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Supplementary Notes on the Tribe Mesosini from Hainan, China, with a New Species, New Records, and an Additional Record of Poorly Known Species (Coleoptera, Cerambycidae, Lamiinae)

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Abstract A new species and seven new recorded species are represented from Hainan, southeastern China: *Pseudoclyzomedus hainanus* n. sp., *Agelasta* (*Mesolophus*) *dayremi* BREUNING, 1938, *Agelasta* (*Pseudagelasta*) *bifasciana* WHITE, 1858, *Cacia* (*Ipocregyes*) *subcephalotes* BREUNING, 1968, *Clyzomedus laosensis* BREUNING, 1965, *Mesosa* (*Aplocnemia*) *tenuefasciata* PIC, 1926, *Mesosa* (*Metamesosa*) *basinodosa* PIC, 1925, *Metipocregyes nodieri* (PIC, 1933). Furthermore, an additional record of poorly known species, *Spinipocregyes wenhsini* BI, 2013, is provided.

Introduction

The fauna list of the tribe Mesosini MULSANT, 1839 from Hainan, southeastern China was recently updated with 21 species by YAMASAKO *et al*. (2017) and later on, a new species, *Metipocregyes variabilis* YAMASAKO et LIN, 2018, was described from Hainan by YAMASAKO and LIN (2018). Since 2017, we continued our survey on the fauna because of expecting more new taxa for the fauna, and eventually we found a new species belonging to the genus *Pseudoclyzomedus* YAMASAKO, 2009 and seven new recorded species in addition to them. Herein, we describe and record those species from Hainan, and in this opportunity, we add a collecting record of a poorly known species, *Spinipocregyes wenhsini* BI, 2013. The number of mesosine species recorded from Hainan is increased to be 30.

Material and Methods

This study was conducted based on the dry specimens from our private collections. The holotype designated herein is housed tentatively in Bin Insect Taxonomy Studio, Beijing, China (BITS), but will be in China Agricultural University, Beijing, China (CAUC).

The observational method, terminology, and abbreviations of the endophallus mainly followed YAMASAKO and OHBAYASHI (2011) (partly modified by YAMASAKO & LIN, 2018).

The abbreviations for endophallic structures used in the present paper are as follows: APH — apical phallomere; BPH — basal phallomere; CS — crescent shaped sclerites; CT — central trunk; ED — ejaculatory duct; LSp — large spicules; MPH — median phallomere; MSp — micro spicules; MT — medial tube; PB — pre-apical bulb; SSp — small spicules.

Measurements of various body parts are coded as follows: LB — length of body, from the tip of vertex to the apex of closed elytra; LE — length of elytra, from the basal to the apical margins along suture; LG — length of gena, from the upper to lower margins; LL — length of lower eye lobe, from the upper to lower margins; LP — length of pronotum, from the basal to apical margins along the mid-line; WB — maximum width across body; WEH — width across elytral humeri; WL — maximum width of lower eye lobe; WP — maximum width across pronotum.

New Species

Pseudoclyzomedus hainanus n. sp.

(Figs. 1 & 2)

Type locality. China, Hainan, Ledong County, Jianfeng Township, Jianfengling (Mt.), 18°43’0.85”N / 108°52’17.74”E, Alt. 1,412 m.

Type series. Holotype: ♂, The peak of Jianfengling (Mt.), Jianfeng Township, Ledong County, Hainan, China, 18°43’0.85”N / 108°52’17.74”E, Alt. 1,412 m, 3.V.2017, Bin LIU leg.

Paratypes: 1 ♀, same data as the holotype; 1 ♂, same locality and collector, 14.V.2017; 1 ♂, ditto, 17.V.2017; 1 ♀, same locality, 12.V.2018, Yinghui LI coll.; 1 ♀, same locality and collector, 17.V.2018; 1 ♂, ditto, 18.V.2018; 1 ♂, ditto, 22.V.2018; 1 ♀, ditto, 27.V.2018.

Description. M a l e (Fig. 1 a–c, n = 3): LB = 11.6–12.1 mm, WB = 5.0–5.2 mm.

Body black and/or dark brown, clothed with grayish white or creamy white pubescence and scattered with small spots of dark brown pubescence except for following parts: each basal part of antennomeres IV–X and tarsonomeres I–II which are provided with white pubescence; each apical part of antennomeres III–X and entire part of XI, apical part of each tibia, each tarsonomere III, and each craw which are clothed with dark brown pubescence. Elytron with round spot of creamy white pubescence on middle of base, and zigzag transversal narrow band of same pubescence behind middle.

