

RESEARCH PAPER

Shibhonia buxanthi, a new genus and species of dorsally punctate Mirini from the island of Socotra (Hemiptera: Heteroptera: Miridae)

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Abstract. *Shibhonia buxanthi* gen. & sp. nov., living on *Buxus hildebrandtii* (senior synonym of *Buxanthus pedicellatus*) (Buxales: Buxaceae) on Socotra Island (Yemen) is described and illustrated. The new taxon is the sixth species of Miridae recorded from the island and the first endemic genus of this family. Due to the complex of its characters, it belongs to the group of dorsally punctate genera of the tribe Mirini. Inside this group it shows some superficial similarities (especially the colouration and body shape) with the genera *Capsus* Fabricius, 1803, *Chilocrates* Horváth, 1889 and *Koreocoris* Cho & Kwon, 2008, but it is readily distinguished from both by relevant morphological differences, particularly in the structure of male and female genitalia.

Key words. Hemiptera, Heteroptera, Miridae, Mirinae, *Lygus* group, host plant, new genus, new species, Socotra, Yemen, Afrotropical Region, Palaearctic Region

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Introduction

The Socotra Archipelago is situated in the western part of the Arabian Sea and consists of one main island, Socotra (3,625 km²), and three smaller islands, Samha (41 km²), Darsa (10 km²), and Abd el Kuri (133 km²), the last one situated about 100 km southwest of the main island. All four islands are closer to the Horn of Africa than to the Arabian Peninsula, being part of the African continent. The distance from Socotra to the nearest point on the African mainland, Cape Guardafui (NE Somalia), is 232 km, the closest point of the Arabian Peninsula (Ra's Fartaq in southern Yemen) is 351 km far. The highest mountain of the archipelago (Skand Mt.) reaches 1,550 m a.s.l. (for review of natural history of the island see KMENT & CARAPEZZA 2022 and additional references therein). Owing to its complex geomorphology and geological history, the limited area of Socotra holds a remarkably diverse vegetation cover and is globally recognized for its outstanding biodiversity and endemism. There

are about 843 species of vascular plants, including 310 species (i.e. 37%) regarded as endemic (e.g. MILLER & MORRIS 2004, KMENT & CARAPEZZA 2022). The available information on terrestrial and freshwater animals of the Socotra Island was reviewed by WRANIK (2003), with significant later additions (e.g. BATELKA 2012, HÁJEK & BEZDĚK 2012, 2014, 2017a,b, 2019; VAN DAMME et al. 2020; NASSIRKHANI et al. 2022, ROCA-CUSACHS & KMENT 2022, GNEZDILOV & MALENOVSKÝ 2023). The previous research and species richness of the heteropteran fauna of the Socotra Archipelago were reviewed by KMENT & CARAPEZZA (2022) who listed 68 species of Heteroptera classified in 58 genera and 24 families. Out of this number, two genera (*Socantestia* Ribes & Schmitz, 1992 and *Socotredocla* Moulet, 2022) and 22 species (i.e. 32%) are considered endemic.

Plant bugs or Miridae is the most species rich family of true bugs (Heteroptera) with about 11,100 described species distributed worldwide (e.g., CASSIS & SCHUH 2012,



HENRY 2017, SCHUH & WEIRAUCH 2020). However, only five species of Miridae were known to occur on Socotra prior to this study (see KMENT & CARAPEZZA 2022): one species of Cylapinae – *Peritropis selene* Linnavuori, 1994, endemic of Socotra (LINNAUORI 1994); two species of Mirinae – *Taylorilygus figuratus* Linnavuori, 1975, known from Ethiopia (LINNAUORI 1975) and Socotra (LINNAUORI & VAN HARTEN 2002), and *Volumnus rufus* Linnavuori, 1997, endemic of Socotra; and two species of Phylinae – *Yotvata (Yotvata) erifyle* Linnavuori, 1994, and *Yotvata (Godataira) hadibo* Linnavuori, 1994, both endemic of Socotra (LINNAUORI 1994). In this paper, we describe a new genus and species of Mirinae belonging to the dorsally punctate group of genera within the tribe Mirini.

Materials and methods

All measurements are given in millimetres (mm). They were taken using a Leica M205C stereomicroscope equipped with an ocular micrometer. The mesial length of pronotum is measured including the pronotal collar.

