Taxonomic and faunistic notes on Colobotheini, including a new Brazilian state record

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(Coleoptera: Cerambycidae: Lamiinae)

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Abstract

Notes on the differences between *Colobothea* LEPELETIER & AUDINET-SERVILLE, 1825, *Priscilla* THOMSON, 1864, and *Sangaris* DALMAN, 1823 (Coleoptera: Cerambycidae: Lamiinae) are provided. *Priscilla brasiliensis* FUCHS, 1961 is reinstated as a valid species and transferred to *Sangaris*; this species is recorded from the Brazilian state of Santa Catarina for the first time. *Colobothea biguttata* BATES, 1865 is transferred to *Sangaris*. *Sangaris petrovi* SCHMID, 2010 is synonymized with *Colobothea flavomaculata* BATES, 1865, which is transferred to *Sangaris*.

Key words: Coleoptera, Cerambycidae, Lamiinae, Colobotheini, longhorned beetles, Neotropical Region, taxonomy, reinstatement, new synonymy, new combinations.

Introduction

During the process of identifying some specimens of Colobotheini, the first author noted that *Priscilla brasiliensis* FUCHS, 1961 has been erroneously synonymized with *Colobothea biguttata* BATES, 1865 by MONNÉ & MARTINS (1974). Studying the second species to verify its generic assignation, we found a series of inconsistencies in the definitions of *Colobothea* LEPELETIER & AUDINET-SERVILLE, 1825, *Priscilla* THOMSON, 1864, and *Sangaris* DALMAN, 1823. We reproduce here the original descriptions and some redescriptions of these genera (translated into English), mainly because some of these papers are not easily obtainable. In the present work, it is not possible to present definitive or even more accurate conclusions, because this would require a thorough review of all three genera. Even so, we believe that it is important to report the existing problems in order to encourage also other authors to carry out further studies.

The shapes of the protarsi, described for the first time by BATES (1865) and commented by LACORDAIRE (1872), apparently overlooked by some recent authors, provide a useful tool to define *Sangaris* and *Priscilla*, and to separate them from the true *Colobothea*.

Material and Methods

Most of the photographs were taken by the second author at MZSP with a Canon EOS TD Mark II camera and a Canon MP-E 65 mm f/2.8 1-5X macro lens, controlled by software; photographs shown in Figs. 9–10, 15–16, and 23–25 were taken by the first author with a Canon EOS 200d camera and a Canon MP-E 65 mm f/2.8 1-5X macro lens, controlled by Helicon Focus Stacking software; Fig. 22 was taken by the late Father Jesus Santiago Moure at the MNHN.

Collection acronyms used herein:

HSCV	Herbert Schmid private collection, Vienna, Austria
MNHN	Muséum national d'Histoire naturelle, Paris, France
MZSP	Museu de Zoologia, Universidade de São Paulo, São Paulo, Brazil

Results

General notes on the genera *Colobothea* LEPELETIER & AUDINET-SERVILLE, 1825, *Priscilla* THOMSON, 1864, and *Sangaris* DALMAN, 1823

DALMAN (1823) did not present a description of *Sangaris*, only using the new generic name to include his new species (*S. concinna* DALMAN, 1823): "A species with a slender habit, it seems, of its own genus, or at least of a subgenus. The frons is quadrate, equal and perpendicular as in *Lamia* or *Saperda*; but the thorax is subglobose, with silk investments, and the neat habit of "Clyti", the elytra being flat dorsally, and the humeri prominent, as in the "Saperdis" of the first section. It is best distinguished from all other "Cerambycines Lamioideis" by the posterior femora extending beyond the apex of the elytra".

Synchyzopus THOMSON, 1864 is currently regarded as a junior synonym of *Sangaris*. THOMSON (1864) described it as follows (translated): "Antennae slender, very long, 11-segmented, scape one-third longer, the others almost subequal; prothorax laterally rounded; elytra anteriorly moderately bigibbose, humeri produced, sloping toward the apex, apex truncated and bispinose; prosternal process and mesoventral process laminiform; apex of last abdominal segment laterally bispinose; middle legs longer than forelegs and shorter than hind legs; tarsi elongate".