Head with frons sparsely and finely punctured. Eye subdivided into upper and lower lobes which are connected posteriorly by narrow line without ommatidium; lower lobe slightly longer than wide, LL/WL = 1.1, LL/LG = 0.8–0.9. Antenna 2.0–2.1 times as long as body length; relative length of each antennomere from I to XI as follows (total length = 10.0): 1.5 : 0.2 : 1.6–1.7 : 1.3 : 1.0–1.1 : 0.9–1.0 : 0.8 : 0.7 : 0.6–0.7 : 0.5–0.6 : 0.6; antennomere I with small developed cicatrix on apical outer side; antennomere III weakly curved at basal 1/3; antennomeres III–VI slightly dilated inwardly and with short black setae apically; antennomere XI more or less curved apically. Pronotum transverse, LP/WP = 0.6–0.7, WP/WEH = 0.7–0.8, smooth and provided with sparse fine punctures on disk, roundly swollen laterally and obtusely projected laterally at widest point, weakly constricted near basal margin. Elytra moderate in length, LE/LB = 0.7, LE/WEH = 1.5–1.6; disk almost smooth except for punctures which are distinct and slightly umbilicate in basal part, thence reduced apically and disappeared in apical 1/3; sides weakly and roundly projected laterally at humeri, slightly narrowed toward apical 1/3, thence arcuately narrowed and rounded apically; apices with subquadrate inner angles. Prosternal process slightly projected below, roundly sloped in lateral view. Mesosternal process with tubercle on center near apex, nearly truncate in lateral view.

Male genitalia as in Fig. 2. Tegmen in dorsal view slender, widest near middle, gently curved in lateral view; paramere in dorsal view 1/5 length of tegmen, thickened inwardly at base, weakly constricted behind base, hardly narrowed toward rounded apex, with setae arising from apical 2/3 on latero-dorsal side and concentrated apically; ringed part in dorsal view expanded laterally near middle of tegmen, thence gently narrowed basally. Median lobe in dorsal view relatively thick in apical half, weakly constricted at basal 1/3, gently curved in lateral view; apex of ventral plate pointed; basal strut dehiscent from near apical 1/3 of median lobe. Endophallus slightly longer than twice length of median lobe; BPH subequal to 2/3 length of median lobe, with pair of CS near ventral swelling on distal part; MPH with MT+CT slender, with MSp and LSp; PB long, cylindrical, delimited from MT+CT by constriction, gently curved in distal part, with SSp; APH short, bean shaped, with ED on dorsal side of distal part; MSp minute, densely arranged on proximal half of MT+CT; LSp unidentate, fine, evenly distributed on distal half of MT+CT; SSp minute, densely covered on distal part of PB.

Fig. 1. Habitus of *Pseudoclyzomedus hainanus* n. sp. —— a–c, Male, holotype; d–f, female, paratype. —— a, d, Dorsal view; b, e, lateral view; c, f, frontal view.

F e m a l e (Fig. 1 d–f, n = 1): LB = 13.0, WB = 5.9. Similar to male, but relatively rotund. Antenna 1.7 times as long as LB; relative length of each antennomere as follows: 1.6 : 0.2 : 1.9 : 1.5 : 1.1 : 0.9 : 0.8 : 0.6 : 0.5 : 0.4 : 0.4.

Diagnosis. This new species is very similar to *Pseudoclyzomedus ohbayashii* YAMASAKO, 2009, the type species of the genus, and *P. borneoensis* YAMASAKO et HEFFERN, 2018, but easily distinguishable from them by its elytral maculation pattern and the antennomeres III–VI that are seemingly ser-

