

P A P É I S A V U L S O S

DO

DEPARTAMENTO DE ZOOLOGIA

SECRETARIA DA AGRICULTURA — SÃO PAULO — BRASIL

ADDITIONS TO THE KNOWLEDGE OF THE
CEPHALOTINI ANTS
(HYMENOPTERA, FORMICIDAE)

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The present paper contains a redescription of two species, *Procryptocerus elegans* Santschi and *Paracryptocerus prodigiosus* (Santschi), based on types which previously were not available when I was working on a monograph of the ant tribe Cephalotini (Kempf, 1951, 1958). Two new species of *Procryptocerus* are also proposed, and three forms of the same genus, heretofore considered as subspecies, are raised to specific category. Finally, interesting and significant new locality records are given for several species in the genera *Procryptocerus*, *Zacryptocerus* and *Paracryptocerus*.

The work was undertaken with the aid of a fellowship of the "Conselho Nacional de Pesquisas" of Brazil. The specimens studied came from the following collections: Coll. Seabra — private collection of Dr. Carlos Alberto Campos Seabra; CTB — Borgmeier collection, in the custody of the author; DZSP — Departamento de Zoologia da Secretaria de Agricultura do Estado de São Paulo; NHMB — Naturhistorisches Museum, Basel, Switzerland (Santschi collection); WWK — author's private collection.

Moreover, I wish to thank Dr. C. A. C. Seabra, Dr. Fred Keiser, Dr. W. Weyrauch, Mr. Karol Lenko, Mr. Fritz Plaumann, Lt.-Col. M. Alvarenga and my Franciscan confrères Frs. Thomas Borgmeier, Columbano Gilbert, Bruno Kelber and Reinaldo Mueller for their continued support in behalf of my ant studies.

***Procryptocerus curvistriatus* Kempf, n. stat.**

Procryptocerus sulcatus curvistriatus Kempf, 1949: 425-426, fig. 5 (Worker; Brazil, Espírito Santo: Santa Teresa). — Kempf, 1951: 72-73, fig. 32.

Convento S. Francisco, São Paulo.

