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A new callianassid (Decapoda: Thalassinidea) from the southern Caribbean Sea

Juan Pablo Blanco Rambla, Ildefonso Liñero Arana, and Luis Beltrán Lares M.

Instituto Oceanográfico de Venezuela, Universidad de Oriente, Apdo. Postal 245, Cumaná, Estado Sucre, Venezuela

Abstract.—A new species of callianassid, *Sergio guaiqueri,* similar to *S. guara* (Rodrigues, 1971) is described from the northeastern coast of Venezuela. The new species differs in having larger, more inflated cornea; in the shape of margins of merus and carpus of the major cheliped, and in dentition of the dactyl of the major cheliped.

Manning & Felder (1991) placed the genus *Neocallichirus* Sakai, 1988, in the subfamily Callichirinae, and included six western Atlantic species. Manning (1993) later added two new species to this genus, but noted that it could be divided into two groups of species based on the shape of the telson and uropodal endopod. Subsequently, Manning & Lemaitre (1994) restricted the genus *Neocallichirus,* and proposed the new genus *Sergio* for four western Atlantic species forming one of those groups: *S. guassutinga* (Rodrigues, 1971), *S. guara* (Rodrigues, 1971), *S. mirim* (Rodrigues, 1971), and *S. trilobatus* (Biffar, 1970). With the discovery of *S. guaiqueri* new species, the genus now contains five species in the western Atlantic. Specimens from Venezuela reported by Blanco Rambla & Liñero Arana (1994) as *Neocallichirus* sp. actually represent the new species described herein.

Specimens of the new species were collected in the northeastern coast of Venezuela with a Petersen grab on board R/V *Guaiquerí II.* Measurements (mm) were made with an ocular micrometer. Carapace length (cl) was measured along the middorsal line of the carapace from the tip of the rostrum to posterior margin; total length (tl) was measured from tip of rostrum to posterior margin of telson. The holotype has been deposited in the National Museum of Natural History, Smithsonian Institution, Washington, D.C. (USNM), and paratypes in the Museum of the Instituto Oceanográfico de Venezuela, Cumaná (IOV).

Family Callianassidae Dana, 1852
Subfamily Callichirinae
Manning & Felder, 1991
Genus *Sergio* Manning & Lemaitre, 1994
Sergio guaiqueri, new species
Figs. 1–3

Neocallichirus sp. Blanco Rambla & Liñero Arana, 1994:20–22, figs. 4–5.

Material.—Venezuela: north of Jose, Anzoátegui State (10°08′40″N, 64°50′10″W), Petersen grab, 9 May 1991, 24 m, clay-silt bottom: 1 male (cl 4.2 mm, holotype, USNM 265294); 3 males (tl 28.3–49.1 mm, paratypes, IOV).

Diagnosis.—Carapace with 3 unarmed anterior projections; median extending less than half length of eyestalks. Eyestalk with cornea subterminal, inflated. Propodus of third maxilliped longer than wide, distal margin sinuous. Major cheliped with ventral serrations on merus, carpus as long as palm; dactylus with 3–4 small teeth. Telson nearly 2 times wider than long; posterior