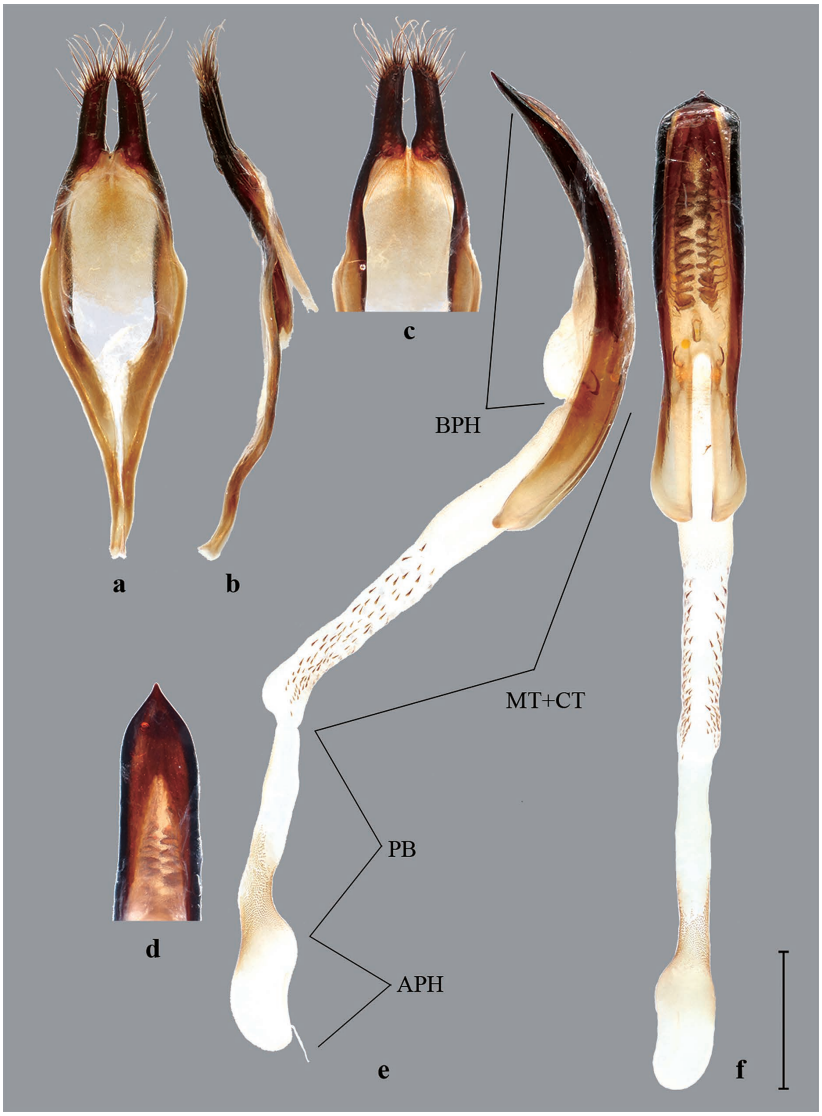

Fig. 2. Male genitalia of *Pseudoclyzomedus hainanus* n. sp. —— a–b, Tegmen; c, parameres; d, apex of median lobe; e–f, median lobe with endophallus. —— a, f, Dorsal view; b, e, lateral view; c, d, ventral view. Scale: 1.0 mm. For abbreviations see text.

rate due to the inwardly dilated apices with short black setae.

Distribution. China (Hainan) (known only from the type locality).

Remarks. The genus had been comprised two species, *P. ohbayashii* with two subspecies from North Laos (YAMASAKO, 2009) and North Thailand (HOLZSCHUH, 2017), and *P. borneoensis* from Borneo (YAMASAKO & HEFFERN, 2018). This is the first record of the genus not only from Hainan but also from China. Considering with the distribution gap, more new records and/or new species are expected from the mainland of China and the other area of the Indochina region.

New and Additional Records

Agelasta (*Mesolophus*) *dayremi* Breuning, 1938

(Fig. 2 a–b)

Specimen examined. 1 ♂, Jianfengling (Mt.), Jianfeng Township, Ledong County, Hainan, China, 2.III.2018, local collector leg.

Distribution. China (Hainan); Vietnam.

Remarks. This species had been known only from North Vietnam since Breuning (1938, 1939), and it is new to Hainan, representing the first record from China.

Agelasta (*Pseudagelasta*) *bifasciana* White, 1858

(Fig. 2 c–d)

Specimens examined. 1 ♂ (Fig. 2 c–d), Mingfeng Valley, Jianfeng Township, Ledong County, Hainan, China, 18°44'37.9"N / 108°50'41.7"E, Alt. 983 m, 23.IX.2014, B. Liu leg.; 1 ♂, 1 ♀, same data; 1 ♀, same locality, but 18°42'N / 108°52'E, 18–22.VII.2017, B. Liu leg.

Distribution. China (Hainan and Jiangxi); India (Assam and Bengale), Laos, Nepal, and Vietnam.

Remarks. Although this species had been known widely from Nepal to southeastern China (Weigel *et al*., 2013), this is the first record from Hainan.