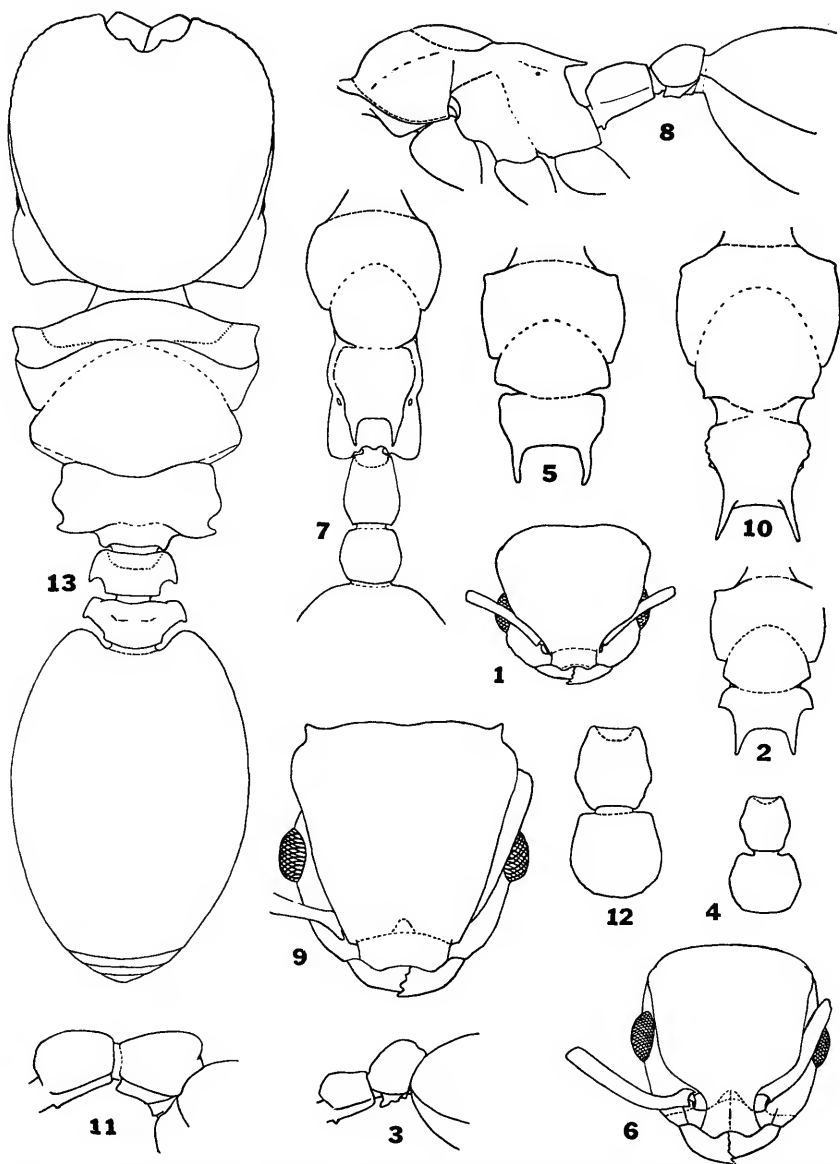


Fig. 1, *Procryptocerus elegans* Santschi, worker, holotype: head. Fig. 2, Idem: thorax. Fig. 3, Idem: pedicel in lateral view. Fig. 4, Idem: pedicel in dorsal view. Fig. 5, *Procryptocerus hylaeus* Kempf, worker: thorax. Fig. 6, *Procryptocerus seabrai*, sp. n., worker, holotype: head. Fig. 7, Idem: thorax and pedicel in dorsal view. Fig. 8, Idem: thorax and pedicel in lateral view. Fig. 9, *Procryptocerus virgatus*, sp. n., holotype, worker: head. Fig. 10, Idem: thorax. Fig. 11, Idem, pedicel in lateral view. Fig. 12, Idem: pedicel in dorsal view. Fig. 13, *Paracryptocerus prodigiosus* (Santschi), lectotype, soldier: body in dorsal view. (Kempf del.)

Even though this form is still known only from the single holotype, there is no cogent reason for considering it as a subspecies of the likewise little known *sulcatus*. The peculiar sculpture patterns of the thorax seem to be sufficient for characterizing a full-fledged species.

***Procryptocerus elegans* Santschi**

(Figs. 1-4)

Procryptocerus elegans Santschi, 1921a: 98-99 (Worker; Brazil, São Paulo City: Ipiranga). — Kempf, 1951: 102-103.

Type. — A lone worker (holotype) taken by H. Luederwaldt in the borough of Ipiranga, São Paulo City, Brazil (n. 19.713), in the Santschi collection (NHMB). Examined.

Worker (holotype). — Total length 3.7 mm; head length 0.85 mm; head width across eyes 0.91 mm; thorax length 1.07 mm; pronotum width 0.67 mm; petiole length 0.29 mm; petiole width 0.28 mm; postpetiole length 0.35 mm; postpetiole width 0.42 mm; gaster length 1.20 mm; gaster width 0.85 mm. Black; tip of mandibles, antennae, femora, tibiae and first tarsite fuscous ferruginous; tip of scape, tip of apical funicular segment, tip of tibiae and first tarsite, extensor face of fore tibiae, tarsites II-V of all legs yellowish-brown. Integument opaque.

Head as shown in Fig. 1. Mandibles longitudinally striate. Clypeus excised in middle of anterior border, longitudinally gently convex, transversely faintly concave, posterior border vestigial. Frontal area obsolete. Frontal carinae sinuous, not covering in front the antennal socket in full-face view, forming posteriorly a broadly rounded and little prominent lobe in front of the obtusely angulate and subdentate occipital corner. Occipital border bisinuous with a weak median impression, sharply marginate, separating the occipital truncation from the vertex. Cheeks in full-face view strongly convex. Eyes evenly convex. Clypeus with about 10 fine and widely spaced longitudinal costulae. Front and vertex longitudinally rugulose, rugulae with rare cross-connections, slightly converging caudad on posterior half, presenting approximately 32 rugae in front of the occipital truncation. Both rugulae and intervals finely reticulate-punctate; larger shallow but rather indistinct foveolae rare, more conspicuous postero-laterally. Cheeks reticulate-rugose. Gular face longitudinally striate. Occipital truncation superficially reticulate, almost smooth and shining, with vertical costulae in the middle and a few transverse costulae on the lateral portions. Scape shagreened. Funiculus submoniliform; segment I longer than broad, II-VII rather broader than long, VIII and IX about as long as broad, X twice as long as broad, segments gradually thickening towards apex.