Habitus images were obtained using a Canon MP-E 65 mm macro lens attached to a Canon EOS 80D camera (photos by Attilio Carapezza), or Canon MP-E 65 mm macro lens attached to a Canon EOS 550D camera (photos by Petr Kment). The photographs were stacked from multiple layers using the Helicon Focus 5.1 Pro software. Non-coated specimens were examined by a Hitachi S-3700N environmental scanning electron microscope at the Department of Palaeontology, National Museum of the Czech Republic, Praha.

Male genitalia, after examination in glycerol, were mounted in dimethyl hydantoin formaldehyde resin (DMHF, a water-soluble mounting medium) on the same cardboard as the specimen; female genitalia were preserved in glycerol inside a small plastic vial with a silicon cap fixed on the same pin as the specimen. Female genitalia were treated with black chlorazol in order to enhance structural details. The general terminology used follows TSAI et al. (2011) and CARAPEZZA & KMENT (2024); the nomenclature of antennomeres is based on ZRZAVÝ (1990); the terminology of genitalia follows KONSTANTINOV (2003) and CARPINTERO & CHÉROT (2008) for males, DAVIS (1955) and KELTON (1955) for females.

The examined specimens are deposited in the following collections:

ACPI	Attilio Carapezza collection, Palermo, Italy;
MMBC	Moravian Museum, Brno, Czech Republic;
NHMW	Naturhistorisches Museum in Wien, Vienna, Austria;
NMPC	National Museum of the Czech Republic, Praha, Czech Republic.

In quoting the labels of holotype, a slash (/) is used to divide data on different lines of one label, double slash (//) is used to divide data on different labels, and the following abbreviation is used: p = printed. The locality data of the remaining specimens is standardized, the names of localities follow BEZDĚK et al. (2012) and the appropriate equivalents are given in parentheses if necessary.