Cacia (*Ipocregyes*) *subcephalotes* Breuning, 1968

(Fig. 2 e–f)

Specimen examined. 1 ♂ (Fig. 2 e–f), Mingfeng Valley, Jianfeng Township, Ledong County, Hainan, China, 18°44'38.6"N / 108°27.0"E, Alt. 1029 m, 24.IV.2014, B. Liu leg.

Distribution. China (Hainan); Laos.

Remarks. This species had been known only from Laos since Breuning (1968) and Rondon and Breuning (1970), and thus it is new to Hainan, representing the first record from China.

Clyzomedus laosensis Breuning, 1965

(Fig. 2 g–h)

Specimens examined. 1 ♀, The peak of Jianfengling (Mt.), Jianfeng Township, Ledong County, Hainan, China, 18°43'0.85"N / 108°52'17.74"E, Alt. 1,412 m, 8.V.2017, B. Liu leg.; 1 ♀, same locality and collector, 12.V.2017; 1 ♂ (Fig. 2 g–h), same locality and collector, 22.V.2017.

Distribution. China (Hainan); Laos.

Remarks. This species had been known only from Laos so far since Breuning (1965) and Rondon and Breuning (1970). It is new to Hainan, representing the first record from China.

Mesosa (*Aplocnemia*) *tenuefasciata* Pic, 1926

(Fig. 3 a–b)

Specimens examined. 1 ♂, The peak of Jianfengling (Mt.), Jianfeng Township, Ledong County, Hainan, China, 18°43'0.85"N / 108°52'17.74"E, Alt. 1,412 m, 23.VI.2017, B. Liu leg.; 1 ♀ (Fig. 3 a–

