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A contribution to knowledge of Mycetophagidae (Coleoptera) from Sao Tome and Principe

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Keywords:

Coleoptera ; new record ;
Mycetophagidae ; Principe ;
Litargus ; Sao Tome ;
taxonomy ; Africa.
new species ;

Abstract. – Three new species from Sao Tome and Principe are described, illustrated and compared with known species: *Litargus (Litargus) cauquili* sp. nov., *Litargus (Litargus) bacchiolellii* sp. nov. and *Litargus (Litargus) ingleberti* sp. nov. The species *Litargus (Litargus) unicolor* Grouvelle, 1914 is newly recorded from Sao Tome.

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Introduction

Some species of the family Mycetophagidae (Coleoptera) from the Afrotropical Region were described by Grouvelle (1914, 1916) and recently by Háva (2022a) and Esser (2018). In the present article three new species are described from French expeditions to Sao Tome and Principe. All three new species belong to the genus *Litargus* Erichson, 1846, which contains 59 species worldwide (Háva 2022b).

Material and methods

The size of the beetles or of their body parts can be useful in species recognition and thus, the following measurements were made:

TL: Total length = linear distance from anterior margin of head to apex of elytra.

EW: Elytral width = maximum linear transverse distance.

Specimens of the presently described species are provided with red, printed labels with text as follows: « HOLOTYPE [or PARATYPE] *species name* sp. nov. J. Háva & A. Coache det. 2022. »

Type material deposited in following collections:

ACPC: Alain Coache private collection, La Brillanne, France.

MHNL: Musée d'Histoire Naturelle de Lyon, Lyon, France.

JHAC: Jiří Háva, Private Entomological Laboratory & Collection, Únětice u Prahy, Prague-west, Czech Republic.

Results

Litargus (Litargus) unicolor Grouvelle, 1914

(Fig. 1)

Material examined. – 1 ex., Sao Tomé & Principe, Sao Tomé, 11.iii.2022, 536 m, Bombaim Ultra Violet, Expé. Microland 4, 2022, leg. A. Coache et G. Filippi, J. Háva det. (ACPC).

Distribution. – This species was described from Cameroon and is new to Sao Tome.

Litargus (Litargus) cauquili sp. nov.

(Fig. 2, 5, 8)

ZooBank: <http://zoobank.org/514EBF01-A87D-437C-8078-EF0CE5AC4EF3>

Holotype. ♂, Sao Tomé & Principe, Sao Tomé, 29.x.2021, Monte Café, Ultra Violet, Expé. Microland 3, 2021, leg. A. Coache et G. Filippi, (MHNL).

Paratypes

- 1 ♀, same data as holotype (ACPC);

- 2 ♀, 2 ex., Sao Tomé & Principe, Sao Tomé, 680 m, 2.x.2022, Monte Café Ultra Violet, Expé. Microland, leg. A. Coache (2 ACPC, 2 JHAC);

- 1 ♂, Sao Tomé & Principe, Ile de Principe, San Joachim U.V., 29.x.2022, Rio Banzu, Expé. microland 5, leg. A. Coache (ACPC).

Description of the male

Body. – TL 1.9 mm, EW 0.9 mm. – Oblong-oval, weakly convex dorsally, weakly glossy brown, covered with brown recumbent setation. – *Elytra* brown with yellowish-orange patterns covered by yellow setation.

Reviewer :

Vladimír Novák (Prague, République Tchèque). - <http://zoobank.org/D5C7B806-1C9E-4C99-944A-13A71EE01B79> - <https://orcid.org/0000-0001-9287-2014>



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Head. – Brown, with dense and coarse punctures; covered by brown, recumbent setation. – *Labrum* brown. – *Eyes* prominent laterally in dorsal view, coarsely faceted and slightly emarginate near antennal insertions. – *Antennae* with 11 antennomeres, light brown (Fig. 5). – *Palpi* light brown, apical maxillary palpomere large, cylindrical.

Pronotum. – Brown, yellowish-orange latero-apically covered by yellow setation with yellowish-orange spot near scutellum, convex dorsally, rugose, with large, dense punctures, other parts covered with brown recumbent setation; widest at middle, gradually narrowed anteriorly and posteriorly. – *Anterior margin* slightly arcuate. – *Lateral sides* roundly arcuate. – *Basal margin* sinuate, without short and circular grooves on subbasal parts.

Scutellum. – Light brown, with short recumbent yellow setation.