LEPELETIER & AUDINET-SERVILLE (1825) described *Colobothea* as follows (translated): "Antennae setaceous, glabrous, inserted very high in an indentation of the eyes, on the line which separates the frons from the vertex, very close to each other at their base, composed of 11 cylindrical segments, the first one [scape] slightly clavate. Body compressed laterally, notably narrowing toward the head and toward the anus, its widest part being at the humeral base of the elytra. Elytra long, strongly indented apically, covering the wings and the abdomen. Legs of medium length; femora long, forming a very pronounced club; protarsi very broad and very setose in one of the sexes".

THOMSON (1864) described *Priscilla* as follows (translated): "Body subconvex, stouter; antennae slender, 11-segmented, scape and antennomere III subequal, the others gradually decreasing; prothorax sloping, subcylindrical, gradually narrowed from the base, laterally unarmed; elytra (each with strong humerus carried longitudinally in an elongate carina) sloping toward the apex, truncate and bispinose apically; prosternal process and mesoventral process laminiform; middle and hindlegs elongate; tarsi moderately elongate".

LACORDAIRE (1872) separated *Sangaris* (under *Synchyzopus*) and *Priscilla* from *Colobothea* as follows (translated): "Elytra carinate laterally only basally, strongly sloping posteriorly", leading to *Synchyzopus* and *Priscilla*. *Sangaris* and *Priscilla* were separated as follows (translated): "Eyes separated dorsally; lower eye lobe subequilateral ... *Synchyzopus*; ... Eyes contiguous, very elongated... *Priscilla*". LACORDAIRE (1872) also reported on the differences between *Priscilla* and *Colobothea* (translated): "The only features that separate this genus from *Colobothea* are reduced to the following: Eyes contiguous dorsally, lower eye lobe much larger and more elongated, whence results a diminution in the length of the genae; prothorax inclined, transverse, cylindrical and slightly narrowed anteriorly broadly rounded laterally with its posterior angles shortly and obtusely carinate above. Elytra short, navicular, strongly sloping posteriorly, carinate laterally on the anterior half, with humeri very protruding and obliquely truncate, each with a slight basilar bulge and oblong".

ZAJCIW (1962) redescribed *Sangaris*: "Body elongate, narrowed forward and backward. Palpi subequal with the last article conical and acute or subfusiform; frons longer than wide, vertical; eyes finely faceted, notched on the superior region, with upper eye lobes small and moderately distant from each other and lower eye lobes not much different from the genal length (in *octomaculata* AURIVILLIUS, 1902 much longer); antennal tubercles projecting, obliquely divergent. Antennae filiform, two or three times longer than body, 11-segmented, with very short

and sparse setae on base of ventral surface; scape elongate, reaching base of elytra, gradually obconic, sometimes thickened apically. Prothorax transverse, subcylindrical or narrowed forward, without discal tubercles, with basal constriction more or less distinct (except in viridipennis MELZER, 1931), with the sides rounded centrally or after middle, or with tubercle more or less acute (basally in viridipennis). Scutellum subtriangular. Elytra elongate, more or less narrowed backward, emarginate on apex, with outer spine more or less developed; humeri widened, obliquely rounded (substraight in *invida*); humeral carina short, not surpassing basal third of elytra; epipleura vertical; surface with semi-erect black setae (viridipennis without setae). Prosternal process narrow, sloped backward, widely and triangularly widened apically; mesoventral process subquadrate (transverse in viridipennis), notched apically. Hindlegs with femora shorter than elytra [not reaching elytral apex] (except in *octomaculata* and *concinna*); metatarsi with first segment longer than II-III together (except in viridipennis)". According to ZAJCIW (1962), Sangaris differs from Colobothea in the short humeral carina, which does not surpass the basal third of the elytra, and from *Priscilla* in the upper eye lobes being not contiguous. ZAJCIW (1962) also noted that "the genus is not completely homogeneous, and each species shows very different morphological and sculptural features".