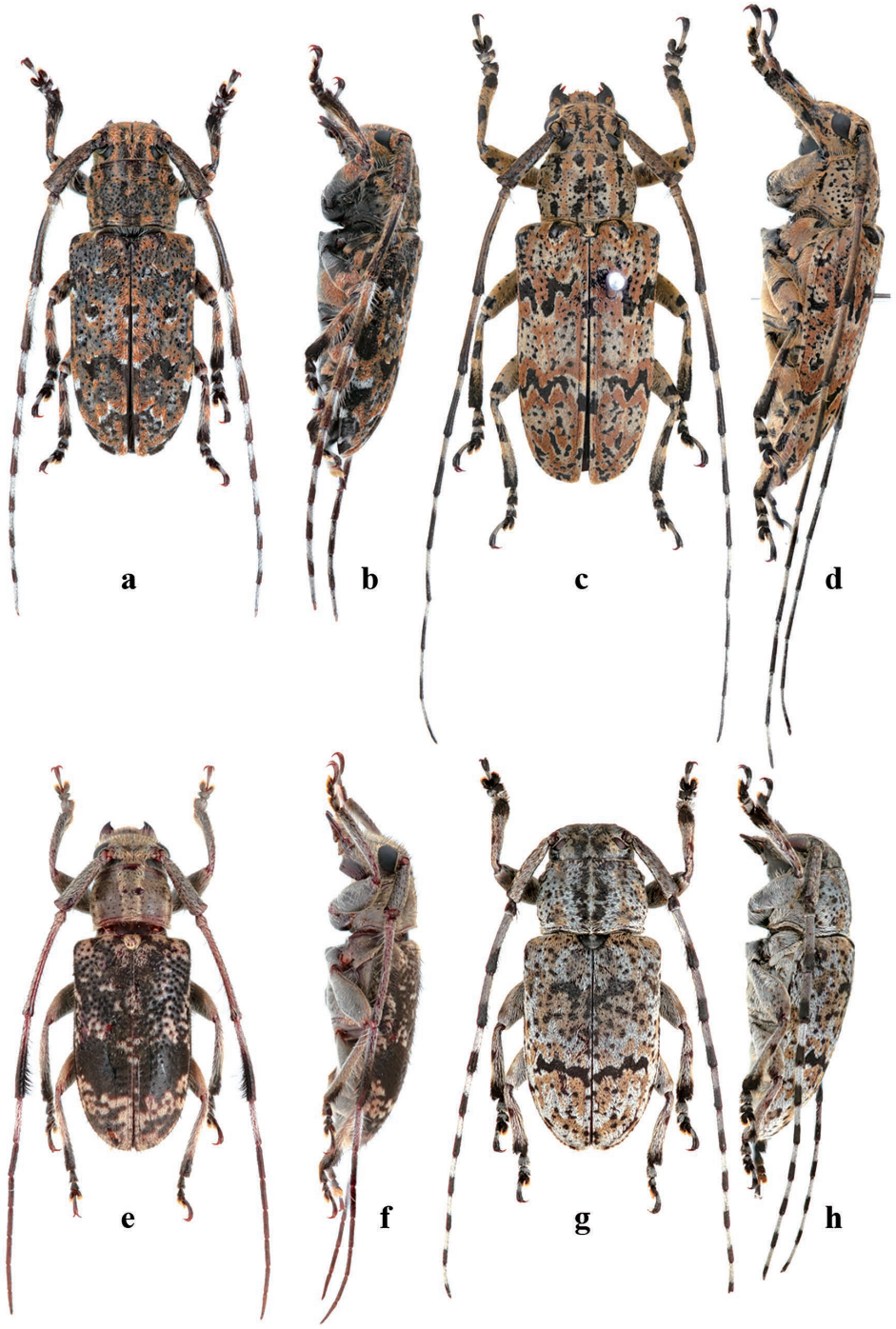

Fig. 3. Habitus of Mesosini spp. from Hainan. —— a–b, *Agelasta* (*Mesolophus*) *dayremi*; c–d, *Agelasta* (*Pseudagelasta*) *bifasciana*; e–f, *Cacia* (*Ipocregyes*) *subcephalotes*; g–h, *Clyzomedus laosensis*. —— a, c, e, g, Dorsal view; b, d, f, h, lateral view.

