, intertwined elements. These characters are shared with several species from Venezuela and the Lesser Antilles that were originally described in *Dysderina* by Simon (1891) and Chickering (1968), and we therefore regard *Simonoonops* as a valid genus, containing the 11 species detailed below.

In the original description of *Dysderina*, Simon (1891) identified specimens from Saint Vincent and from Venezuela as belonging to the taxon he designated as the type species of *Dysderina*, *Oonops principalis* Keyserling (1881). As indicated by Platnick and Dupérré (2011), all of Simon's specimens were misidentified. For his paper on *Dysderina*, Chickering (1968) borrowed, from the Natural History Museum in London, the holotype of *D. principalis*, and he also requested on loan the specimens from Saint Vincent that Simon had identified as *D. principalis*, to compare with the other material he had available from that island.

Simon's identified material of *D. principalis* from Saint Vincent is represented today by seven males and five females in the London collection, and also by a vial, with three additional females, housed in the Simon collection in Paris. It appears that in response to Chickering's loan request, Doug Clark, who was then in charge of the spider collection in London, sent Chickering one male and one female, taken at random from the series in London. Chickering recognized, correctly, that these specimens are not conspecific with *D. principalis*, and described them as the male holotype and female paratype of a new species, *D. soltina*. He indicated (1968: 31) that, for *D. soltina*, "As far as I have been able to determine the two specimens described here are the only members of the species known at present." In other words, Chickering was unaware that there were additional relevant specimens in the London and Paris collections.

Both the London and Paris series of "*D. principalis*" from Saint Vincent are actually mixed lots involving two different species. As it happens, the male and female examined and described as *D. soltina* by Chickering are mismatched. As one might expect, Clark's decision to send just two of the specimens to Chickering had unfortunate nomenclatural consequences. Simon (1891) described two additional species from Saint Vincent, *Dysderina princeps* and *Dysderina spinigera*, both of which belong to *Simonoonops* rather than *Dysderina*. Chickering (1968) studied a modern female specimen from Saint Vincent that does not belong to *S. princeps* or *S. spiniger*, and does

not match the single female he described as the paratype of *S. soltina*; he therefore described it as a new species, *Dysderina zinona*. Unfortunately, that female matches those that appear to be the true females of *S. soltina*. The Saint Vincent specimens that were misidentified by Simon (1891) as *D. principalis* but that do not belong to *S. soltina* (including Chickering's female paratype of *S. soltina*) appear to belong to a separate species, which we describe below as *S. chickeringi*.

It should be noted that Simon (1891, 1893b) identified specimens from Venezuela as belonging to another of his Saint Vincent species, *Dysderina spinigera*; all those specimens are also misidentified, and do not even belong to *Simonoonops*. Interestingly, this error was suspected by Chickering (1968: 32), who commented that "Simon reported both sexes of this species from St. Vincent and Venezuela where he regarded it as widespread. I have not seen the specimens from Venezuela but, on the basis of my study of this genus, I consider it unlikely that they are the same as these from St. Vincent."

Simon's error was repeated by Dumitrescu and Georgescu (1987), who identified several males and females from Venezuela as belonging to *Dysderina spingera*, without having examined any of Simon's material. Dumitrescu and Georgescu's specimens were misidentified, and that error was needless, as Chickering (1968) had already provided adequate drawings of the male and female syntypes of the species, which do not resemble Dumitrescu and Georgescu's Venezuelan specimens at all. Dumitrescu and Georgescu then compounded their error by transferring *Dysderina spinigera* to their new genus "*Prodysderina*," solely on their basis of their misidentified specimens. As it happens, their transfer was invalid, because "*Prodysderina*" is a nomen nudum; in attempting to establish the genus, Dumitrescu and Georgescu included in it two of Simon's species, but failed to designate either one as the type species of the genus. Their generic name is therefore unavailable, and Simon's true *Dysderina spinigera*, from Saint Vincent, is placed below in *Simonoonops* instead; it is not congeneric with either of the species Dumitrescu and Georgescu placed in "*Prodysderina*."

Members of *Simonoonops* show some unusual features of the endites. In both sexes of at least *S. craneae*, the serrula seems to be reduced to a pair of relatively long, widely separated teeth (figs. 8, 37). Most of the dorsal surface of the endites is occupied by a row of long, fringed setae, the most basal of which is greatly widened and lacks a fringe. One of the serrula teeth is situated at about one-third of the length of the setal row, whereas the other is more basal but is situated near the median, rather than lateral, edge of the endite. These features may represent synapomorphies at various levels. For example, the basal, enlarged seta also occurs in both sexes of *Scaphidysderina* (Platnick and Dupérré, 2011: figs. 143, 179), *Paradysderina* (Platnick and Dupérré, in press; figs. 7, 47), and *Semidysderina* (Platnick and Dupérré, in press: figs. 748, 788), even though females of those genera differ from their males in retaining a normal serrula.

Our methods follow those of Platnick and Dupérré (2009a, 2009b); only differences from the males (beyond the obvious lack of male endite modifications) are mentioned in the descriptions of females. Scans were taken from uncoated right male palps, and the images were flipped for consistency. All measurements are in mm. High-resolution versions of the images, the geocoded locality data, and a distribution map for each species will be available on the goblin spider Planetary Biodiversity Inventory (PBI) project's website (http://research.amnh.org/oonopidae).

COLLECTIONS EXAMINED

AMNH	American Museum of Natural History, New York, NY
BMNH	Natural History Museum, London, England
CAS	California Academy of Sciences, San Francisco, CA
FSCA	Florida State Collection of Arthropods, Gainesville, FL
MCZ	Museum of Comparative Zoology, Harvard University, Cambridge, MA
MNHN	Muséum National d'Histoire Naturelle, Paris, France

Simonoonops Harvey

Eusimonia Dumitrescu and Georgescu, 1987: 94 (type species designated only via the heading "Eusimonia orghidani g.n., sp.n."; preoccupied in the Solifugae by Eusimonia Kraepelin, 1899).
Simonoonops Harvey, 2002: 456 (replacement name for Eusimonia Dumitrescu and Georgescu, 1987, with Eusimonia orghidani [= Simonoonops craneae (Chickering)] formally designated as the type species).

DIAGNOSIS: Members of *Simonoonops* resemble those of *Dysderina* and *Costarina* Platnick and Dupérré (2011) in having three transverse ridges on the sternum (figs. 6, 79); they differ from members of *Dysderina* by lacking a groove connecting the anterior pair of spiracles, from those of *Costarina* by having a groove connecting the posterior pair of spiracles (figs. 13, 41), and from both by having a much more complex embolic region (figs. 10–12, 64, 65).