MONNÉ (1993) was the first to provide a reliable questioning about the definition of Sangaris (translated): "Sangaris currently includes 13 not very homogeneous species. The presence of a short lateral carina on anterior third of each elytron has been the main feature that lead BATES (1881), MELZER (1931, 1932), and ZAJCIW (1962) to include new species in the genus. At the moment, I consider it premature to propose changes without presenting an overview of the Colobotheini tribe; nevertheless, I verified the existence of three groups of species, characterized by: a) elytra without erect setae; prothorax with acute lateral tubercles located in apical fifth: S. viridipennis, Brazil (Rio de Janeiro to Santa Catarina); b) elytra with erect setae; prothorax with conical lateral tubercles, located just after middle or located at beginning of posterior third: S. condei MELZER, 1931, Brazil (Espírito Santo), S. zikani MELZER, 1931, Brazil (Minas Gerais); S. invida MELZER, 1932, Brazil (Rio de Janeiro), S. seabrai ZAJCIW, 1962, Brazil (Rio de Janeiro), and S. albida sp.n., Brazil (Bahia); c) elytra with erect setae; prothorax without lateral tubercles, the sides rounded or subparallel: S. concinna, Brazil (Bahia to Santa Catarina), S. geometrica (BATES, 1872), Nicaragua; S. cancellata (BATES, 1881), Bolivia, S. duplex (BATES, 1881), Brazil (Bahia to Rio Grande do Sul), Paraguay and Argentina; S. laeta (BATES, 1881), Ecuador; S. polystigma (BATES, 1881), Honduras, Colombia, and Venezuela, S. octomaculata, Brazil (Bahia to São Paulo), S. inornata, sp.n. Brazil (Amazonas), and S. sexmaculata, sp.n., Peru".

HOVORE (1998) reviewed the species of *Sangaris* from Central America and defined the genus as follows: "Body form elongate, subcylindrical. Head with front vertical, longer than wide, palpi subequal, apical segments variable in shape, eyes finely faceted, lower lobes as tall or slightly taller than gena below, antennal tubercles moderately elevated, rounded, obliquely divergent; antennae filiform, 11-segmented, about twice as long as body, scape elongate, simple, subcylindrical or slightly expanded apically, distal segments simple, unarmed. Prothorax subcylindrical or with small basolateral tubercles, basal constriction moderate, apex constricted or not; proand mesocoxae prominent, rounded, procoxal cavities closed behind. Scutellum variable in shape. Elytra elongate, slightly tapered apically, humeral angles prominent, epipleura vertical at least on basal 1/3, with a distinct carina extending posteriorly from humeral angle, apices emarginate, truncate or sinuate, outer angle usually dentate. Legs with femora slightly to strongly clavate, tibiae simple, slender, straight, tarsi slender; abdomen unmodified in male, apical segments elongated into ovipositorial sheath in females, extending beyond elytral apices (modified from ZAJCIW 1962)".

GIESBERT (1979) provided a redescription of *Colobothea* based on the species from Mexico and Central America: "Moderate-sized, somewhat elongate, laterally compressed ... Pronotum un-

armed, convex, widest at base or behind middle ... Elytra widest across humeri ...; sides vertical on basal half, deflexed, more or less straight, carinate above from humeri to well beyond middle ... Body beneath with prosternal process usually less than 1/4 as wide as procoxal cavity (broader in *C. distincta*), expanded at apex; ... mesoventral process wide, narrower at apex; male terminal sternite often modified ... This genus may be distinguished from others in its tribe by the laterally compressed body; the elytra with vertical sides carinate above, and lacking tubercles or crests, with spinose outer apical angles; unarmed pronotum; female abdomen not lengthened to form a sheath for the ovipositor; and by the filiform 11-segmented antennae with slender obconical scape".