Elytra. – Dark brown with yellowish-orange patterns, covered by brown recumbent setation, patterns covered by yellow setation, elongate, subparallel-sided, narrowed from apical 1/4 part to apex (Fig. 2).

Epipleuron. – Brown, covered with brown recumbent setation.

Meta-meso ventrites. – Brown, with brown recumbent setation, finely punctate.

Legs. – Entirely light brown with light brown spines, covered with brown recumbent setation. – *Tibiae* with long brown spines apically.

Abdominal visible ventrites. – Light brown, finely punctate, covered with brown recumbent setation.

Pygidium. – Brown, covered with brown recumbent setation.

Genitalia. – As in Fig. 8.

Female. – Similar externally to male.

Differential diagnosis. – The new species is similar to *Litargus (Litargus) raffrai* Grouvelle, 1914 and *L. (Litargus) crassus* Grouvelle, 1914, but differs from them by the heart-shaped elytral pattern and structure of the antennae.

Etymology. – Patronymic, dedicated to Cédric Cauquil, specialist of the Phasmidae, who supports us in our ongoing projects in the Sao Tome and Principe Archipelago.

***Litargus (Litargus) bacchiolellii* sp. nov.**

(Fig. 3, 6)

ZooBank: <http://zoobank.org/2346EA8D-3606-444F-88B0-F3F4F7F0596C>

Holotype, ♀, Sao Tomé & Príncipe, Sao Tomé, 29.x.2021, Monte Café Ultra Violet, Expe. Microland 3, 2021, leg. A. Coache et G. Filippi (MHNL).

Paratypes

- 1 ♀, Sao Tomé & Príncipe, Sao Tomé, 680 m, 2.x.2022, Monte Café Ultra Violet, Expe. Microland, leg. A. Coache (ACPC);
- 1 ♀, same data as paratype, but 9.xi.2022 (ACPC);
- 1 ♀, same data but 686 m, 9.xi.2022 (JHAC);
- 1 ♀, same data but Roca Bombaim, 485 m, 6.xi.2022 (ACPC);
- 1 ex., Is Príncipe, Roca Inf.D.Henrique, i-iv.1901, 100-300 m, L. Fea (JHAC).

Description of the female

Body. – TL 2.0 mm, EW 1.0 mm. – Oblong-oval, weakly convex dorsally, weakly glossy brown, covered with brown recumbent setation; elytra brown with yellowish-orange patterns covered by yellow setation.

Head. – Brown, with dense, coarse punctures; covered by brown, recumbent setation. – *Labrum* brown. – *Eyes* prominent laterally in dorsal view, coarsely faceted and slightly emarginate near antennal insertions. – *Antennae* with 11 antennomeres, light brown (Fig. 6). – *Palpi* light brown, apical maxillary palpomere large, cylindrical.

Pronotum. – Brown with yellowish-orange latero-apical parts covered by yellow setation and with yellowish-orange spot near scutellum, convex dorsally, rugose, with large, dense punctures, other parts covered with brown recumbent setation; widest at middle, gradually narrowed anteriorly and posteriorly. – *Anterior margin* slightly arcuate. – *Lateral sides* roundly arcuate. – *Basal margin* sinuate, without short and circular grooves on subbasal parts.

Scutellum. – Light brown, with short recumbent yellow setation.

Elytra. – Dark brown with yellowish-orange patterns, covered by brown recumbent setation, patterns covered by yellow setation, elongate, subparallel-sided, narrowed from apical 1/4 part to apex (Fig. 3).

Epipleuron. – Brown, covered with brown recumbent setation.

Meta-meso ventrites. – Brown, with brown recumbent setation, finely punctate.

Legs. – Entirely light brown with light brown spines, covered with brown recumbent setation. – *Tibiae* with long brown spines apically.

Abdominal visible ventrites. – Light brown, finely punctate, covered with brown recumbent setation.

Pygidium. – Brown, covered with brown recumbent setation.

Male. – Unknown.

Differential diagnosis. – The new species is similar to *L. (Litargus) elegans* Grouvelle, 1914 (Cameroon) and *L. (Litargus) ingleberti* sp. nov. but differs from them by characters in the following key.

Etymology. – Patronymic, dedicated to Jean-Pierre Bacchiolelli, NGE quarry development manager, who supports us in our ongoing projects in the Sao Tome and Principe Archipelago.