DESCRIPTION: Total length of males 1.4–2.0, of females 1.7–2.5. Typical coloration carapace dark red-brown; sternum, mouthparts, and abdominal scuta orange-brown, without pattern; abdominal soft portions white, without pattern; legs yellow-brown, often with anterior or all femora darkened. Cephalothorax: Carapace ovoid in dorsal view, anteriorly narrowed to 0.49 times its maximum width or less (figs. 1, 31), pars cephalica strongly elevated in lateral view (figs. 3, 33), anterolateral corners without extension or projections, pars thoracica with rounded posterolateral corners, without depressions or radiating rows of pits, posterolateral edge without pits, posterior margin not bulging below posterior rim, posterolateral surface without spikes; most of surface of elevated portion of pars cephalica covered by low tubercles, producing strongly reticulate appearance, sides granulate; fovea absent, lateral margin straight, rebordered, with blunt denticles; plumose setae near posterior margin of pars thoracica absent; marginal and nonmarginal pars cephalica and pars thoracica setae light, needlelike, scattered. Clypeus margin strongly rebordered (figs. 2, 32), sinuous in front view, vertical in lateral view, high, ALE separated from edge of carapace by their radius or more, median projection absent (except for fused chilum); setae light, needlelike. Chilum undivided, fused to clypeus, seam present. Eyes six, well developed, ALE largest, oval, PME squared, PLE oval; posterior eye row slightly recurved from above, slightly procurved from front; ALE separated by slightly less to slightly more than their radius, ALE-PLE separated by less than ALE radius, PME touching throughout most of their length, PLE-PME separated by less than PME radius. Sternum wider than long, not fused to carapace, surface smooth except for three transverse ridges connected by longitudinal ridge along midline (fig. 6), median concavity and hair tufts absent, with radial furrows between coxae I-II, II-III, III-IV, furrows smooth, radial furrow opposite coxae III

absent, surface without pits, with tubercles at sides of smooth areas between ridges and at posterior margin, sickle-shaped structures absent, anterior margin with continuous transverse groove, posterior margin extending posteriorly beyond anterior edges of coxae IV as single extension but without posterior hump, anterior corner unmodified, lateral margin with infracoxal grooves bearing anterior and posterior openings, distance between coxae approximately equal, extensions of precoxal triangles absent, lateral margins with bridges to coxae; setae sparse, light, needlelike, densest laterally. Chelicerae slightly divergent, anterior face with swelling (figs. 4, 34); promargin and retromargin usually each with single tooth, but retromarginal tooth small, easy to overlook (figs. 5, 35); fang without toothlike projections, directed medially, shape normal, without prominent basal process, tip unmodified; setae light, needlelike, densest medially; paturon inner margin with pairs of enlarged setae, distal region abruptly narrowed, posterior surface unmodified, promargin with row of flattened setae, inner margin sometimes with laminate groove. Labium triangular, not fused to sternum, posterior portion flattened, anterior portion at sharp angle, anterior margin slightly excavated in males (fig. 7) but not females (fig. 36), same as sternum in sclerotization; with six or more setae on anterior margin, subdistal portion with unmodified setae. Endites same as sternum in sclerotization, those of males distally excavated, with separate ventral and dorsal processes anteriorly (fig. 7), posterior part unmodified; serrula reduced to two widely separated, long teeth (figs. 8, 37), serrular area occupied by series of long, fringed setae, of which most basal seta is greatly thickened, fringeless (figs. 8, 37). Female palp without claw or spines; tibia with three trichobothria (fig. 38), patella without prolateral row of ridges, tarsus elongate (figs. 39, 40). Abdomen: ovoid, without long posterior extension, rounded posteriorly, interscutal membrane without rows of small sclerotized platelets. Book lung covers large, ovoid, without setae, anterolateral edge unmodified; posterior spiracles connected by groove, which continues past spiracles almost to lateral margins (figs. 13, 41), anterior spiracles not connected by groove. Pedicel tube long, ribbed, scutopedicel region unmodified, scutum extending far dorsal of pedicel; plumose hairs, matted setae on anterior ventral abdomen in pedicel area, and cuticular outgrowths near pedicel absent. Dorsal scutum strongly sclerotized, covering more than three-quarters to full length of abdomen, usually with no soft tissue visible from above in males, slightly smaller in females, not fused to epigastric scutum, middle surface and sides smooth, anterior half without projecting denticles. Epigastric scutum strongly sclerotized, surrounding pedicel, not protruding, small lateral sclerites absent, without lateral joints in females. Postepigastric scutum strongly sclerotized, long, semicircular, fused to epigastric scutum, anterior margin unmodified, with short posteriorly directed lateral apodemes. Spinneret scutum present, incomplete ring, with fringe of long setae; supraanal scutum absent. Abdominal setae light, needlelike, frontal epigastric area setae not thickened; dense patch of setae anterior to spinnerets absent, interscutal membrane with setae. Colulus present, tiny, with pair of setae. Anterior lateral spinnerets bisegmented, posterior medians unisegmented, posterior laterals bisegmented (fig. 44); spigots scanned only in S. craneae, anterior laterals with single major ampullate gland spigot and four piriform gland spigots in males (fig. 16), five in females (fig. 45), posterior medians with two minor ampullate gland spigots and one aciniform gland spigot in males (fig. 17), nine in



FIGURES 1–15. *Simonoonops craneae* (Chickering), male. **1.** Carapace, dorsal view. **2.** Same, anterior view. **3.** Same, lateral view. **4.** Chelicerae, anterior view. **5.** Same, posterior view. **6.** Sternum, ventral view. **7.** Labium and endites, ventral view. **8.** Labrum and endites, dorsal view. **9.** Palpal tibia, dorsal view. **10.** Left palp, prolateral view. **11.** Same, ventral view. **12.** Same, retrolateral view. **13.** Anterior portion of abdomen, ventral view. **14.** Sperm pore, ventral view. **15.** Leg I, lateral view.



FIGURES 16–30. *Simonoonops craneae* (Chickering), male. **16.** Anterior lateral spinneret, apical view. **17.** Posterior median spinneret, apical view. **18.** Posterior lateral spinneret, apical view. **19.** Tarsal organ, leg I, dorsal view. **20.** Same, leg II. **21.** Same, leg III. **22.** Same, leg IV. **23.** Same, palp. **24.** Trichobothrial base, metatarsus IV, dorsal view. **25.** Claws of leg I, oblique apical view. **26.** Same, leg II. **27.** Same, leg III. **28.** Same, leg IV. **29.** Claws of leg III, lateral view. **30.** Same, leg IV.