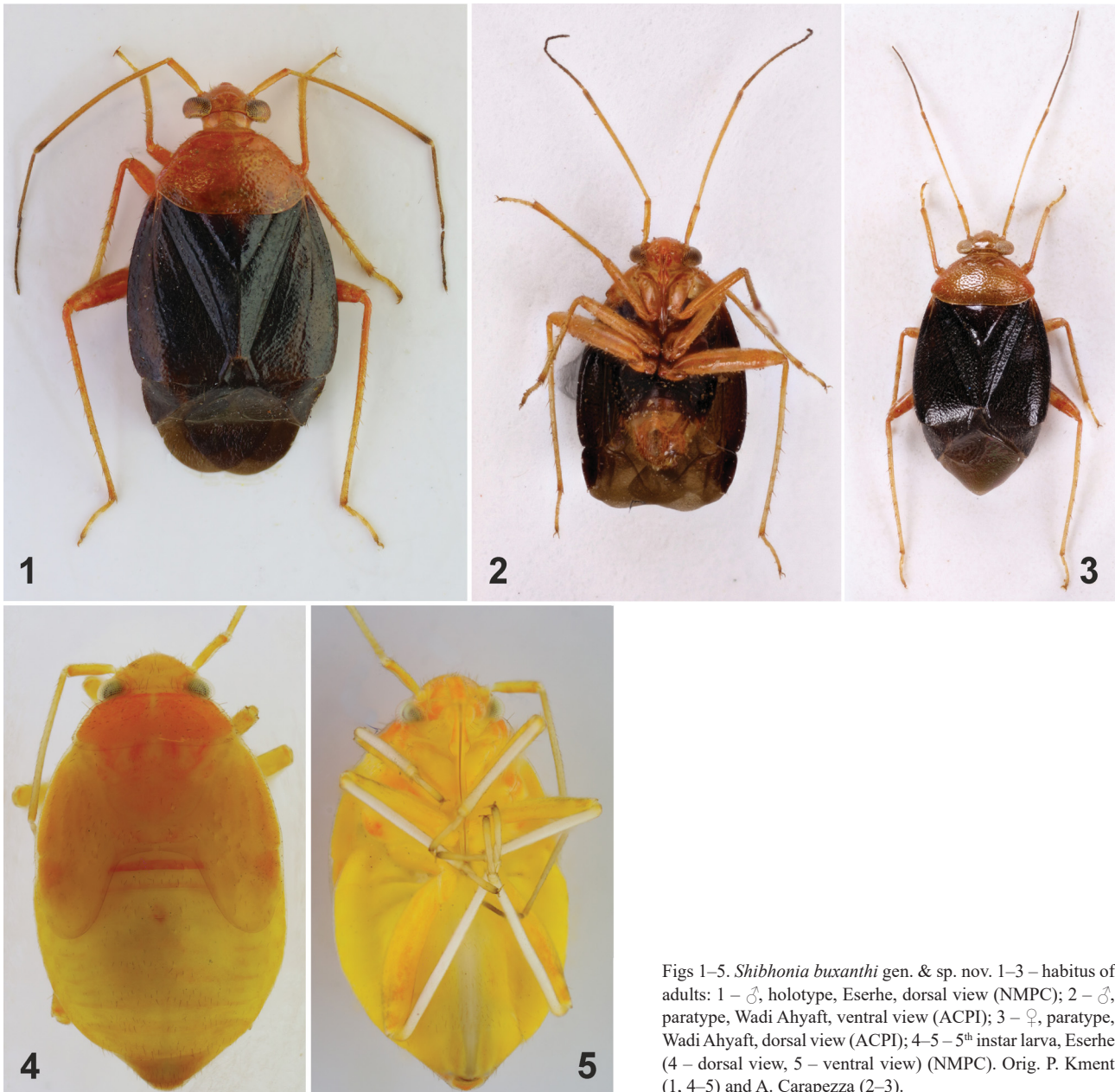
Taxonomy

Shibhonia gen. nov.

Type species. *Shibhonia buxanthi* sp. nov., here designated.

Description. *Colouration.* Colouration marked by contrasting bright orange and black brown parts of the body (Figs 1–3).

Structure. Body tumid, oval, dorsally half-shiny (Figs 1, 3), 3.80–5.30 mm long and 1.85–2.00 times longer than maximum width across hemelytra. Head declivous, clypeus protruding beyond anterior margin of frons (Fig. 10); vertex carinate; frons smooth (Fig. 9); antennal insertion dorsal to ventral margin of eye; eyes touching anterior margin of pronotal collar (Fig. 10). Antennae thin and long (Figs 1–3); scape (segment I) thickest, obviously surpassing clypeus, pedicel (II) almost linear, longer than pronotal width and longer than combined length of segments III–IV. Labium extending to median part of metacoxae, first segment inflated. Pronotum subtrapezoid, convex, uniformly punctured behind area of callosities (Figs 6, 8–9); anterior margin with distinct, narrow collar almost as long medially as maximum width of second antennal segment; lateral margins rounded, deflected, posterior margin straight, slightly concave medially, humeral angles rounded; callosities prominent, rounded, medially separated from each other as well as from pronotal lateral margins. Mesoscutum not exposed, scutellum tumid, with modest basal depression, its punctation wide and shallow (Fig. 9). Hemelytra evenly punctured except on cuneus (Figs 7–8), widely surpassing apex of abdomen (Fig. 2), lateral margins markedly rounded; membrane and cuneus deflexed (Figs 1, 8). Tibial spines short, yellowish-brown, not arising from black spots. Metatarsi with metatarsomere III subequal to II and 1.50 times as long as I. Metathoracic scent efferent system with elongate ostiole and ear-shaped peritreme. Male genitalia: genital capsule (Fig. 13) broad, basally 1.6 times wider than medially long, genital opening with small protuberance near left paramere insertion, little protruding outwards; left paramere (Figs 15–17) robust, provided with secondary lobe in form of sclerotized ligulate process opposite to sensory lobe (Fig. 15: sel, snl), sensory lobe well developed, devoid of teeth but bearing several short setae, apical process modestly widening preapically, apex flattened and truncate (Fig. 15: apl); right paramere (Fig. 14) wide, relatively elongate, subcylindrical, with slightly pointed apical process (Fig. 14: apl); vesica (Figs 18–20) with two posterior, strongly sclerotized processes (Fig. 18: sp), both hook-shaped apically, one very long, basal, the other shorter, originating in proximity of secondary gonopore (Fig. 18: sg), apical lobes covered with small spines. Female genitalia (Figs 11–12): parieto-vaginal rings (Fig. 11: pvr) relatively large, elongate, margins thick, anterior and latero-inner margins globally convex, posterior margin concave, outer margin almost straight, acute; no sclerite present between rings, but small prolongation arising from each outer margin; dorsal sac wide, getting both lateral oviducts (Fig. 11: lo) and the vermiform gland (Fig. 11: vg). Posterior wall (Fig. 12) wide, with large dorsal structure (Fig. 12: ds) probably subdivided in two