In our opinion, the features currently reported to separate *Sangaris*, *Colobothea*, and *Priscilla* are unreliable. But it will be necessary to do a complete review of these genera to correctly assign all the species. *Sangaris* probably only includes the species with erect setae on the elytra. However, the erect setae may also be present or absent in species currently included in *Colobothea*, and even considering only the species with erect setae on the elytra. *Sangaris* still appears to be polyphyletic. The shape of the apex of the abdomen in females is not a reliable feature separating *Sangaris* from *Colobothea*, because there are species in both genera with the apex of the abdomen practically identical in shape and length (e.g., *S. luteonotata* MONNÉ & MONNÉ, 2009, and *C. obconica* AURIVILLIUS, 1902); furthermore, there is a gradient in the shape and length of the ovipositor in the species currently included in *Sangaris*, from very long and tubular (e.g., *S. spilota* MARTINS & GALILEO, 2009) to moderately short and subtriangular (e.g., *S. luteonotata*), and there are species in *Colobothea* with the apex of the abdomen forming a distinct and tubular ovipositor (e.g., *C. hirtipes* (DE GEER, 1775)).

The length of the humeral carina is another questionable feature, because it is extremely variable in the species currently included in *Colobothea*: distinct from humerus to near apex (e.g., *C. pleuralis* CASEY, 1913), often with an additional longitudinal carina near it (e.g., *C. hirtipes*), slightly marked from humerus to near apex (e.g., *C. sinaloensis* GIESBERT, 1979), well-marked from humerus to about middle, then slightly distinct or absent toward apex (e.g., *C. obtusa*), or distinct only basally (e.g., *C. biguttata* and *C. flavomaculata*, species belonging to *Colobothea* at that time). Therefore, the difference between *Colobothea* and *Sangaris* pointed out by ZAJCIW (1962) and GIESBERT (1979), i.e., the length of the humeral carina, is not reliable. In the same way, the length of the humeral carina cannot be used also to separate *Colobothea* and *Sangaris* from *Priscilla* because it may be confined to the base in the three genera.

The distance between the upper eye lobes in *Colobothea* is another very variable feature: distinctly larger than basal diameter of antennomere III (e.g., *C. colombiana* MONNÉ, 1993); about as wide as basal diameter of antennomere III (e.g., *C. batesi* TAVAKILIAN & SANTOS-SILVA, 2022); narrower than the basal diameter of antennomere III, almost contiguous (e.g., *C. biguttata*). Therefore, this feature cannot be used to separate *Colobothea* from *Priscilla*, although it may be useful to separate *Priscilla* from *Sangaris*, because the upper eye lobes are not subcontiguous.

The length of the lower eye lobes in *Colobothea* is variable, shorter than gena (e.g., *C. vaa-mondei* DEVESA & SANTOS-SILVA, 2022), about as long as gena (e.g., *C. bitincta* BATES, 1872), or distinctly longer than gena (e.g., *C. biguttata*). Therefore, this is another feature that does not allow the separation of different genera, either to divide the genus *Colobothea* or to separate it from *Priscilla* and *Sangaris*.

THOMSON (1864) described the prosternal and mesoventral processes as laminiform in *Synchyzopus* (= *Sangaris*) and *Priscilla*. Evidently, the concept of "laminiform" according to THOM-SON (1864) does not correspond to what is considered as such (extremely narrow). This is evident from fact that THOMSON (1864) several times described the process as being laminiform in genera and species in which they are wide or very wide (e.g., in *Plistonax* THOMSON, 1864). ZAJCIW (1962) described the prosternal process as narrow and the mesoventral process as subquadrate or transverse in Sangaris. In fact, the narrowest area of the prosternal process compared with the procoxal width in the species currently assigned to Sangaris, which were examined by us, was found to be very variable: about 1/4 in S. concinna, S. invida, S. laeta, S. luctuosa (PASCOE, 1859), S. octomaculata, S. trifasciata MELZER, 1928, S. zikani MELZER, 1931, S. flavomaculata, and S. duplex; about 1/5 in S. condei MELZER, 1931 and S. inornata MONNÉ, 1993; about 1/2 in S. biguttata and S. brasiliensis; and almost as wide in S. viridipennis. The narrowest area of the mesoventral process in *Sangaris* is also variable when compared with the mesocoxal width: distinctly wider in S. biguttata, S. brasiliensis, and S. viridipennis; and about as wide in the other species examined. In *Priscilla*, the narrowest area of the prosternal process is wider than half of the procoxal width and the narrowest area of the mesoventral process is distinctly wider than the mesocoxal width. In *Colobothea*, the width of the narrowest area of the prosternal process is variable, from about 1/4 the procoxal width (e.g., C. batesi) to about half the procoxal width (e.g., C. androwi VLASAK & SANTOS-SILVA, 2023), or even wider than half of the procoxal width (e.g., C. colombiana). The mesoventral process in Colobothea is always wide, but the width is also variable, from about as wide as the mesocoxal width (e.g., C. hirtipes) to distinctly wider than mesocoxal width (e.g., C. colombiana). Therefore, the widths of the prosternal and mesoventral processes are also not useful to separate the three genera.