FIGURES 31–45. *Simonoonops craneae* (Chickering), female. **31.** Carapace, dorsal view. **32.** Same, anterior view. **33.** Same, lateral view. **34.** Chelicerae, anterior view. **35.** Same, posterior view. **36.** Labium and endites, ventral view. **37.** Labrum and endites, dorsal view. **38.** Palpal tibia, dorsal view. **39.** Palp, prolateral view. **40.** Same, retrolateral view. **41.** Anterior portion of abdomen, ventral view. **42.** Genitalia, ventral view. **43.** Same, dorsal view. **44.** Spinnerets, apical view. **45.** Anterior lateral spinneret, apical view.



FIGURES 46–60. *Simonoonops craneae* (Chickering), female. **46.** Posterior median spinneret, apical view. **47.** Posterior lateral spinneret, apical view. **48.** Leg I, lateral view. **49.** Same, leg IV. **50.** Tarsal organ, leg I, dorsal view. **51.** Same, leg II. **52.** Same, leg III. **53.** Same, leg IV. **54.** Same, palp. **55.** Claws of leg I, oblique lateral view. **56.** Same, leg II. **57.** Same, leg III. **58.** Same, leg IV. **59.** Claws of leg III, apical view. **60.** Same, leg IV.



FIGURES 61–76. *Simonoonops craneae* (Chickering), male (61–70) and female (71–76). **61.** Carapace, dorsal view. **62, 71.** Same, anterior view. **63.** Sternum, ventral view. **64.** Left embolus, prolateral view. **65.** Same, retrolateral view. **66.** Carapace, lateral view. **67.** Mouthparts, ventral view. **68.** Left palp, prolateral view. **69.** Same, ventral view. **70.** Same, retrolateral view. **72.** Abdomen, lateral view. **73.** Same, ventral view. **74. 75.** Genitalia, ventral view. **76.** Same, dorsal view.

females (fig. 46), posterior laterals with three minor ampullate gland spigots and one aciniform gland spigot in males (fig. 18), 10 in females (fig. 47). Legs: femur IV not thickened, same size as femora I-III, patella plus tibia I shorter than carapace, tibia I unmodified, tibia IV specialized hairs on ventral apex and ventral scopula absent, metatarsi I, II mesoapical comb absent, metatarsi III, IV weak ventral scopula absent. Leg spines present on anterior femora, tibiae, and metatarsi (figs. 15, 48), absent on posterior legs (fig. 49). Tarsi without inferior claw. Superior claws (scanned only in S. craneae) of males apparently with single row of four large teeth on legs I, II (figs. 25, 26), with two rows of teeth on legs III, IV, row on median surface with most distal tooth long, row on lateral surface with most distal tooth short (figs. 27-30); superior claws of females each with two rows of teeth, row on median surface with most distal tooth long, row on lateral surface with most distal tooth short (figs. 55–60). Trichobothrial base with numerous parallel ridges (fig. 24). Tarsal organ with three sensillae on legs I, II (figs. 19, 20, 50, 51), two on legs III, IV, palp (figs. 21-23, 52-54). Genitalia: Male epigastric region with sperm pore small, triangular with rounded angles, situated between anterior and posterior spiracles, rebordered (fig. 14); furrow without Ω -shaped insertions, without specialized setae. Male palp of normal size, not strongly sclerotized, right and left palps symmetrical, proximal segments pale orange, cymbium and bulb yellow, embolus dark, without prolateral excavation; trochanter of normal size, unmodified; femur of normal size, two or more times as long as trochanter, without posteriorly rounded lateral dilation, attaching to patella basally; patella shorter than femur, not enlarged, without prolateral row of ridges, setae unmodified; tibia with three trichobothria (fig. 9); cymbium ovoid in dorsal view, completely fused with bulb, no seam visible (figs. 10, 12), not extending beyond distal tip of bulb, plumose, stout setae absent, without distal patch of setae; bulb 1 to 1.5 times as long as cymbium, stout, elongated. Embolus accompanied by conductor, often complexly twisted around conductor (fig. 11). Tegulum with small lobe at base of embolar complex, lobe typically touching base of conductor (figs. 64, 82, 97, 112, 143, 158, 200). Female genitalia with conspicuous atrium containing sclerotization (fig. 42); anterior genitalic process long, narrow (fig. 43).

DISTRIBUTION: Known only from coastal Venezuela, Guyana, and the Lesser Antilles.

KEY TO SPECIES

1.	Males (those of S. princeps unknown)
_	Females (those of S. lutzi and S. globina unknown)11
2.	Ventral process on endites not reaching distal tip of endite (figs. 96, 111)3
_	Ventral process on endites reaching distal tip of endite (as in fig. 7)4
3.	Conductor long, narrow, originating far from base of embolus (figs. 97, 99)grande
_	Conductor abruptly bent, originating near base of embolus (figs. 112, 114)andersoni
4.	Transverse ridges on sternum distinct, pronounced (as in figs. 63, 79, 155, 184)5
_	Transverse ridges on sternum much less pronounced (as in figs. 123, 140, 170, 197)8
5.	Anterior median eyes separated by less than their radius (figs. 169, 183)6
_	Anterior median eyes separated by their radius or more (figs. 62, 78)7

6.	Embolic region distally arched (figs. 186, 188)spiniger
_	Embolic region not distally arched (fig. 174)chickeringi
7.	Most basal embolic element relatively wide (fig. 64)craneae
_	Most basal embolic element relatively narrow (fig. 82)simoni
8.	Embolic elements relatively small (fig. 160)soltina
_	Embolic elements much larger (figs. 129, 145, 202)
9.	Embolic region distally arched (figs. 128, 129)lutzi
_	Embolic region otherwise
10.	Most basal embolic elements narrow, sharp (fig. 143)etang
_	Most basal embolic elements wide, blunt (fig. 200)globina
11.	Transverse ridges on sternum distinct, pronounced (as in figs. 63, 79, 94, 109, 124, 155,
	184)
_	Transverse ridges on sternum much less pronounced (as in figs. 140, 170)18
12.	Genital atrium squared (figs. 136, 137)princeps
_	Genital atrium otherwise
13.	Transverse bar connecting genitalic apodemes excavated at midline (figs. 76, 91)14
_	Transverse bar connecting genitalic apodemes not excavated at midline15
14.	Genital atrium with lateral wings (figs. 75, 76)craneae
_	Genital atrium without lateral wings (figs. 90, 91)simoni
15.	Genitalic apodemes extending posterior of groove connecting posterior spiracles (fig. 106
)grande
_	Genitalic apodemes not extending to groove connecting posterior spiracles (as in figs. 121,
	167, 194)
16.	Genital atrium largely filled with oval sclerotization (fig. 166)soltina
_	Genital atrium otherwise
17.	Anterior edge of transverse bar connecting apodemes rounded (fig. 121)andersoni
_	Anterior edge of transverse bar connecting apodemes excavated (fig. 194)spiniger
18.	Genitalic apodemes relatively long (fig. 152)etang
_	Genitalic apodemes relatively short (fig. 181)chickeringi

Simonoonops craneae (Chickering), new combination Figures 1–76

Dysderina principalis (misidentification): Simon, 1891: 557; 1893b: 441 (in part, some specimens from Venezuela only).