Thorax in dorsal view shown in Fig. 2. Note the angulate shoulders, the vestigial promesonotal suture, the obtusely angulate lateral lobes of mesonotum, the acutely dentate and prominent antero-lateral lobes of basal face of epinotum and the relatively short and widely separated epinotal spines. Lateral borders of thoracic dorsum sharply marginate. Mesoepinotal groove impressed. Promesonotum gently convex in both directions. Basal face of epinotum nearly flat. Dorsum of thorax longitudinally costate-rugose, with about 20 rugae across pronotum, 18 across mesonotum; antero-lateral portions of pronotum reticulate-rugose and foveolate. Sides of thorax, including laterotergite of pronotum, horizontally striate. Declivous face of epinotum practically devoid of sculpture and quite shining, with the exception of a few vertical rugosities near bottom. Lateral face of fore coxae with a few vestigial horizontal striae postero-inferiorly, of mid and hind coxae with a few weak vertical striae. Apical half of extensor face of femora with a few longitudinal rugae. Extensor face of tibiae scarcely rimose. Rest of legs smooth and shining.

Pedice! as shown in Figs. 3 and 4; longitudinally rugose, petiole with 7-8 rugae, postpetiole with 10-12 rugae on dorsum. Petiole dorsally rather flat, postpetiole in profile convex above. Tergum I of gaster densely longitudinally striato-costulate, intervals with a row of fine punctulae; costulae fading out at posterior fifth of tergum, giving place to superficially reticulate sculpture in the middle, to longitudinal rows of small punctulae laterally. Exposed portions of terga II-IV with faint, superficial, transverse rugulae. Sternum I sculptured as tergum I.

Erect hairs stiff, whitish, blunt at apex, scattered, relatively short, on body and appendages. Tergum I of gaster also possesses minute scattered and appressed setulae.

Discussion. — This species gets dangerously close to the sympatric *lepidus* Forel, agreeing in habitus and general characters. The slightly smaller size, the predominance of longitudinal rugae on dorsum of head combined with rare and inconspicuous meshes and shallow foveolae, the nearly smooth extensor face of tibiae, the finer, striato-rugose sculpture of tergum I of gaster that fades out before reaching the posterior border, are the ensemble of characters which separate for the time being *elegans* from *lepidus*. Inasmuch as *lepidus* is quite variable and occasionally approaches in one or the other of the aforementioned characters the condition obtained in *elegans*, the validity of the latter as a good species is doubtful. I let it stand provisionally, pending on further material.

The present species was included and correctly placed in my key to the species of *Procryptocerus* (Kempf, 1951: 21), although at the time only Santschi's fairly detailed description was available. However, the measurement used as an auxiliary character of separation is no

longer useful, since the smallest specimens of the variable *lepidus* are close to *elegans*.

Procryptocerus hylaeus Kempf, n.stat.

(Fig. 5)

Procryptocerus goeldii Forel, 1912 (*nec* 1899): 207 (Worker; Colombia: Naranjo, foothills of Sierra Nevada de Santa Marta). Kempf, 1957 (*partim*): 399-400 (Brazil, Rio Grande do Norte: Goianinha).

Procryptocerus goeldii hylaeus Kempf, 1951: 50-51 (Worker; Colombia: Naranjo; Trinidad: Mt. Tucuche; Bolivia: Rurrenabaque).