The shape of the prothorax is very variable in the species currently included in *Colobothea*: without lateral tubercles or rounded area, without apical spine, and gradually widened from anterolateral to posterolateral angles (e.g., *C. batesi*); with lateral tubercle or rounded projection and distinctly narrowed posteriorly (e.g., *C. assimilis* AURIVILLIUS, 1902); without lateral tubercles or rounded area, gradually widened from anterolateral to posterolateral angles, and with short spine close or near posterolateral angles (e.g., *C. humerosa* BATES, 1865); almost uniformly rounded laterally (e.g., *C. chontalensis* BATES, 1872). This extreme interspecific variation in *Colobothea* is one of the most problematic features to allow a division of the genus or a separation from *Priscilla* and *Sangaris*.

To further complicate the definition of *Colobothea*, two species, *C. signatipennis* LAMEERE, 1884 and *C. signativentris* GAHAN, 1889 have distinct tubercles on the central region of the pronotum, and *C. decemmaculata* BATES, 1865 has an extremely prominent and sinuous humeral carina and the protarsi are not sexually dimorphic. We believe that these features would justify the establishment of two new genera, but we prefer not to describe them until more detailed studies are available.

BATES (1865) divided *Colobothea* into two groups: 1) "Fore tarsi not more dilated in the male than in the female. Thorax narrowed at the base, and tumid or tuberculate behind the middle on each side", including *C. lignicolor* BATES, 1865 (now *Carphina lignicolor*), *C. velutina* BATES, 1865 (= *C. macularis* (OLIVIER, 1797)), *C. ligneola* BATES, 1865 (now *Carphina ligneola*), *C. decemmaculata*, *C. flavomaculata* (herein transferred to *Sangaris*), *C. luctuosa* (now *Sangaris luctuosa*), and *C. dioptica* BATES, 1865 (= *Priscilla hypsiomoides* THOMSON, 1864); 2) "Fore tarsi dilated and ciliated in the male"; this group was divided into two subgroups: 1) "Thorax tumid on each side behind the middle, or furnished with a tubercle: narrowed at the base", including *C. pictilis* BATES, 1865, *C. pulchella* BATES, 1865, *C. obtusa* BATES, 1865, *C. lineola* BATES, 1865, *C. strigosa* BATES, 1865, *C. vidua* BATES, 1865, *C. poecila* (GERMAR, 1823), and *C. subcincta* CASTELNAU, 1840; 2) "Thorax widest at the basal angles, gradually narrowed thence to the apex", including *C. pimplaea* BATES, 1865, *C. varica* BATES, 1865, *C. propinqua* BATES, 1865, *C. naevia* BATES, 1865, *C. paulina* BATES, 1865, *C. paulina* BATES, 1865, *C. sejuncta* BATES, 1865, *C. naevia* BATES, 1865, *C. paulina* BATES, 1865, *C. paulina* BATES, 1865, *C. naevia* BATES, 1865, *C. juncea* BATES, 1865, *C. paulina* BATES, 1865, *C. naevia* BATES, 1865, *C. paulina* BATES, 1865, *C. naevia* BATES, 1865, *C. paulina* BATES, 1865, *C. naevia* BATES, 1865, *C. juncea* BATES, 1865, *C. sejuncta* BATES, 1865, *C. naevia* BATES, 1865, *C. juncea* BATES, 1865, *C. sejuncta* BATES, 1865, *C. naevia* BATES, 1865, *C. juncea* BATES, 1865, *C. sej*