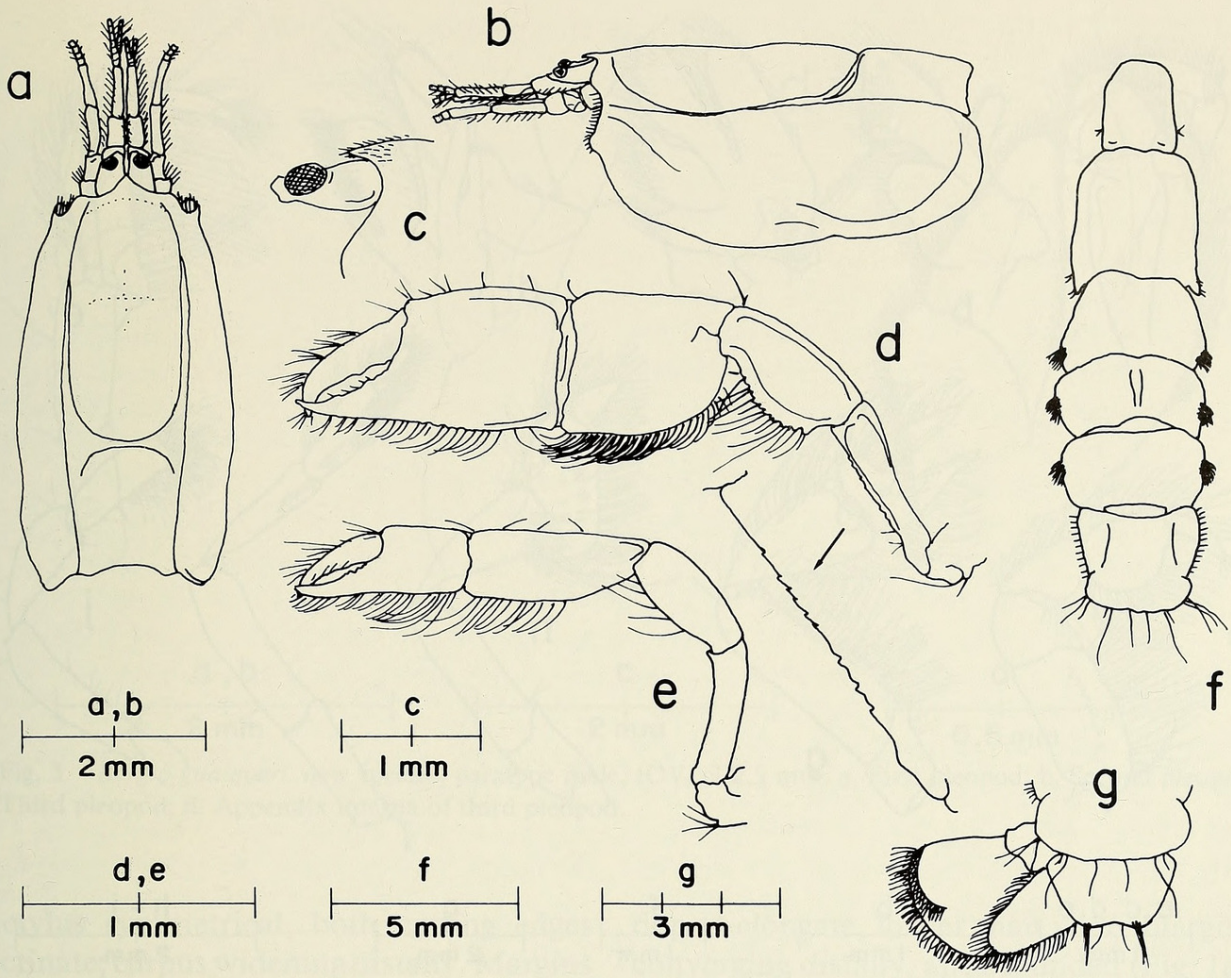

Fig. 1. *Sergio guaiqueri,* new species. a–c, f, g, holotype male, USNM 265294, cl 4.2 mm; f, g, paratype male, IOV, cl 2.5 mm. a, Carapace and cephalic appendages (dorsal view); b, Same (lateral view); c, Anterior portion of carapace and eyestalk; d, Major cheliped (inner face); e, Minor cheliped (outer face); f, Abdomen; g, Telson and left uropod.

margin divided by a median cleft. Uropodal endopods longer than wide.

Description.—Front with 3 anterior projections, median subtriangular, flattened, extending less than half length of eyestalks, with scattered setae on dorsal surface and few setae on ventral surface near the apex. Carapace rounded dorsolaterally; linea thalassinica distinct, reaching posterior margin of carapace; cervical groove distinct, delimiting posterior margin of dorsal oval (Fig. 1a, b).

Abdominal somites smooth; somite 1 smallest, with 2 short setae at each side on posterior half; somite 2 largest, with small setae posteriorly; somites 3–5 wider than long, with 1 tuft of dense setae posterolaterally on each side; somite 6 bilobed, anterior lobe larger than posterior, with long setae on posterior margin (Fig. 1f).