Dysderina craneae Chickering, 1968: 10, figs. 20–23 (male holotype from Simla, Trinidad, in MCZ; examined).

Eusimonia orghidani Dumitrescu and Georgescu, 1987: 96, pl. 4, figs. 1–5 (male holotype from Rancho Grande, Aragua, Venezuela, in Institut de Spéologie, Bucharest; not examined). NEW SYNONYMY *Simonoonops orghidani:* Harvey, 2002: 456.

DIAGNOSIS: Males can easily be recognized by the subdistal, diamond-shaped expansion on the darkened conductor (fig. 69), females by the shape of the genital atrium (figs. 42, 74), which has a pair of lateral wings that are separated from the central part of the atrium by oblique slits (figs. 75, 76).

MALE (PBI_OON 2597, figs. 1–30, 61–70): Total length 1.98. Posterior half of pars cephalica with pair of elongate, oval, paramedian light areas, surface of anterior portion reticulate, posterior portion smooth. Chilum small, triangular. Endites with both processes long, narrow, ventral process longer than dorsal process. Anterior femora darkened. Leg spination: femora: I p0-0-2, r0-1-1, II p0-0-1; tibiae: I v4-4-2, II v4-4-1p; metatarsi I, II v2-2-1p. Embolus twisted around darkened conductor, conductor with diamond-shaped expansion at about half its length.

FEMALE (PBI_OON 2597, figs. 31–60, 71–76): Total length 2.25. Leg spination: femora: I p0-0-2, r0-1-2, II p0-0-2, r1-1-0; tibiae I, II v4-4-2; metatarsi: I v2-2-2, II v2-2-1p. Atrium wide, semicircular, posterior portion heavily sclerotized, anterior portion mostly filled with rectangular sclerotization; anterior genitalic process long, narrow; posterior margin of transverse bar connecting genitalic apodemes invaginated at midline.

MATERIAL EXAMINED: Venezuela: localities unspecified on label, presumably from one or more of those listed by Simon (1893b: 441): Caracas, Corosal, and San-Esteban (part of MNHN AR 5764, now PBI_OON 4737), 5 δ , 5 \circ . Aragua: 19 km N Maracay, road to Choroní, Apr. 2, 1992, stream litter, elev. 4300 ft (L. Herman, AMNH PBI_OON 39), 19; Rancho Grande, Portachuelo, 20 km NW Maracay, Apr. 15, 1994, litter, elev. 1150 m (L. Herman, AMNH PBI_ OON 138), 23, 19; Parque Nacional Henri Pittier, Estación Biológica Rancho Grande, 10°20'42"N, 67°41'09"W, May 12, 1998, montane forest litter, elev. 1150 m (R. Anderson, AMNH PBI_OON 796), 3 9, Pico Perequito, 10°20'32"N, 67°41'46"W, May 13, 1998, cloud forest litter, elev. 1300 m (R. Anderson, AMNH PBI_OON 798), 23, road to Pico Guacamaya, 10°21'37"N, 67°40'25"W, May 14, 1998, cloud forest litter, elev. 1550 m (R. Anderson, AMNH PBI_OON 797), 23, 19, road to Pico Guacamaya, 10°21'38"N, 67°40'38"W, May 14, 1998, cloud forest litter, elev. 1450 m (R. Anderson, AMNH PBI OON 799), 2♂; Tiara, near Cerro Niguel, Apr. 27, 1995, elev. 1400 m (J. Lattke, CAS 26306, PBI_OON 2597), 2 &, 2 . Miranda: Agua Blanca, Parque Nacional Guatopo, 35 km N Altagracia, May 31, 1987, ravine litter, elev. 400 m (S., J. Peck, AMNH PBI_OON 50), 1° , May 31–June 7, 1987, flight intercept trap, ravine, elev. 400 m (S., J. Peck, AMNH PBI_OON 55), 4 Å, 1 ♀, June 7–14, 1987, flight intercept trap, forest streamside, elev. 400 m (S., J. Peck, AMMH PBI_OON 53), 43; El Lucero, Parque Nacional Guatopo, 28 km N Altagracia, June 7-14, 1987, flight intercept traps, ravine, elev. 700 m (S., J. Peck, AMNH PBI_OON 35), 2♂; Puente Bucaral, Parque Nacional Guatopo, 35 km N Altagracia, June 14-Aug. 5, 1987, flight intercept trap, forest streamside, elev. 600 m (S., J. Peck, AMMH PBI_OON 36), 1 &. Monagas: Caripe, Cueva Guacharo, July 20-30, 1987, malaise flight intercept trap, forest over coffee, elev. 700 m (S., J. Peck, AMNH PBI_OON 56), 3 3, July 20-31, 1987, malaise flight intercept trap, forest over coffee, elev. 750 m (S., J. Peck, AMNH PBI_OON 54), 3∂, 2♀. Sucre: Las Melenas, 9.7 km NW Irapa, 10°41'N, 62°37'W, May 10, 1993, sifting leaf litter, elev. 800 m (J. Lattke, CAS 26315, PBI_OON 2747), 2 & . Trinidad and Tobago: Trinidad: Andrews Terrace, off Blanchisseuse Road, Arima, July 16, 1979 (L. Sorkin, AMNH PBI_OON 98), 1 &; road to Blanchisseuse, 4-13 mi N Simla, Apr. 22, 1964 (A. Chickering, MCZ 66637, PBI_OON 664), 3 ^Q (paratypes); Simla, Arima Valley, Apr. 5–28, 1964 (A.



FIGURES 77–91. *Simonoonops simoni*, new species, male (77–85) and female (86–91). 77. Carapace, dorsal view. **78**, **86**. Same, anterior view. **79**. Sternum, ventral view. **80**. Carapace, lateral view. **81**. Mouthparts, ventral view. **82**. Left embolus, prolateral view. **83**. Left palp, prolateral view. **84**. Same, ventral view. **85**. Same, retrolateral view. **87**. Abdomen, lateral view. **88**. Same, ventral view. **89**, **90**. Genitalia, ventral view. **91**. Same, dorsal view.