C. bisignata BATES, 1865, *C. latevittata* BATES, 1865 (now *Hilobothea latevittata*), *C. styligera* BATES, 1865, *C. grallatrix* BATES, 1865, *C. olivencia* BATES, 1865, *C. pura* BATES, 1865, *C. forcipata* BATES, 1865, *C. naevigera* BATES, 1865, *C. lucaria* BATES, 1865, *C. crassa* BATES, 1865, *C. lineatocollis* BATES, 1865, *C. ordinata* BATES, 1865, *C. otolineata* BATES, 1865 (*e C. bicuspidata* (LATREILLE, 1833)), *C. contaminata* LEPELETIER & AUDINET-SERVILLE, 1825 (*e C. hirtipes*), *C. geminata* BATES, 1865, *C. concreta* BATES, 1865 (*e C. hirtipes*), *C. bilineata* BATES, 1865, *C. luculata* LUCAS, 1859, *C. hebraica* BATES, 1865, *C. fasciata* BATES, 1865, and *C. lateralis* BATES, 1865.

In fact, the male protarsi of the species currently included in *Sangaris* (Fig. 6) do not differ from those of the females (Fig. 5). Although there are also some species currently included in *Colobothea* with the protarsi identical in both sexes (e.g., *C. decemmaculata, C. colombiana*), we think that this feature is useful to separate *Sangaris* from *Colobothea* and also from *Priscilla*, especially in *Sangaris* when considering also the short humeral carina and the posteriorly narrowed prothorax. For that reason, we transfer *Colobothea biguttata* and *Priscilla brasiliensis* to *Sangaris*.

Sangaris biguttata (BATES, 1865), comb.n. (Figs. 1–10)

Colobothea biguttata BATES 1865: 219; MONNÉ 2023: 522 (part).

MATERIAL EXAMINED:

BRAZIL: <u>Espírito Santo</u>: Santa Tereza, 1 $_{\bigcirc}$ (MZSP 55826), XI.1964, leg. C.T. Elias (MZSP); Linhares, 1 $_{\circlearrowleft}$ (MZSP 55852), XI.1972, leg. P.C. Elias (MZSP). <u>Rio de Janeiro</u>: Itatiaia, 1 $_{\bigcirc}$ (MZSP 55834), 12.IV.1931, leg. J.F. Zikán (MZSP). <u>Santa Catarina</u>: Hansa Humboldt [now Corupá], 1 $_{\bigcirc}$ (MZSP 55835), III.1933, leg. A. Maller (MZSP); 1 $_{\bigcirc}$ (MZSP 55836), L1931, leg. A. Maller (MZSP); 1 $_{\bigcirc}$ (MZSP 55836), XII.1930, leg. A. Maller (MZSP); 1 $_{\bigcirc}$ (MZSP 55838), XII.1930, leg. A. Maller (MZSP); 1 $_{\bigcirc}$ (MZSP 55838), XII.1931, leg. A. Maller (MZSP); 2 $_{\bigcirc}$ $_{\bigcirc}$ no additional data (HSCV); Joinville, 1 $_{\bigcirc}$ (MZSP 55838), II.1931, leg. A. Maller (MZSP); Corupá, 2 $_{\bigcirc}$ $_{\bigcirc}$ no additional data (HSCV); Joinville, 1 $_{\bigcirc}$ (MZSP 55838), II.1920, leg. Schmit (MZSP). <u>São Paulo</u>: Ilha da Vitória, 1 $_{\bigcirc}$ (MZSP 55828), 16.–27.III.1964, leg. Exp. Dept. Zool. (MZSP); Ilha dos Pescadores (Ilha da Vitória), 1 $_{\bigcirc}$ (MZSP 55830), 24.III.1964, leg. D. Zool. (MZSP); Itanhaém, 1 $_{\bigcirc}$ (MZSP 55831), IV.1964, leg. U.R. Martins (MZSP); Juquiá, 1 $_{\bigcirc}$ (MZSP 55832), 9.V.1937, leg. Lange de Morretes (MZSP); Peruíbe, 1 $_{\bigcirc}$ (MZSP 55833), 5.VI.1941, leg. H. Zellibor (MZSP); Guarujá, 2 $_{\bigcirc}$ (MZSP 55837, MZSP 55840), 12.XII.1920, no collector indicated (MZSP); 1 $_{\bigcirc}$ (MZSP 55844), 11.XII.1920, no collector indicated (MZSP); 3 $_{\bigcirc}$ $_{\bigcirc}$ (MZSP 55845), 10.XII.1920, no collector indicated (MZSP); 3 $_{\bigcirc}$ (MZSP 55844), 11.XII.1920, no collector indicated (MZSP); 3 $_{\bigcirc}$ $_{\bigcirc}$ (MZSP 55845), 1 $_{\bigcirc}$ (MZSP 55844), 11.XII.1920, no collector indicated (MZSP); 55844), 11.XII.1920, no collector indicated (MZSP); 1 $_{\bigcirc}$ (MZSP 55845), 10.XII.1920, no collector indicated (MZSP); 3 $_{\bigcirc}$ $_{\bigcirc}$ (MZSP 55846), MZSP 55846), MZSP 55846), MZSP 55846), 1 $_{\bigcirc}$ (MZSP 55850), XI.1915, no collector indicated (MZSP).