When originally described, *hylaeus* was based on a few specimens hailing from stations that are peripheral to the habitat of the typical *goeldii*. This fact and the overall resemblance with *goeldii* led me to propose them as a subspecies of the latter. Now I have in my collection several stray individuals from Agudos, São Paulo State, Brazil, which are not only identical with *hylaeus*, but also occur side by side with *goeldii*. Thus it seems that *hylaeus* is not a subspecies at all, but a good species. The differential characters are as stated in the original description (Kempf, 1951: 51), except for the antero-median deeply impressed furrow on the basal face of epinotum. This feature has no longer any distinguishing value, being absent in most southern specimens. I add a figure showing the thorax of the worker in dorsal view (Fig. 5).

New records. — Brazil, São Paulo State: Agudos, C. Gilbert & R. Mueller leg., 4 workers; Mato Grosso State: Dourados, R. Mueller leg., 1 worker; Rio Grande do Norte State: Goianinha, M. Alvarenga leg., 1 worker (identified as *goeldii* in my 1957 paper!). Paraguay, Col. Independencia nr. Villarica, N. Kusnezov leg. 1 female (WWK).

Procryptocerus lepidus Forel, n. stat.

Procryptocerus subpilosus lepidus Forel, 1908: 355-356 (Worker; Brazil: São Paulo City). — Forel, 1911: 262-263. — Kempf, 1951: 64-65, figs. 35, 47 (Worker; Brazil, São Paulo State: São Paulo; Rio de Janeiro State: Petrópolis).

Forel did not know the true *subpilosus* (a species from the upper Amazon river, insufficiently diagnosed by Fr. Smith in 1860) when describing *lepidus* as subspecies of the former. Later (1911) he saw in the Bates collection a presumable syntype of *subpilosus* and recognized the striking differences of *lepidus*, viz. much smaller size, much shorter epinotum with prominent baso-lateral lobes, the coarse and shallow foveolae among longitudinal rugulae on dorsum of head, but did not change its status. Neither did I in my monograph (1951).

Although *subpilosus* is still practically unknown, I now feel that there is no reason for leaving *lepidus* attached to the former. Therefore, I propose to raise it to specific rank.

New records: — Brazil, Santa Catarina State: Nova Teutônia, F. Plaumann leg. (CTB); São Paulo State: Barueri, K. Lenko leg. (DSZP, WWK); Rio de Janeiro State: Itatiaia, J. F. Zikán leg. (CTB); Espírito Santo State: Afonso Cláudio, O. Conde leg. (CTB).

***Procryptocerus seabrai*, sp.n**

(Figs. 6-8)

Worker (holotype). — Total length 5.0 mm; head length 1.15 mm; head width across eyes 1.17 mm; eye length 0.32 mm; thorax length 1.47 mm; thorax width across pronotum 0.77 mm; petiole length 0.40 mm; petiole width 0.32 mm; postpetiole length 0.32 mm; postpetiole width 0.35 mm; gaster length 1.52 mm; gaster width 1.09 mm. Black; scape and tibiae light brown; funiculus, proximal constricted portion of femora and tarsi fuscous ferruginous. Subopaque.

Head as shown in Fig. 6. Mandibles longitudinally striate. Median lobe of clypeus with the anterior border excised in the middle, almost smooth and somewhat shining; with a weak sagittal keel, laterally with 1-2 faint longitudinal costulae. Frontal area impressed, rather distinct. Frontal carinae strongly sinuous: anterior half strongly diverging laterad, not covering the antennal sockets in full-face view; posterior half only slightly diverging caudad and nearly straight, terminating a little in front of the unarmed occipital corner, and forming a feebly prominent lobe. Front and vertex clathrate, *i. e.* longitudinally rugose with occasional cross-connections between the widely spaced rugae; intervals vestigially punctate, somewhat shining. Occipital truncation longitudinally striate, not separated by a sharply marginate border from vertex, but merging with the latter by a continuous curvature. Posterior border of head in full-face view gently convex and not impressed in the middle. Cheeks reticulate-rugose. Lower portions of sides of head and gular face coarsely longitudinally striate. Striae and intervals on occiput and gular face show superimposed rows of fine punctulae. Eyes gently and evenly convex. Antennal scrobe reticulate-punctate, opaque. Scape curved near base, finely shagreened. Funicular segments somewhat moniliform, segments II-IX about as long as broad, X twice as long as broad, VIII-X much thicker than the preceding, forming a rather distinct 3-segmented apical club.