FIGURES 92–106. *Simonoonops grande*, new species, male (92–100) and female (101–106). 92. Carapace, dorsal view. 93, 101. Same, anterior view. 94. Sternum, ventral view. 95. Carapace, lateral view. 96. Mouthparts, ventral view. 97. Left embolus, prolateral view. 98. Left palp, prolateral view. 99. Same, ventral view. 100. Same, retrolateral view. 102. Abdomen, lateral view. 103. Same, ventral view. 104, 105. Genitalia, ventral view. 106. Same, dorsal view.

Chickering, MCZ 66636, PBI_OON 665), 5δ , 4 (paratypes), Apr. 25, 1964 (A. Chickering, MCZ PBI_OON 663), 1δ , 1 (holotype, paratype); Spring Hill, Arima, July 22, 1979, leaf litter (L. Sorkin, AMNH PBI_OON 99), 1 2.

DISTRIBUTION: Coastal Venezuela and Trinidad.

SYNONYMY: Dumitrescu and Georgescu (1987) did not even cite Chickering's (1968) paper on *Dysderina*; had they consulted it, they might have detected that their Venezuelan species had already been described, from Trinidad, by Chickering.

Simonoonops simoni, new species

Figures 77–91

Dysderina principalis (misidentification): Simon, 1891: 557, 1893b: 441 (in part, some specimens from Venezuela only).

TYPES: Male holotype, female allotype, and female paratype from Venezuela, presumably from one of the three localities listed by Simon (1893b: 441; Caracas, Corosal, and San-Esteban), deposited in MNHN (part of MNHN AR 5764, now PBI_OON 666).

ETYMOLOGY: The specific name is a patronym in honor of the collector and first student of these animals, Eugène Simon.

DIAGNOSIS: Males resemble those of *S. craneae* but have only a small, dorsally situated tubercle on the palpal conductor (figs. 82–85); females have a distinctively widened genital atrium (figs. 89–91).

MALE (PBI_OON 666, figs. 77–85): Total length 1.78. Carapace unpatterned, elevated portion of pars cephalica reticulate. Chilum short, wide triangle. Endites with ventral process with elongate tip directed toward, and almost meeting, tip of dorsal process. Anterior femora darkened. Leg spination: femur I p0-0-2; r0-1-0; tibiae: I v4-4-1p, II v4-4-0; metatarsi I, II v2-2-0. Embolus twisted, conductor with small, dorsally situated tubercle.

FEMALE (PBI_OON 666, figs. 86–91): Total length 1.86. Leg spination: femora I, II p0-0-2, r0-2-0; tibiae: I v4-4-2, II v4-4-1p; metatarsi: I v2-2-1p, II v2-2-0. Atrium greatly widened, almost filled with wide sclerotization that is more heavily sclerotized at sides than in middle; posterior margin of transverse bar connecting genitalic apodemes invaginated at midline.

Other Material Examined: None.

DISTRIBUTION: Venezuela.

Simonoonops grande, new species

Figures 92–106

TYPES: Male holotype and female allotype from a Berlese sample of forest litter taken at an elevation of 1000–1400 m at Rancho Grande, 15 km NW Maracay, Aragua, Venezuela (Feb. 19–27, 1971; S., J. Peck), deposited in FMNH (PBI_OON 38409).

ETYMOLOGY: The specific name is a noun in apposition taken from the type locality.

DIAGNOSIS: Males have the conductor originating far from the base of the embolus (figs. 97–100); females have an ovoid genital atrium with rounded lateral sclerotizations (figs. 104–106).



FIGURES 107–121. *Simonoonops andersoni*, new species, male (107–115) and female (116–121). **107.** Carapace, dorsal view. **108, 116.** Same, anterior view. **109.** Sternum, ventral view. **110.** Carapace, lateral view. **111.** Mouthparts, ventral view. **112.** Left embolus, prolateral view. **113.** Left palp, prolateral view. **114.** Same, ventral view. **115.** Same, retrolateral view. **117.** Abdomen, lateral view. **118.** Same, ventral view. **119, 120.** Genitalia, ventral view. **121.** Same, dorsal view.

MALE (PBI_OON 38409, figs. 92–100): Total length 1.72. Carapace unpatterned, surface of anterior portion of pars cephalica reticulate, posterior portion smooth. Chilum wide, triangular. Endites with ventral process with elongate tip directed toward posterior process. Anterior femora darkened. Leg spination: femur I p0-0-2, r0-1-0; tibiae: I v4-4-2, II v4-4-1p; metatarsi: I v2-2-0, II v2-1p-2. Embolus with dorsally directed tubercle on dorsal side, conductor distally divergent.

FEMALE (PBI_OON 38409, figs. 101–106): Total length 2.08. Leg spination: femora: I p0-0-2, r0-2-1, II p0-0-2; r0-2-0; tibiae I, II v4-4-2; metatarsi I, II v2-2-1p. Atrium relatively long, containing wide sclerotization occupying all but posterior portion, that sclerotization with darkened transverse line; apodemes basally wide, long, extending past groove connecting posterior spiracles.

OTHER MATERIAL EXAMINED: **Venezuela**: *Aragua*: Rancho Grande, path to Toma de Agua, 20 km NW Maracay, Mar. 22, 1992, litter near stream, elev. 3800 ft (L. Herman, AMNH PBI_OON 15), 1

DISTRIBUTION: Venezuela.

Simonoonops andersoni, new species

Figures 107–121

TYPES: Male holotype and female allotype from montane forest litter taken at an elevation of 1150 m at the Estación Biológica Rancho Grande, Parque Nacional Henri Pittier, 10°20′42″N, 67°41′09″W, Aragua, Venezuela (May 12, 1998; R. Anderson), deposited in AMNH (PBI_OON 800).

ETYMOLOGY: The specific name is a patronym in honor of the collector, Robert Anderson of the Canadian Museum of Nature.

DIAGNOSIS: Males can easily be recognized by the abruptly bent conductor (figs. 112–115), females by the strong, M-shaped genitalic apodemes connected by a transverse bar with a rounded anterior edge (figs. 119–121).

MALE (PBI_OON 800, figs. 107–115): Total length 1.77. Carapace unpatterned, surface of elevated portion of pars cephalica reticulate. Chilum small, triangular. Endites with ventral process darkened, ventrally protuberant. Anterior femora darkened. Leg spination: femur I p0-0-2, r0-1-0; tibiae: I v4-4-1p; II v4-4-0; metatarsi: I v2-2-1p; II v2-2-0. Embolus tip directed obliquely, conductor abruptly bent, with recurved tip.

FEMALE (PBI_OON 800, figs. 116–121): Total length 1.98. Leg spination: femora I, II p0-0-2, r0-1-1; tibiae: I v4-4-2; II v4-4-0; metatarsi: I v2-2-2; II v2-2-0. Atrium wide, broadly triangular but with anterior margin truncate, apodemes strongly sclerotized, M-shaped.