***Litargus (Litargus) ingleberti* sp. nov.**

(Fig. 4, 7)

ZooBank: <http://zoobank.org/5995E909-FE15-4351-AB03-FACF29B8BEC0>

Holotype, ♀, Sao Tomé & Príncipe, Sao Tomé, 11.iii.2022, 536 m, Bombaim Ultra Violet, Expe. Microland 4, 2022, leg. A. Coache et G. Filippi (MHNL).

Description of the female

Body. – TL 1.8 mm, EW 0.8 mm; oblong-oval; weakly convex dorsally, weakly glossy; dark brown, covered with brown recumbent setation; elytra brown with yellowish-orange patterns covered by yellow recumbent setation (Fig. 4).

Head. – Brown, with dense, coarse punctures; covered by intermixed yellow and brown, recumbent setation. – *Labrum* brown. – *Eyes* prominent laterally in dorsal view, coarsely faceted and slightly emarginate near antennal insertions. – *Antennae* with 11 antennomeres, antennomeres I-VIII light brown, antennal club dark brown with three antennomeres (Fig. 7). – *Palpi* dark brown, apical maxillary palpomere large, cylindrical.

Pronotum. – Dark brown with yellowish-orange latero-apical parts covered by yellow setation and with yellowish-orange spot near scutellum, convex dorsally, rugose, with large, dense punctures, other parts covered with brown recumbent setation; widest at middle, gradually narrowed anteriorly and posteriorly. – *Anterior margin* slightly arcuate. – *Lateral sides* roundly arcuate. – *Basal margin* sinuate, without short and circular grooves on subbasal parts.

Scutellum. – Dark brown, with short recumbent brown setation.

Elytra. – Dark brown with three yellowish-orange patterns, covered by brown recumbent setation, patterns covered by yellow setation, elongate, subparallel-sided, narrowed from apical 1/4 part to apex (Fig. 4).

Epipleuron. – Dark brown, covered with brown recumbent setation.

Meta-meso ventrites. – Brown, with brown recumbent setation, finely punctate.

Legs. – Entirely brown with light brown spines, covered with brown recumbent setation. – *Tibiae* with long brown spines apically.

Abdominal visible ventrites. – Light brown, finely punctate, covered with brown recumbent setation.

Pygidium. – Brown, covered with brown recumbent setation.

Male. – Unknown.

Differential diagnosis. – The new species is similar to *L. (Litargus) elegans* Grouvelle, 1914 (Cameroon) and *L. (Litargus) bacchiolellii* sp. nov. but differs from them by characters in the following key.