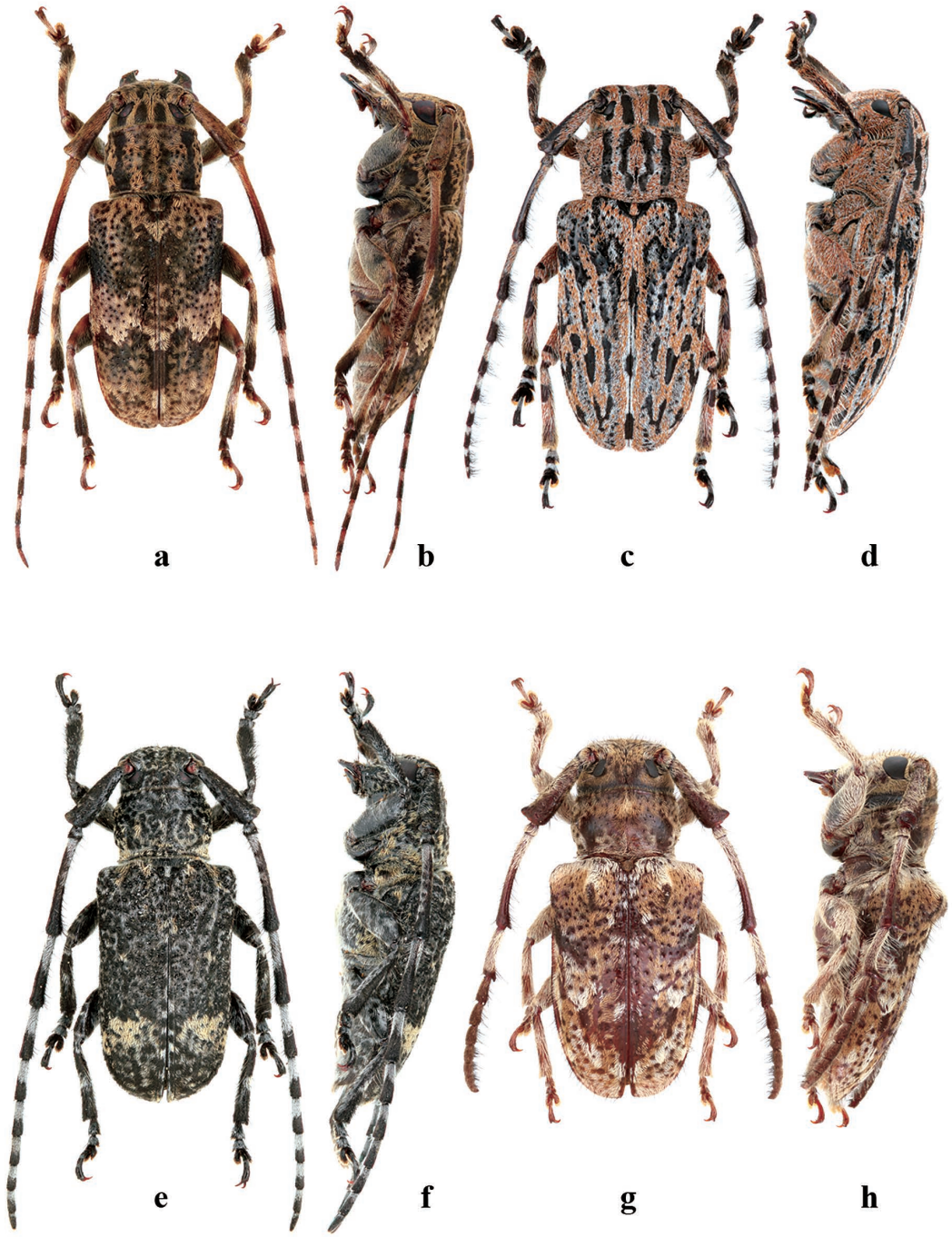

Fig. 4. Habitus of Mesosini spp. from Hainan. —— a–b, *Mesosa* (*Aplocnemia*) *tenuefasciata*; c–d, *Mesosa* (*Metamesosa*) *basinodosa*; e–f, *Metipocregyes nodieri*; g–h, *Spinipocregyes wenhsini*. —— a, c, e, g, Dorsal view; b, d, f, h, lateral view.

b), Mingfeng Valley, Jianfengling (Mts.), Jianfeng Township, Ledong County, 18°44'N / 108°50'E, Alt. ca. 1,000 m, 13.VII.2017, local collector leg.

Distribution. China (Hainan); Vietnam.

Remarks. This species had been known only from North Vietnam since PIC (1926) and BREUNING (1939). It is new to Hainan, representing the first record from China.

Mesosa* (*Metamesosa*) *basinodosa PIC, 1925

(Fig. 3 c–d)

Specimens examined. 1 ♀ (Fig. 3 c–d), The peak of Jianfengling (Mt.), Jianfeng Township, Ledong County, Hainan, China, 18°43'0.85"N / 108°52'17.74"E, Alt. 1,412 m, 8.V.2017, B. LIU leg.

Distribution. China (Hainan and Yunnan).

Remarks. This species had been known from Yunnan, China (PIC, 1925; BREUNING, 1939; LÖBL & SMETANA, 2010), and is newly recorded from Hainan.

Metipocregyes nodieri (PIC, 1933)

(Fig. 3 e–f)

Specimens examined. 1 ♂ (Fig. 3 e–f), The peak of Jianfengling (Mt.), Jianfeng Township, Ledong County, Hainan, China, 18°43'0.85"N / 108°52'17.74"E, Alt. 1,412 m, 12.V.2017, B. LIU leg.

Distribution. China (Guangxi, Hainan, and Yunnan); Vietnam.

Remarks. This species was described from North Vietnam by PIC (1933), and recently recorded from China (Guangxi and Yunnan) by YAMASAKO and LIN (2018), but it is new to Hainan.

Spinipocregyes wenhsini BI, 2013

(Fig. 4 g–h)

Specimen examined. 1 ♀ (Fig. 4 g–h), The peak of Jianfengling (Mt.), Jianfeng Township, Ledong County, Hainan, China, 18°43'0.85"N / 108°52'17.74"E, Alt. 1,412 m, 12.V.2017, B. LIU leg.

Distribution. China (Hainan).

Remarks. This species was described based on only the female holotype (BI, 2013). Since then, no additional record had been known so far. This female specimen was collected on the main peak of Jianfengling (Mt.). The type locality, Mingfeng Valley of Jianfeng Township, is located at the foot of this mountain.

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要　　約

山迫淳介・刘　彬：海南島に分布するゴマフカミキリ族（鞘翅目カミキリムシ科）の追加知見．―― 中国・海南島のゴマフカミキリ族は，Yamasako *et al*.（2017）の再検討により，21 種が確認された．しかし，近隣地域における本族の種多様性を考慮すると，同島には未確認の種がなお存在すると期待されていた．そこで，同島のファウナ調査を継続した結果，数種の未記録種に加え，これまでインドシナとボルネオのみから知られていた *Pseudoclyzomedus* 属の 1 未記載種が新たに確認された．本稿では，海南島から 1 新種 *Pseudoclyzomedus hainanus* n. sp. を命名記載し，7 未記録種を記録するとともに，これまでホロタイプ♀しか知られていなかった *Spinipocregyes wenhsini* の 1 ♀を模式産地と同山塊に属する近隣地域から追加記録した．最近 Yamasako and Lin（2018）によって追加された 1 新種と本研究の結果により，海南島のゴマフカミキリ族は 30 種となった．

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