OTHER MATERIAL EXAMINED: **Venezuela**: *Aragua*: Parque Nacional Henri Pittier, Estación Biológica Rancho Grande, 10°20′42″N, 67°41′09″W, May 12, 1998, montane forest litter, elev. 1150 m (R. Anderson, AMNH PBI_OON 801), 5♂, 4♀.

DISTRIBUTION: Venezuela.

Simonoonops lutzi, new species

Figures 122, 123, 125–130

TYPE: Male holotype from Guyana, no specific locality (July 20, 1911; F. Lutz), deposited in AMNH (PBI_OON 38081).



FIGURES 122–137. *Simonoonops lutzi*, new species, male (122, 123, 125–130) and *S. princeps* (Simon), female (124, 131–137). **122, 131.** Carapace, dorsal view. **123, 124.** Sternum, ventral view. **125, 132.** Carapace, anterior view. **126.** Same, lateral view. **127.** Mouthparts, ventral view. **128.** Left palp, prolateral view. **129.** Same, ventral view. **130.** Same, retrolateral view. **133.** Abdomen, ventral view. **134.** Same, lateral view. **135, 136.** Genitalia, ventral view. **137.** Same, dorsal view.



FIGURES 138–152. *Simonoonops etang*, new species, male (138–146) and female (147–152). **138.** Carapace, dorsal view. **139, 147.** Same, anterior view. **140.** Sternum, ventral view. **141.** Carapace, lateral view. **142.** Mouthparts, ventral view. **143.** Left embolus, prolateral view. **144.** Left palp, prolateral view. **145.** Same, ventral view. **146.** Same, retrolateral view. **148.** Abdomen, lateral view. **149.** Same, ventral view. **150, 151.** Genitalia, ventral view. **152.** Same, dorsal view.

ETYMOLOGY: The specific name is a patronym in honor of the collector, Frank Lutz.

DIAGNOSIS: Male can easily be recognized by the large, dorsally inserted, smoothly arched palpal conductor (figs. 128–130).

MALE (PBI_OON 38081, figs. 122, 123, 125–130): Total length 1.78. Carapace unpatterned, surface of elevated portion of pars cephalica reticulate. Chilum small, triangular. Endites with ventral process darkened, ventrally protuberant. Anterior femora darkened. Leg spination: femur I p0-0-2, r0-1-1; tibiae I, II v4-4-1p; metatarsi: I v2-2-1p; II v2-2-0. Embolus flattened, bifid at tip, conductor heavily sclerotized, strongly arched.

Female: Unknown.

Other Material Examined: None.

DISTRIBUTION: Guyana.

Simonoonops etang, new species

Figures 138-152

TYPE: Male holotype taken in trap at Grand Etang, Grenada, Windward Islands (Nov. – Dec. 1912; R. Thaxter), deposited in MCZ (72975, PBI_OON 27630).

ETYMOLOGY: The specific name is a noun in apposition taken from the type locality.

DIAGNOSIS: Males have a complex embolus, with two distal prongs, most distal one narrow, curved, other one squared (figs. 143–146); females have an oval genital atrium and a narrow anterior genitalic process (figs. 150–152).

MALE (PBI_OON 27630, figs. 138–146): Total length 1.68. Posterior half of pars cephalica with pair of elongate, oval, paramedian light areas, surface reticulate except over those light areas, where smooth. Chilum small, triangular. Endites with ventral process with elongate tip directed toward dorsal process. Anterior femora darkened. Leg spination: femora: I p0-0-2, r0-1-0, II p0-0-1; tibiae: I v4-4-1p, II v4-4-0; metatarsi: I v2-2-1p, II v2-2-0. Embolus with two distal prongs, most distal one narrow, curved, other one squared; conductor distally narrowed.

FEMALE (PBI_OON 27632, figs. 147–152): Total length 2.02. Leg spination: femora I, II p0-0-2; r0-2-1; tibiae: I v4-4-2, II v4-4-1p; metatarsi: I v2-2-1p, II v2-2-0. Atrium oval, with strongly rebordered posterior margin, anterior genitalic process visible through cuticle as narrow median line; apodemes greatly elongated, bent.

OTHER MATERIAL EXAMINED: The following specimens taken with the types: MCZ 72972, PBI_OON 27633, 1♀; MCZ 72973, PBI_OON 27632, 3♀; MCZ 92974, PBI_OON 27631, 1♂.

DISTRIBUTION: Windward Islands (Grenada).

Simonoonops princeps (Simon), new combination Figures 124, 131–137

Dysderina princeps Simon, 1891: 557 (female holotype from St. Vincent, Windward Islands, in BMNH; examined). – Chickering, 1968: 24, figs. 53, 54 (female).

NOTE: Simon (1891) originally described only the female of this species. He later (1893a: 290, fig. 260) supplied an illustration of the male palp, presumably based on the male that was



FIGURES 153–167. *Simonoonops soltina* (Chickering), male (153–161) and female (162–167). **153.** Carapace, dorsal view. **154, 162.** Same, anterior view. **155.** Sternum, ventral view. **156.** Carapace, lateral view. **157.** Mouthparts, ventral view. **158.** Left embolus, prolateral view. **159.** Left palp, prolateral view. **160.** Same, ventral view. **161.** Same, retrolateral view. **163.** Abdomen, lateral view. **164.** Same, ventral view. **165, 166.** Genitalia, ventral view. **167.** Same, dorsal view.

found in the same vial as the female of this species housed in MNHN. That male belongs to *S*. *soltina* rather than *S. princeps*.

DIAGNOSIS: Females have an oval genital atrium that is almost entirely filled by a sclerotization including the distinctively U-shaped base of the anterior genitalic process (figs. 135–137).

MALE: Unknown.

FEMALE (PBI_OON 671, figs. 124, 131–137): Total length 2.49. Carapace unpatterned, surface of elevated portion of pars cephalica reticulate. Chilum small, triangular. All femora darkened. Leg spination: femora I, II p0-0-2, r0-2-1; tibiae: I v4-4-2, II v4-4-1p; metatarsi: I v2-2-1p, II v2-1p-2. Atrium oval, mostly filled by rectangular sclerotization including darkened, U-shaped base of anterior genitalic process.

MATERIAL EXAMINED: Windward Islands: Saint Vincent: no specific locality (BMNH 2356, PBI_OON 671), 1 ^o (holotype), (MNHN AR 5772, PBI_OON 667), 1 ^o.

DISTRIBUTION: Windward Islands (Saint Vincent).

Simonoonops soltina (Chickering), new combination Figures 153–167

Dysderina principalis (misidentification): Simon, 1891: 557, fig. 1 (in part, some specimens from Saint Vincent only).