Thorax as shown in Figs. 7 and 8. Dorsum coarsely reticulate-rugose, laterally practically immarginate. Shoulders almost rounded. Laterotergite of pronotum not excavate, horizontally striate. Promeso-

notal suture vestigial. Mesonotum nearly as long as broad, with scarcely projecting and broadly rounded lateral lobes. Mesoepinotal groove gently impressed, not interrupting the sculpture. Basal face of epinotum as long as broad, lacking prominent antero-lateral lobes, terminating in a pair of rather delicate and short horizontal spines. Declivous face without macrosculpture in the middle, somewhat shining. Sides of thorax horizontally and coarsely striate, becoming reticulate-rugose above at the junction with dorsum. Fore coxae obliquely, mid and hind coxae vertically striate on outer face. The whole posterior face of fore femora and the apical half of dorsal and posterior face of middle and hind femora longitudinally striate-costate. All striae and rugae of thorax with superimposed rows of fine punctulae. Tibiae smooth and shining.

Segments of pedicel (Figs. 7 and 8) dorsally reticulate-rugose, the longitudinal rugae being predominant. Petiole elongate, with gently convex sides; subpetiolar tooth small but distinct. Postpetiole subquadrate, dorsally and laterally very little convex, scarcely broader than petiole. Gastric terga and sterna densely and sharply aciculate.

Golden-yellow, pointed, erect or slightly oblique, long hairs abundant on body and appendages. Gaster lacking appressed or decumbent hairs. Pubescence confined to funiculi, anterior face of coxae and tibiae.

Types. — 1 worker (holotype) from Boracéia Biological Station near Salesópolis, São Paulo State, Brazil, Frederico Lane leg., February 5, 1960 (WWK); 3 workers (paratypes) from Floresta da Tijuca, Guanabara State, Brazil, Dr. C. A. C. Seabra leg., November 29, 1959 (Coll. Seabra and WWK). The paratypes agree with the holotype in all details. Their critical measurements vary as follows: Head length 1.01-1.14 mm; head width across eyes 1.09-1.20 mm; thorax length 1.33-1.49 mm.

Discussion. — This highly distinctive species resembles in many ways the forms of the *rudis*-group. It differs, however, in the ensuing important features: Frontal carinae sinuous, not covering in front the anterior sockets in full-face view; occipital corners unarmed; thorax shorter and broader; tibiae smooth.

In my key to the species of *Procryptocerus* (Kempf, 1951: 19-20), *seabrai* runs to couplet 10, where it disagrees with either lug: a) by having the long hairs on gaster erect and not very dense; b) by the aciculate sculpture of the gaster, where the punctulae are not disposed in longitudinal rows. In its native habitat of southeastern Brazil, *seabrai* has no close relative and is easily recognized.

I take great pleasure in naming this species for my generous friend and its first discoverer, Dr. Carlos Alberto Campos Seabra.

***Procryptocerus virgatus*, sp. n.**

(Figs. 9-12)

Worker (holotype). — Total length 6.2 mm; head length 1.41 mm; head width across eyes 1.41 mm; eye length 0.32 mm; thorax length 1.86 mm; pronotum width 0.96 mm; petiole length 0.48 mm; petiole width 0.43 mm; postpetiole length 0.51 mm; postpetiole width 0.53 mm; gaster length 1.70 mm; gaster width 1.45 mm; hind femur length 1.23 mm. Black; tip of mandibles, scape, femora, tibiae, 4 apical tarsites ferruginous or fuscous ferruginous.