REMARKS: The female from Bolivia identified as *S. biguttata* by MONNÉ & MONNÉ (2010), apparently represents a close species, which does not correspond to *S. biguttata* or *S. brasiliensis*, because the scutellum is distinctly smaller (larger in *S. biguttata* and *S. brasiliensis*). In this specimen from Bolivia, the elytra (especially humeri and apex) agree better with *S. brasiliensis* than with *S. biguttata*. However, the pubescent band on the scutellum does not reach the apex, agreeing better with *S. biguttata*, and also the distance between the upper eye lobes agrees better with *S. biguttata*. Unfortunately, we do not know the shape of the frons and the length of the lower eye lobes. Therefore, we cannot be sure about the true identity of this specimen.

DISTRIBUTION: Currently, *S. biguttata* is known from Ecuador, Bolivia and Brazil (Amazonas, Bahia, Minas Gerais, Espírito Santo, Rio de Janeiro, São Paulo, Santa Catarina) (BEZARK 2023, MONNÉ 2023, TAVAKILIAN & CHEVILLOTTE 2023).

We believe that the species may actually occur also in the Brazilian state of Rio Grande do Sul. However, the record for that state was solely based on the unjustified synonymy proposed by MONNÉ & MARTINS (1974). Therefore, *S. biguttata* must formally be excluded from the fauna of Rio Grande do Sul until confirmed records are available.



Figs. 1–10: *Sangaris biguttata*:1–5) female from Brazil, São Paulo, Peruíbe: 1) habitus, dorsal, 2) same, ventral, 3) same, lateral; 4) head, frontal view, 5) protarsus; 6–8) male from Brazil, Espírito Santo, Linhares: 6) protarsus, 7) head, frontal view, 8) habitus, dorsal; 9–10) female from Brazil, Santa Catarina, Corupá: 9) head, frontal view, 10) habitus, dorsal.

Sangaris brasiliensis (FUCHS, 1961), reinstated, comb.n. (Figs. 11–16)

Priscilla brasiliensis FUCHS 1961: 9; MONNÉ & MARTINS 1974: 28 (syn.). Colobothea biguttata: MONNÉ 2023: 522 (part).

MATERIAL EXAMINED:

BRAZIL: 1 ♀ (MZSP 55853), no additional data (MZSP). <u>Rio Grande do Sul</u>: holotype ♀, Osório, 5.I.1950, leg. Pe. [Padre] Buck (HSCV); Corupá, 1 ♀, without additional data (HSCV). <u>Santa Catarina</u> (new state record): Hansa Humboldt [now Corupá], 2 ♀♀ (MZSP 55854, MZSP 55855), XII.1933, leg. A. Maller (MZSP).

REMARKS: FUCHS (1961) described *Priscilla brasiliensis* based on a single female from Brazil (Rio Grande do Sul) (Figs. 15–16). MONNÉ & MARTINS (1974) synonymized *P. brasiliensis* with *Colobothea biguttata*, without presenting any evidence. Ernst Fuchs died in 2000 (SCHMID 2002), and there is no evidence that the holotype of *Priscilla brasiliensis* was examined by MONNÉ & MARTINS (1974). We believe that the holotype was not examined by these two authors but, even if they has seen a photograph, it would not be possible to separate the two species based only on a photograph of the dorsal habitus, because the two species are very similar in dorsal view. We believe that the synonymy was simply based on the original description of *P. brasiliensis*.