Dysderina princeps (misidentification): Simon, 1893a: 290, fig. 260 (male).

Dysderina soltina Chickering, 1968: 31, figs. 69–73 (male holotype from Saint Vincent, in BMNH, examined; not female paratype, figs. 74, 75, which belongs to *S. chickeringi*).

Dysderina zinona Chickering, 1968: 35, figs. 85, 86 (female holotype from Mt. Soufriere, Saint Vincent, in MCZ, examined). NEW SYNONYMY.

DIAGNOSIS: Males can be recognized by the straight, distally expanded palpal conductor (figs. 158–161), females by the thick, heavily sclerotized transverse bar connecting the genitalic apodemes (figs. 165–167).

MALE (PBI_OON 669, figs. 153–161): Total length 1.80. Posterior half of pars cephalica with pair of elongate, oval, paramedian light areas, surface of anterior portion granulate, posterior portion smooth. Chilum small, rectangular. Endites with ventral process long, narrow, tip pointed toward dorsal process. All femora darkened. Leg spination: femora: I p0-0-2, r0-1-0, II p0-0-1; tibiae: I v4-4-0, II v4-3-0; metatarsi: I v2-2-1p, II v2-2-0. Embolus short, with broad, triangular base, conductor set at oblique angle, expanded at tip.

FEMALE (PBI_OON 672, figs. 162–167): Total length 2.08. Surface of posterior portion of pars cephalica with U-shaped smooth area surrounding reticulate median area. Leg spination: femora: I p0-0-2, r0-2-1, II p0-0-2; r0-2-0; tibiae I, II v4-4-1p; metatarsi I, II v2-2-1p. Atrium oval, posterior margin appears thickened because of heavily sclerotized transverse bar connecting apodemes; atrium almost filled with oval sclerotization, with long, narrow, anterior genitalic process visible through sclerotization.

MATERIAL EXAMINED: Windward Islands: Saint Vincent: no specific locality (BMNH PBI_OON 668, plus holotype of Dysderina soltina, BMNH PBI_OON 669, these specimens originally misidentified as Dysderina principalis by Simon, 1891), 63, 19, (MNHN 5765,



FIGURES 168–181. *Simonoonops chickeringi*, new species, male (168–175) and female (176–181). **168.** Carapace, dorsal view. **169, 176.** Same, anterior view. **170.** Sternum, ventral view. **171.** Carapace, lateral view. **172.** Mouthparts, ventral view. **173.** Left palp, prolateral view. **174.** Same, ventral view. **175.** Same, retrolateral view. **177.** Abdomen, lateral view. **178.** Same, ventral view. **179, 180.** Genitalia, ventral view. **181.** Same, dorsal view.

PBI_OON 4738, originally misidentified as *Dysderina principalis* by Simon, 1891), 2 \Im , (MNHN PBI_OON 670, misidentified as *Dysderina princeps* by Simon, 1893a), 1 \Im . Mt. Soufriere, Jan. 6, 1965 (R. Bell, MCZ PBI 672), 1 \Im (holotype).

DISTRIBUTION: Windward Islands (Saint Vincent).

SYNONYMY: As discussed in the Introduction, we hypothesize that Chickering's *D. zinona* is the female of *D. soltina*.

Simonoonops chickeringi, new species

Figures 168–181

Dysderina principalis (misidentification): Simon, 1891: 557 (in part, some specimens from Saint Vincent only).

Dysderina soltina (misidentification): Chickering, 1968: 31, figs. 74, 75 (female only).

TYPES: Male holotype and three female paratypes from Saint Vincent, no specific locality, deposited in BMNH (PBI_OON 673).

ETYMOLOGY: The specific name is a patronym in honor of Arthur Chickering, in recognition of his many contributions to our knowledge of goblin spiders.

DIAGNOSIS: Members of this species resemble those of *S. soltina* but have much weaker transverse ridges on the sternum (fig. 170), a wider embolus (figs. 173–175), and a smaller sclerotization in the female genital atrium, paired with a weaker transverse bar connecting the apodemes (figs. 179–181).

MALE (PBI_OON 673, figs. 168–175): Total length 1.52. Posterior half of pars cephalica with pair of elongate, oval, paramedian light areas, surface of anterior portion of pars cephalica reticulate, posterior portion smooth. Chilum short, triangular. Endites with ventral process distinctly set off from remainder of endite by strip of lightly sclerotized cuticle, almost diamond shaped, dorsal process narrow. All femora darkened. Leg spination: femur I p0-0-2; tibiae: I v4-3-0, II v4-4-0; metatarsi: I v2-2-1p, II v2-2-0. Embolus with elaborate, translucent dorsal flange, conductor short, with blunt tip.

FEMALE (PBI_OON 673, figs. 176–181): Total length 1.87. Posterior portion of pars cephalica with U-shaped smooth area surrounding median reticulate area. Leg spination: femora: I p0-0-2, r0-2-1, II p0-0-2, r0-2-0; tibiae I, II v4-4-1p; metatarsi: I v2-2-1p, II v2-1p-2. Atrium oval, posterior margin relatively thin, internal sclerotization surrounded by unsclerotized areas at side, narrower unsclerotized area anteriorly, only narrow anterior genitalic process visible through cuticle.

OTHER MATERIAL EXAMINED: Windward Islands: Saint Vincent: no specific locality (BMNH PBI_OON 674, paratype of Dysderina soltina Chickering, originally misidentified as Dysderina principalis by Simon, 1891), 1° , (MNHN PBI_OON 675, originally misidentified as Dysderina principalis by Simon, 1891), 1° .

DISTRIBUTION: Windward Islands (Saint Vincent).

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FIGURES 182–194. *Simonoonops spiniger* (Simon), new species, male (182–189) and female (190–194). **182.** Carapace, dorsal view. **183, 190.** Same, anterior view. **184.** Sternum, ventral view. **185.** Carapace, lateral view. **186.** Mouthparts, ventral view, with oblique distal view of embolus. **187.** Left palp, prolateral view. **188.** Same, ventral view. **189.** Same, retrolateral view. **191.** Abdomen, lateral view. **192.** Same, ventral view. **193.** Genitalia, ventral view. **194.** Same, dorsal view.

Simonoonops spiniger (Simon), new combination Figures 182–194

Dysderina spinigera Simon, 1891: 558, figs. 2, 3 (one male and two female syntypes from Saint Vincent, no specific locality, in BMNH; examined). – Chickering, 1968: 31, figs. 76–79. [N.B.: not *"Prodysderina" spinigera* of Dumitrescu and Georgescu, 1987].

DIAGNOSIS: Males can easily be recognized by the long, curved embolus (figs. 186–189), females by the short, wide genital atrium and the excavated anterior margin of the transverse bar connecting the genitalic apodemes (figs. 192–194).