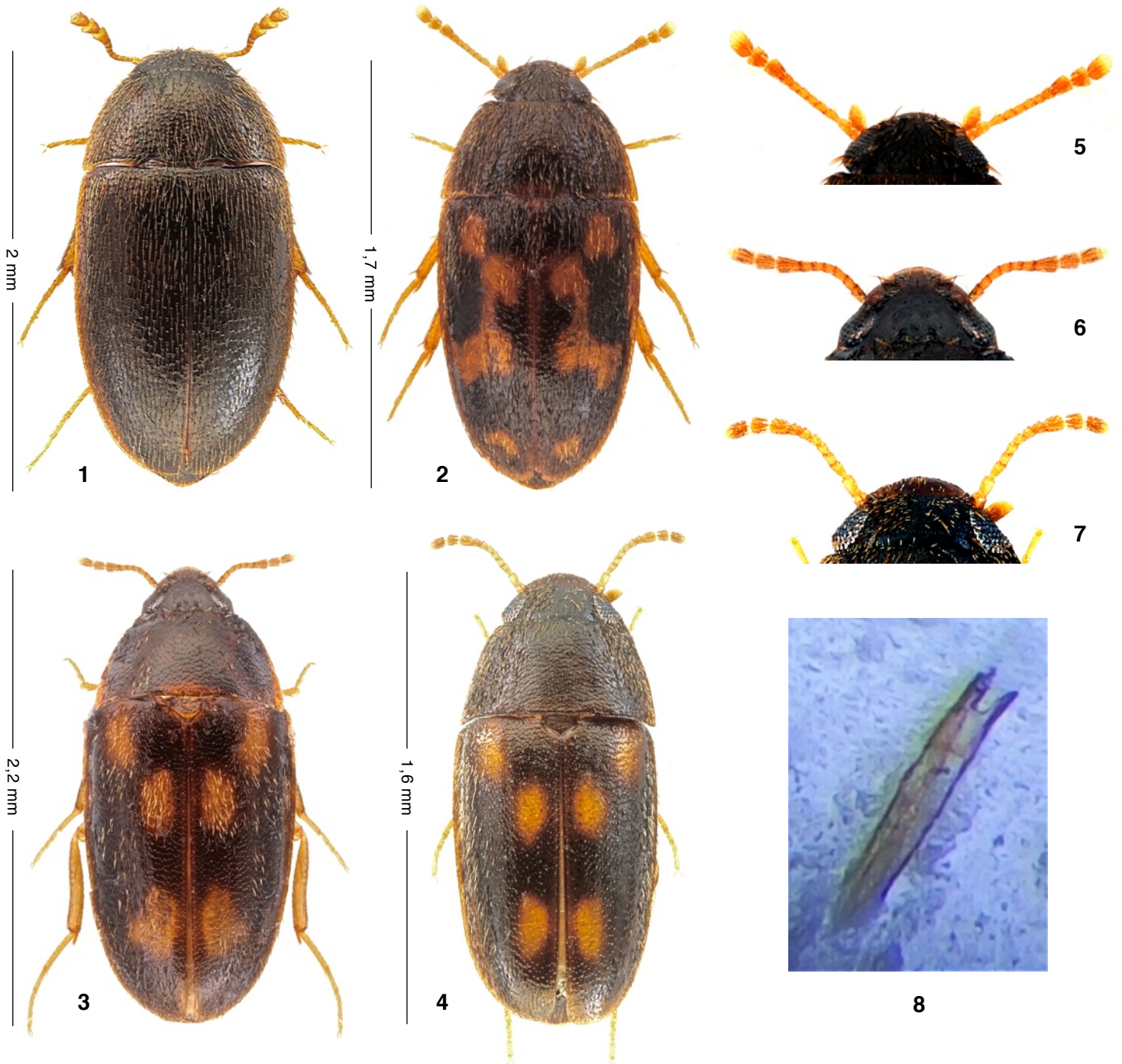


Fig. 1-4. Habitus. Fig. 5-7. Head and antennae. Fig. 8. Male genitalia.

1. *Litargus (Litargus) unicolor* Grouvelle, 1914. 2, 5 & 8. *L. (Litargus) cauquili* sp. nov. 3 & 6. *L. (Litargus) bacchiolellii* sp. nov. 4 & 7. *L. (Litargus) ingleberti* sp. nov.

1(4) Eyes small, body broad

2(3) Head with depressions between the eyes; elytra with longitudinal rows of punctures; pronotum very finely punctate *L. elegans* Grouvelle, 1914

3(2) Head without depressions between the eyes; elytra without longitudinal rows of punctures; pronotum coarsely punctate *L. bacchiolellii* sp. nov.

4(1) Eyes very large, body narrow *L. ingleberti* sp. nov.

Etymology. – Patronymic, dedicated in memory of the entomologist Henri Inglebert, President of ACOREP, Association des Coléoptéristes de la Région Parisienne, who published a Catalogue des Coléoptères de Paris intramuros in 1996, ACOREP N°26, whose grandson Marc, supports us in our ongoing work, as well as our research and development for Microland and Inveo.

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Fig. 9-12. Type locality. 9-10. Sao Tome, Monte Café station. 11-12. Sao Tome, Roca Bombaim.

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Publisher correspondence. – AC
Writing the article. – JH & AC
Descriptors. – JH
Article proofreading. – JH & AC
Bibliographic work. – JH
Material study. – AC & JH
Author of the figures. – Pascal Deschamps
Collector. – MICROLAND

Résumé

Háva J. & Coache A., 2023. – Contribution à la connaissance des Mycetophagidae (Coleoptera) de Sao Tomé et Príncipe. *Faunitaxys*, 11(32): 1-5.

Trois nouvelles espèces de Sao Tomé et Príncipe sont décrites, illustrées et comparées aux espèces connues les plus proches : *Litargus* (*Litargus*) *cauquilli* sp. nov., *Litargus* (*Litargus*) *bacchiolellii* sp. nov. et *Litargus* (*Litargus*) *ingleberti* sp. nov. L'espèce *Litargus* (*Litargus*) *unicolor* Grouvelle, 1914 est nouvellement signalée de Sao Tomé.

Mots-clés. – Coleoptera, Mycetophagidae, *Litargus*, taxonomie, espèce nouvelle, nouvel enregistrement, Príncipe, Sao Tomé, Afrique

¹ AC = Alain Coache - JH = Jiří Háva - GF = Gérard Filippi



Map. Locations of *Litargus* sp.

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Illustration de la couverture :

Sao Tomé, Roca Bombaim.

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