Head (Fig. 9) subopaque. Mandibles superficially and very finely punctate, apical portion nearly smooth with coarse and sparse piligerous punctures. Median lobe of clypeus excised in middle of anterior border, anterior portion perpendicular to dorsum of head, posterior portion strongly convex longitudinally and continuous with front; limited posteriorly by a very faint transverse impression and the vestigial frontal area; finely reticulate-punctate and with about 13 widely spaced and weak longitudinal costulae. Frontal carinae nearly straight, diverging caudad; anterior end covering the antennal socket in full-face view; posterior end lobate and curving mesad toward prominent occipital tooth. Occiput faintly impressed in the middle. Eyes evenly convex. Front and vertex densely longitudinally costate-rugose; anastomoses between contiguous rugae practically absent on disc, scarce toward the sides; about 40 rugae at maximum expansion of vertex between frontal carinae; intervals between rugae finely punctate. Antennal scrobe finely reticulate, almost smooth, the posterior end suddenly bent obliquely downwards beneath the posterior lobe of frontal carinae for lodging the basal segments of funiculus. Sides of head and gular face longitudinally and densely striato-rugose. Occipital truncation distinct, superficially reticulate but shining, laterally separated from vertex by a marginate and crenulate border, mesially grading into vertex by a continuous curvature on which descend the median costae of dorsum of head. Scape with a triangular lobe at base, subcylindrical proximad, slightly flattened and depressed distad, scarcely curved, sharply shagreened. Funicular segments not longer than broad, except I and X.

Thorax (fig. 10) subopaque. Promesonotum about as broad as long. Shoulders subangulate. Lateral border of pronotum gently arcuate, posterior half distinctly marginate. Promesonotal suture at best vestigial. Anterior and lateral portions of promesonotum gently convex in both directions, coarsely and irregularly reticulate-rugose; discal and posterior portions (mesonotum proper) rather flat, with dense, longitudinal rugae which converge caudad. Lateral lobe of mesonotum little projecting, subdentate. Mesoepinotal constriction deep laterally, shallow in

the middle and not interrupting the longitudinal rugae which extend from the mesonotum to the similarly sculptured basal face of epinotum. Antero-lateral lobes of basal face of epinotum rounded, prominent, marginate. Basal face of epinotum about as long as broad. Epinotal spines horizontal, delicate, much shorter than basal face, gently diverging caudad. Declivous face with transverse costulae. Sides of thorax, including laterotergite of pronotum, horizontally costate. Legs nearly smooth and quite shining, extensor face of tibiae faintly rimose.

Pedicel shown in Figs. 11 and 12. Petiole with faintly reticulate and somewhat shining anterior face, coarsely longitudinally to irregularly rugose on dorsal and lateral faces. Postpetiole little broader than long; macrosculpture indistinct dorsally and laterally, almost smooth and quite shining; forming in profile a rounded peak near posterior border. Gaster finely reticulate, shining and almost smooth except for the posterior portions of tergum I, where the more strongly reticulate-punctate microsculpture forms longitudinal rows that converge caudad.

Body and appendages with fine, unequal, rather long, golden, erect to suberect hairs. Gastric tergum I with short, decumbent, fine hairs between the erect ones.

Type. — 1 worker (holotype) from R. Pastozo, 1700 m, in the Republic of Ecuador, collected by Dr. W. Weyrauch, April 8, 1958 (WWK). No other specimens known.

Discussion. — This species belongs to the *rudis*-group (Cf. Kempf, 1951: 22-30), containing a few poorly collected forms, all of them apparently restricted to the northern Andes and southern Central America (*P. clathratus* from southern Brasil, which I included in this group, was later proved to belong elsewhere, cf. Kempf, 1957: 398).

The closest relative is *rudis* Mayr, from which *virgatus* differs in the lack of striae on mandibles, the strictly longitudinal costae on dorsum of head, the smooth lateral portions of the occipital truncation, the obsolete promesonotal suture, the long basal face of epinotum, the scarcely rimose extensor face of tibiae, the absence of transverse striae on anterior face of petiole, the scarcely sculptured postpetiole, the more elongate gaster lacking longitudinal striae.

On account of the smooth and shiny gaster, *virgatus* keys out with *batesi* Forel in my previous key (Kempf, 1951: 19). But *batesi* is even more removed from *virgatus*, due to the rounded shoulders, the stronger and upturned lateral mesonotal tooth, the lack of a mesoepinotal groove, the long epinotal spines, aside from most of the differential features already mentioned above for *rudis*.

Paracryptocerus prodigiosus (Santschi)

(Fig. 13)

Cryptocerus (*Cyathocephalus*) *prodigiosus* Santschi, 1921b: 124-125 (Soldier, female; Argentina, Santiago del Estero: Icaño, Rio Dulce).