Sangaris brasiliensis differs from *S. biguttata* (Figs. 1–10) as follows: lower eye lobes distinctly shorter (Figs. 14, 16), shorter than 1.5 times genal length; frons subparallel-sided (Figs. 14, 16); and humeri slightly projecting (Figs. 11, 15). In *S. biguttata*, the lower eye lobes are distinctly longer (Figs. 4, 9), about 3.0 times the genal length, frons distinctly widened toward clypeus (Figs. 4, 9), and humeri distinctly projecting (Figs. 1, 8, 10). Additionally, all specimens of *S. bi-guttata* examined by us, males and females, have the outer apical angle of the elytra (Figs. 1, 8, 10) with short spiniform projection (absent in the four females of *S. brasiliensis* examined, Figs. 11, 15), and the pubescent band on the center of the scutellum does not reach the apex (reaching the apex in *S. brasiliensis*). Furthermore, the distance between the upper eye lobes in females of *S. brasiliensis* (Figs. 11, 15) is slightly wider than in females of *S. biguttata* (Figs. 1, 10).

We are reinstating *Priscilla brasiliensis* as a valid species and transfer it to *Sangaris* (see above, under "General notes on the genera ..."). As the two species occur in the same locality (Brazil, Santa Catarina, Corupá), they cannot be just subspecies.

DISTRIBUTION: So far, this species is known only from Brazil (Rio Grande do Sul, Santa Catarina).

Sangaris flavomaculata (BATES, 1865), comb.n. (Figs. 17–25)

(11gs. 17–25)

Colobothea flavomaculata BATES 1865: 218; MONNÉ 2023: 527 (cat.). *Sangaris petrovi* SCHMID 2010: 190; MONNÉ 2023: 547 (cat.). syn.n.

MATERIAL EXAMINED:

BRAZIL: Amazonas: Borba, 1 & (MZSP 56066), no additional data (MZSP).

PERU: Loreto: holotype ♀ of Sangaris petrovi, ca. 58 km SSW of Iquitos, Itaya River, ca. 100 m a.s.l., 8.V.2009, leg. A. Petrov (HSCV).

REMARKS: BATES (1865) described *C. flavomaculata* (Fig. 22) based on at least two syntypes $(1 \circ, 1 \circ)$ from Brazil (Amazonas). SCHMID (2010) described *S. petrovi* based on a single female (Figs. 23–25) from Peru. Comparison of the original descriptions, photographs of the male syntype of *C. flavomaculata* (Fig. 22), and the study of the holotype of *S. petrovi* (Figs. 23–25) allow us to conclude that the two taxa belong to the same species. Therefore, *S. petrovi* is considered herein as a junior synonym of *C. flavomaculata*. As pointed out by BATES (1865), the protarsi are not sexually dimorphic. Therefore, *C. flavomaculata* is here transferred to *Sangaris*.



Figs. 11–16: *Sangaris brasiliensis*: 11–14) female from Brazil, Santa Catarina, Corupá: 11) habitus, dorsal, 12) same, ventral, 13) same, lateral, 14) head, frontal view; 15–16) holotype female: 15) habitus, dorsal, 16) head, frontal view.



Figs. 17–21: *Sangaris flavomaculata*: male from Brazil, Amazonas, Borba: 17) habitus, dorsal, 18) same, ventral, 19) same, lateral, 20) head, frontal view, 21) protarsus.

DISTRIBUTION: Currently, this species is known from Peru and Brazil (Amazonas) (BEZARK 2023, MONNÉ 2023, TAVAKILIAN & CHEVILLOTTE 2023).



Figs. 22–25: *Sangaris flavomaculata*: 22) male syntype, dorsal habitus, 23–25) holotype female of *S. petrovi*: 23) habitus, dorsal, 24) same, lateral, 25) head, frontal view.

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