Eyestalk dorsally flattened, not extending to end of first segment of antennular peduncle; cornea subterminal, hemispherical, pigmented; anterior margin of eyestalk with angled projection (Fig. 1c). Antennular peduncle shorter than antennal peduncle; segment 3 of antennular peduncle longer than segments 1 and 2. Segment 4 of antennal peduncle as long as segment 5, segments 1–3 short.

Mandible with 1 sharp tooth on molar process; incisor process with 10 sharp teeth, median longest; mandibular palp 3-segmented, third article longest, bearing

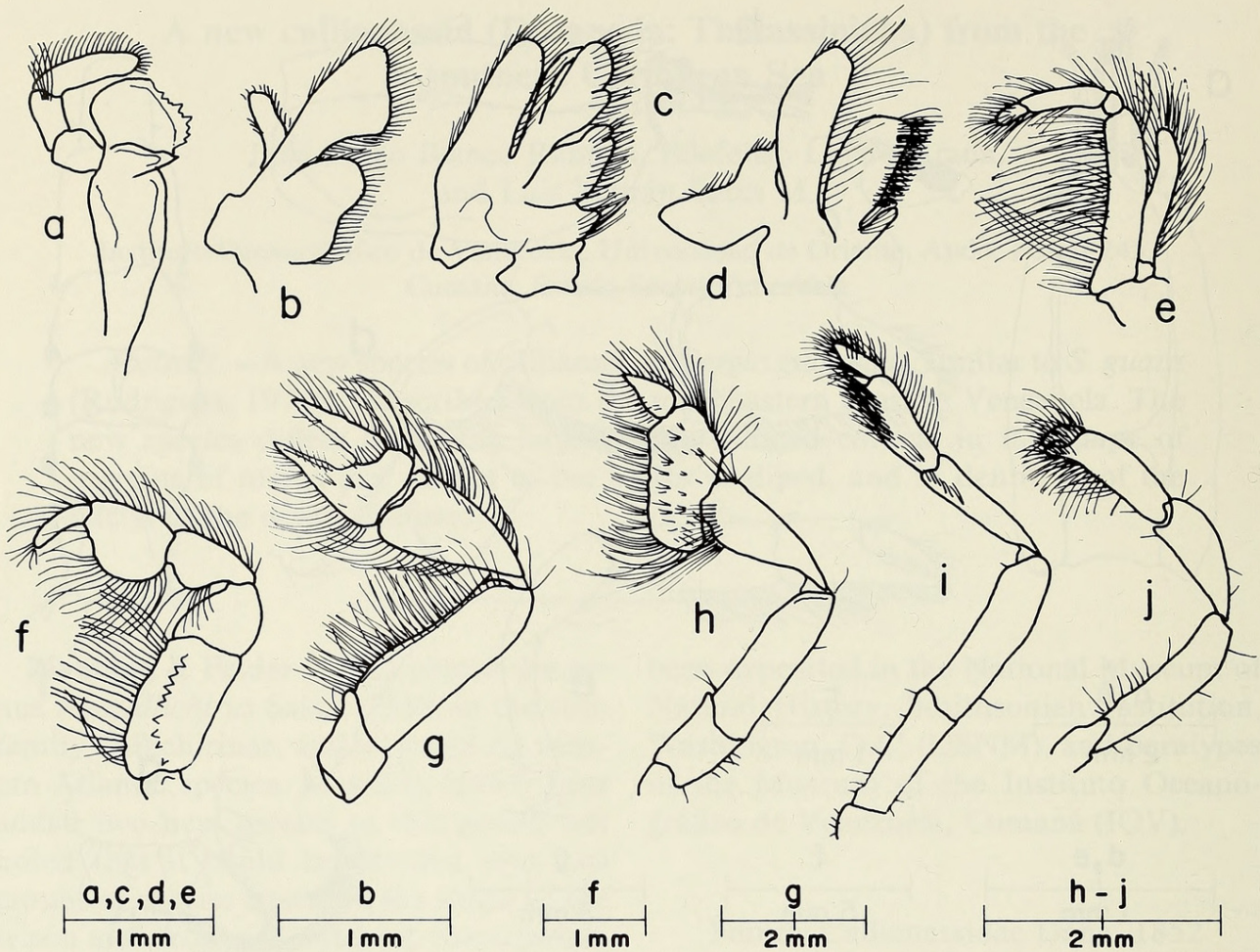

Fig. 2. *Sergio guaiqueri,* new species, paratype male, IOV, cl 2.5 mm. a, Mandible; b, Maxillule; c, Maxilla; d, First maxilliped; e, Second maxilliped; f, Third maxilliped (inner face); g, Second pereopod; h, Third pereopod; i, Fourth pereopod; j, Fifth pereopod.

numerous setae on outer surface (Fig. 2a). Maxillule with elongate lobe on coxo-basal endite, palp slender, unsegmented. Maxilla with elongate lobes on both coxal and basal endites, scaphoganthite with anterior lobe rounded (Fig. 2b, c).

First maxilliped with short basal endite. Second maxilliped with exopod shorter than merus of endopod, dactyl short. Third maxilliped without exopod; ischium-merus subpediform, ischium with crista dentata on inner surface, with about 10 teeth; propodus longer than wide, distal margin emarginate, concave (Fig. 2d–f).

Chelipeds dissimilar, unequal. Major cheliped strong, ischium elongate, widening distally, ventral margin finely serrated; merus broad, ventrally denticulate, bearing long setae, convex, without hooks or spines; carpus subquadrate, longer than wide, ventral margin evenly convex, smooth; propodus with palm as long as carpus, ventral margin irregular, except on fixed finger, with long setae; cutting edge of fixed finger with 3–4 small teeth; dactylus slightly shorter than palm, with tufts of setae on dorsal margin, curved ventrally, tip hooking over outer surface of fixed finger, cutting edge with 3–4 small teeth on proximal half (Fig. 1d).

Ischium of minor cheliped narrow, margins diverging distally; merus broad on distal half, lacking ventral keel, serrations or hooks; carpus elongate, more than 2 times longer than wide, with long setae on ventral margin; dactylus longer than palm, both dactylar and fixed finger with cutting edges denticulate (Fig. 1e).