Paracryptocerus (*Harnedia*) *prodigiosus*: Kempf, 1958: 49-50.

A syntype soldier, received on loan from the Santschi collection (NHMB), gives me a chance for redescribing and picturing this rare and striking species.

Soldier (lectotype). — Total length 10.7 mm; maximum length of head 3.05 mm; maximum width of head 2.95 mm; Weber's length of thorax 3.00 mm. Black; upper half of sides of head, cephalic disc, shoulders, tip of epinotal teeth, extensor face of tibiae, four apical tarsites more or less brownish red. Contour of body in dorsal view shown in Fig. 13.

Head opaque, finely reticulate-punctate, about as broad as long, surmounted by a broadly ovoid, deeply excavate, completely marginate saucerlike disc, having the posterior border evenly rounded, the anterior border excised above the reticulate-rugose mandibles; floor of disc with a prominent convexity just in front of the middle, not visible in side-view, being concealed by the strongly upturned lateral rim of the disc. The latter finely crenulate, not conspicuously upturned posteriorly nor overhanging the flat occiput. Clypeal sutures not evident. Eyes rather flat, scarcely visible from above. Antennal scrobe reaching the eye. Inferior border of cheeks marginate, extending back to the likewise marginate and bluntly dentate occipital lobes. Floors of disc and sides of head coarsely and densely reticulate-rugose with deeply impressed and rather irregular pits within the meshes. Gular face less coarsely sculptured, aerolate-rugose, the intervals between the shallower foveolae being blunt, not forming sharp and raised ridges.

Thorax opaque, finely reticulate-punctate. Pronotum greatly expanded laterad, the anterior angle of the expansion dentate, followed by a short blunt lobe in front of the prominent, mesially interrupted transverse pronotal crest. Pronotum not excavate laterally in front of crest. Promesonotal suture vestigial, not impressed. Mesonotum rather flat in both directions, each side with a projecting and broadly rounded lobe. Mesoepinotal suture impressed. Basal face of epinotum transversely convex with a short blunt, lateral lobe and a subacute, upturned posterior tooth. Declivous face shallowly excavate, laterally submarginate, lacking macrosulpture. Femora fusiform. Dorsum of thorax reticulate-rugose and foveolate, but the sculpture is not as coarse as on cephalic disc. Sides of thorax similarly sculptured, but the foveolae are more elongate and shallower, the horizontal rugae becoming gra-

dually more prominent toward the bottom. Extensor face of femora lightly reticulate-rugulose.

Petiole and postpetiole opaque, irregularly reticulate-rugose and foveolate, each segment bearing laterally a beaklike appendage, pointing backwards and, on the postpetiole, also slightly upwards. Petiole with a subvertical anterior face distinct from the horizontal upper face. Postpetiole, in profile, strongly convex with a dorsal peak formed by a pair of tumuli. Gaster subopaque, elongate, about 1.5 times as long as broad, antero-laterally strongly lobate, the lobes immarginate. Tergum I finely reticulate-punctate and covered with sparse and shallow foveolae, becoming superficial to obsolete towards the rear. Sternum I superficially areolate-rugose.

Gular face of head, thorax, pedicel and legs with golden decumbent or appressed, elongate, canaliculate, scalelike hairs. The same hairs on anterior end of gaster, becoming gradually finer and shorter toward the rear. Cephalic disc, sides of head, and anterior portion of pronotum in front of transverse crest with thick, recurved or suberect short hairs, which lack the metallic sheen. Hairs in pits on cephalic disc do not project beyond the rim of the foveolae from which they arise. Rim of cephalic disc laterally with a few widely spaced very short and blunt projecting hairs.

Specimen examined. — 1 worker (lectotype) from the Argentine, Chaco de Santiago del Estero, Rio Dulce, Coll. Santschi (NHMB), ex Coll. Le Moul. t.

Discussion. — In the key to the Argentine species of *Paracryptocer* (Kempf, 1958:13-14) this species was omitted because at that time I could not secure the types. It runs to couplet 12, disagreeing with either lug: a) Hairs in pits of cephalic disc not projecting beyond rim; head completely marginate and excavate with a median tumulus; b) head disc very coarsely reticulate-rugose and deeply foveolate with a median tumulus.