MALE (PBI_OON 676, figs. 182–189): Total length 1.47. Posterior half of pars cephalica with pair of elongate, oval, paramedian light areas, surface reticulate except for smooth, U-shaped area at back. Chilum narrow, sharply pointed triangle. Endites with ventral process almost diamond shaped, sharply set off from remainder of endite, dorsal process narrow. Femora not darkened. Leg spination: femora: I p0-0-2, r0-2-2, II p0-0-1; tibiae I, II v4-4-1p; metatarsi: I v2-2-1p, II v2-1p-2. Embolus very long, curved, abruptly narrowed, sinuous near tip; conductor with membranous tip.

FEMALE (PBI_OON 676, figs. 190–194): Total length 1.82. Chilum tiny, sharply pointed triangle. Leg spination: femora I, II p0-0-2, r0-2-2; tibiae: I v4-4-2, II v4-4-1p; metatarsi: I v2-2-1p, II v2-1p-2. Atrium very wide, with posteriorly expanded posterolateral corners, with wide sclerotization occupying anterior two-thirds of length; transverse bar connecting apodemes heavily sclerotized.

MATERIAL EXAMINED: Windward Islands: Saint Vincent: no specific locality (BMNH PBI_OON 676), 1 °, 2 ° (syntypes).

DISTRIBUTION: Windward Islands (Saint Vincent); records of this species from Venezuela by Simon (1891, 1893b) and by Dumitrescu and Georgescu (1987) are all erroneous, and refer to species that do not even belong to *Simonoonops*.

Simonoonops globina (Chickering), new combination Figures 195–203

Dysderina globina Chickering, 1968: 14, figs. 28–31 (male holotype from Laudat, Saint George, Dominica, in AMNH; examined).

DIAGNOSIS: Males of this species resemble those of *S. spiniger* but can be recognized by their large, basally bifid conductor (figs. 200–203).

MALE (PBI_OON 26335, figs. 195–203): Total length 1.80. Carapace unpatterned, surface of pars cephalica reticulate. Chilum short, narrow, triangle. Endites with ventral process very long, curved ventrally at about half its length, dorsal process narrow. Femora not darkened. Leg spination: femora: I p0-0-2, r0-1-0, II p0-0-2; tibiae I, II v4-4-1p; metatarsi: I v2-2-1p, II v2-1p-2. Conductor basally bifid, with arched distal prong.

Female: Unknown.

MATERIAL EXAMINED: Leeward Islands: Dominica: Saint George: Laudat, June 12, 1911 (AMNH PBI_OON 677), 13 (holotype), same (AMNH PBI_OON 38074), 13 (paratype).



FIGURES 195–203. *Simonoonops globina* (Chickering), male. **195.** Carapace, dorsal view. **196.** Same, anterior view. **197.** Sternum, ventral view. **198.** Carapace, lateral view. **199.** Mouthparts, ventral view. **200.** Left embolus, prolateral view. **201.** Left palp, prolateral view. **202.** Same, ventral view. **203.** Same, retrolateral view.

Saint Paul: Middle Falls Trail, Cochrane, W Morne Macaque, 15°20.852'N, 61°20.698'W, Apr. 29, 2006, rainforest leaf litter, elev. 2300 ft (Z. Prusak, FSCA PBI_OON 26335), 23. DISTRIBUTION: Leeward Islands (Dominica).

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REFERENCES

- Benoit, P.L.G. 1979. Contributions à l'étude de la faune terrestre des îles granitiques de l'archipel des Séchelles (Mission P.L.G. Benoit - J.J. Van Mol 1972). Oonopidae (Araneae). Revue de Zoologie Africaine 93: 185–222.
- Chickering, A.M. 1968. The genus *Dysderina* (Araneae, Oonopidae) in Central America and the West Indies. Breviora 296: 1–37.
- Dumitrescu, M., and M. Georgescu. 1987. Quelques représentants de la famille Oonopidae (Araneae) du Venezuela. In V. Decu et al. (editors), Fauna hipogea y hemiedáfica de Venezuela y de otros paises de América del Sur. Bucarest: Editura Academiei Republicii Socialiste România, 1: 89–105.
- Harvey, M.S. 2002. Nomenclatural notes on Solifugae, Amblypygi, Uropygi and Araneae (Arachnida). Records of the Western Australian Museum 20: 449–459.
- Keyserling, E. 1881. Neue Spinnen aus Amerika. III. Verhandlungen der Zoologisch-Botanisch Gesellschaft in Wien 31: 269–314.
- Kraepelin, K. 1899. Zür Systematik der Solifugen. Mitteilungen aus dem Naturhistorischen Museum in Hamburg, 16: 197–259.
- Platnick, N.I., and N. Dupérré. 2009a. The goblin spider genera *Opopaea* and *Epectris* (Araneae, Oonopidae) in the New World. American Museum Novitates 3649: 1–43.
- Platnick, N.I., and N. Dupérré. 2009b. The American goblin spiders of the new genus *Escaphiella* (Araneae, Oonopidae). Bulletin of the American Museum of Natural History 328: 1–151.
- Platnick, N.I., and N. Dupérré. 2011. The Andean goblin spiders of the new genus *Scaphidysderina* (Araneae, Oonopidae), with notes on *Dysderina*. American Museum Novitates 3712: 1–51.
- Platnick, N.I., and N. Dupérré. In press. The Andean goblin spiders of the new genera *Paradysderina* and *Semidysderina* (Araneae, Oonopidae). Bulletin of the American Museum of Natural History.
- Saaristo, M.I. 2001. Dwarf hunting spiders or Oonopidae (Arachnida, Araneae) of the Seychelles. Insect Systematics and Evolution 32: 307–358.
- Simon, E. 1873. Aranéides nouveaux ou peu connus du midi de l'Europe. (2e mémoire). Mémoires de la Société Royale des Sciences de Liège (2) 5: 187–351.

Simon, E. 1891. On the spiders of the island of St. Vincent. Part 1. Proceedings of the Zoological Society of London 1891: 549–575.

Simon, E. 1893a. Histoire naturelle des araignées. Vol. 1: 257-488. Paris: Roret.

Simon, E. 1893b. Voyage de M. E. Simon au Venezuela (Décembre 1887–Avril 1888). 21^e Mémoire (1). Arachnides. Familles des Uloboridae, Zoropsidae, Dictynidae, Oecobiidae, Filistatidae, Sicariidae, Leptonetidae, Oonopidae, Dysderidae, Caponiidae, Prodidomidae, Drassidae, Palpimanidae et Zodariidae. Annales de la Société Entomologique de France 61: 423–462.

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