Second pereopod chelate, fixed finger and

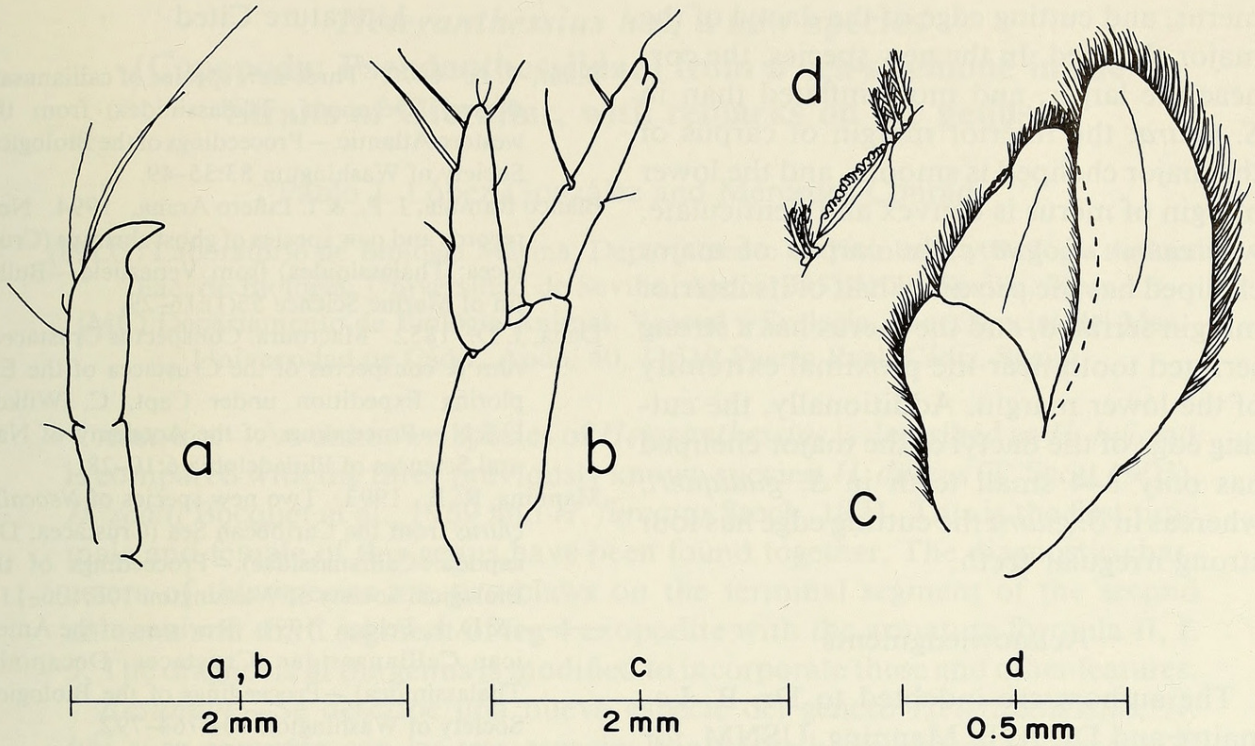

Fig. 3. *Sergio guaiqueri,* new species, paratype male, IOV, cl 2.5 mm. a, First pleopod; b, Second pleopod; c, Third pleopod; d, Appendix interna of third pleopod.

dactylus symmetrical, both cutting edges pectinate; carpus widening distally. Margins of chela and carpus setose; ventral margin of merus with row of evenly spaced long setae. Third pereopod with carpus widening anteriorly; propodus 2 times wider than long, outer face covered with numerous tufts of short setae; dactylus short, articulating on upper anterior margin. Fourth pereopod subchelate, with carpus and propodus broader distally; propodus and dactylus with setae, densely setose grooming apparatus on ventral margin of propodus. Fifth pereopod chelate, propodal finger short; dactylus elongate, apex rounded. Propodus and dactylus setose; carpus widening distally (Fig. 2g–j).

Telson short, nearly 2 times wider than long, subtrapezoidal, posterior margin divided by shallow median cleft into broadly rounded posterolateral lobes. Uropods longer than telson; uropodal protopod bilobed, lacking spines; exopod broad, longer than endopod, upper exopodal plate shorter than lower plate, posterior margin flattened; endopod elongate, longer than wide, margins converging distally, apex rounded (Fig. 1g).

First pleopod of male uniramous, 2-segmented, bearing a few setae, terminal segment hooked at tip (Fig. 3a). Second pleopod biramous, endopod and exopod of about the same length, blade-like exopod, with a few setae; endopod with a slender lobe and few setae. Appendix interna and appendix masculina absent (Fig. 3b). Pleopods 3–5 alike, exopods and endopods foliaceous; endopods with small appendix interna embedded on inner margins; margins of endopods and exopods with plumose setae (Fig. 3c, d).

Distribution.—Known so far only from north of Jose, Anzoátegui State, Venezuela.

Etymology.—The specific name honors an ancient indian tribe Guaiquerí from the northern Venezuelan coast, and the research vessel of the IOV.

Remarks.—*Sergio guaiqueri,* new species, is most closely related to *S. guara.* The two can be separated by differences in the shape of the corneae, margins of carpus and

merus, and cutting edge of the dactyl of the major cheliped. In the new species, the corneae are larger, and more inflated than in *S. guara*; the interior margin of carpus of the major cheliped is smooth, and the lower margin of merus is convex and denticulate, whereas in *S. guara* the carpus of major cheliped has the proximal half of its interior margin serrated, and the merus has a strong serrated tooth near the proximal extremity of the lower margin. Additionally, the cutting edge of the dactyl of the major cheliped has only 3–4 small teeth in *S. guaiqueri,* whereas in *S. guara* the cutting edge has four strong irregular teeth.

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