P. prodigiosus shares with *P. bruchi* (Forel) the privilege of being one of the largest species in subgenus *Harnedia*. The soldiers of both species, however, are completely different as regards head shape and sculpture. Unfortunately, the worker of *prodigiosus* is still unknown, whereas the female has been briefly diagnosed by Santschi. She has the same differential characters as the soldier.

NEW LOCALITY RECORDS

Procryptocerus balzani Emery. — Peru, Valle Chanchamayo, 400 m, July 9, 1956, W. Weyrauch leg. 1 worker (WWK). Previously known only from Bolivia.

Procryptocerus pictipes Emery. — Ecuador, Puna Island, November 9, 1950, Ross & Michelbacher leg. 1 worker (WWK). Described

from Costa Rica, this species has also been recorded from British Guiana and from Pará and Pernambuco States in Brazil.

Procryptocerus regularis Emery. — Brazil, Goiás State: Anápolis, February 12, 1958, W. W. Kempf leg. many workers (WWK).

Procryptocerus sampaioi Forel. — Brazil, Rio de Janeiro State: Marambaia Island, January 1960, R. Mueller leg. 1 worker; São Paulo State: Iporanga, November 1, 1961, Lenko & Reichardt leg. many workers and a few females (DZSP, WWK); Mongaguá, Praia Grande, June 20, 1960, W. W. Kempf leg. 1 late female (WWK). The species seems now to be not so uncommon along the shore and on the coastal mountains between Rio de Janeiro and São Paulo.

Procryptocerus spiniperdus Forel. — Ecuador, El Revo, 900 m, Amazon drainage, June 12, 1958, W. Weyrauch leg. 1 worker (WWK). Differs slightly from the type in denser longitudinal striato-rugose head sculpture and concentric rugae on dorsum of postpetiole. The types were found on the Island of Trinidad.

Zacryptocerus membranaceus (Klug). — Brazil, Guanabara State: Represa Rio Grande, March 15 and April 1961, F. M. Oliveira leg. many workers (Col. Seabra, DZSP, WWK). Although well known to the old authors, this species had practically disappeared. Both Prof. Gonçalves and Dr. Seabra have been looking for it for some time. Finally one of Dr. Seabra's collectors spotted a colony in the environs of Rio de Janeiro city.

Paracryptocerus bruchi (Forel). — Brazil, Mato Grosso State: Imbirussu-Corumbá, December 1, 1960, K. Lenko leg. many workers (DZSP, WWK). The northernmost and the first Brazilian record for the species.

Paracryptocerus complanatus (Guérin). — Brazil, Mato Grosso State: Utiariti, Rio Papagaio, July 1961, K. Lenko leg. several workers (DZSP, WWK).

Paracryptocerus fiebrigi (Forel). — Brazil, Mato Grosso State: Imbirussu-Corumbá, December 1, 1960, K. Lenko leg. many workers (DZSP, WWK). The first Brazilian record for the species, heretofore known only from Paraguay and Argentina.

Paracryptocerus spinosus (Mayr). — Several stray workers collected by Dr. W. Weyrauch at Valle Chanchamayo, 800 m, Tingo Maria 670 m in Peru, and at El Reyo, 900 m (Amazon drainage) in Ecuador (WWK).

RESUMO

Continuando os estudos da tribo Cephalotini, o autor apresenta a redescritção dos tipos de *Procryptocerus elegans* Santschi e *Paracryptocerus prodigiosus* (Santschi), a descrição de duas espécies novas no gênero *Procryptocerus*, uma — *seabrai* — das vizinhanças de São Paulo e do Rio de Janeiro, a outra — *virgatus* — do Equador. Três subespécies do gênero *Procryptocerus* são elevadas à categoria de espécies: *curvistriatus* Kempf, *hylaesus* Kempf e *lepidus* Forel. Enfim registram-se para várias espécies de *Procryptocerus*, *Zacryptocerus* e *Paracryptocerus* novas localidades de ocorrência que possuem importância zoogeográfica.

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