Figs 1–5. *Shibhonia buxanthi* gen. & sp. nov. 1–3 – habitus of adults: 1 – ♂, holotype, Eserhe, dorsal view (NMPC); 2 – ♂, paratype, Wadi Ahyaft, ventral view (ACPI); 3 – ♀, paratype, Wadi Ahyaft, dorsal view (ACPI); 4–5 – 5th instar larva, Eserhe (4 – dorsal view, 5 – ventral view) (NMPC). Orig. P. Kment (1, 4–5) and A. Carapezza (2–3).

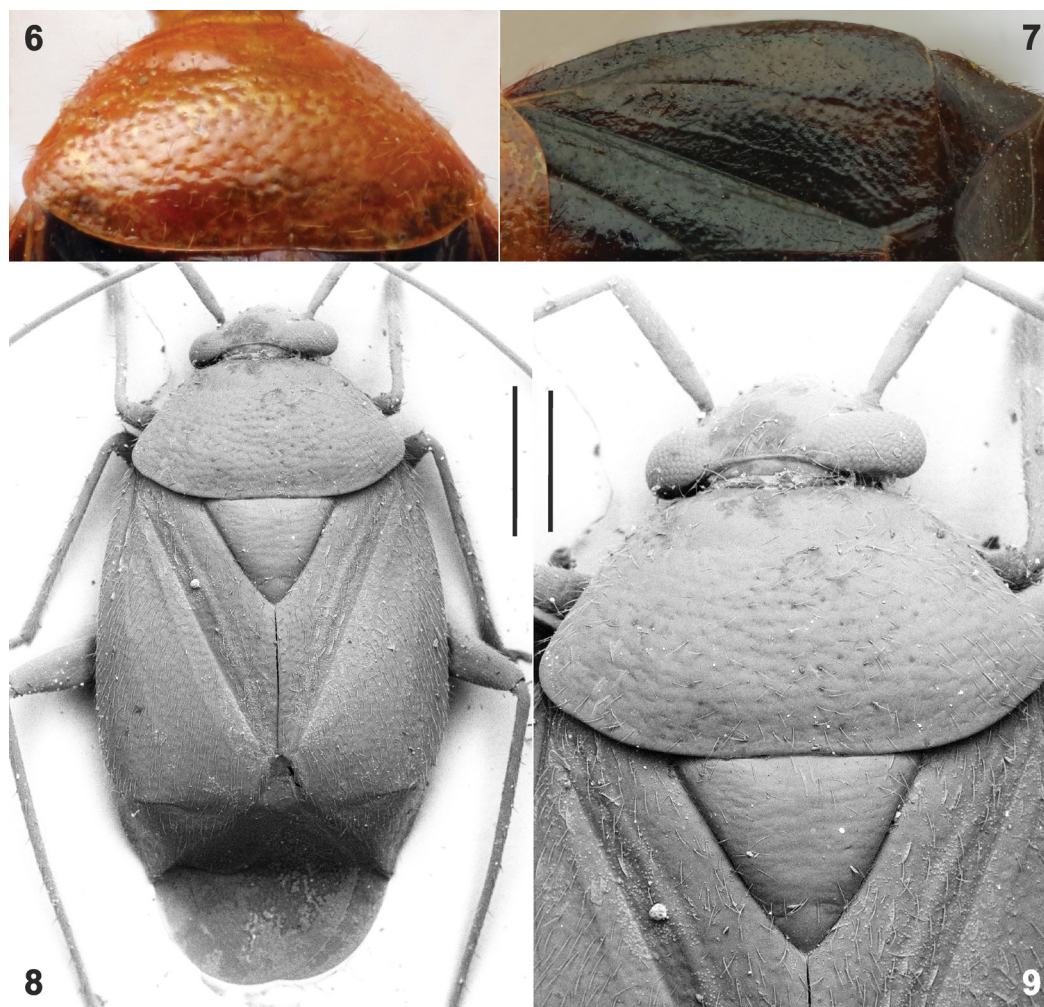
parts, and elongate median sclerite (= sigmoid process; Fig. 12: ms); inter-ramal sclerites (= A-structures; Fig. 12: irs) large, contiguous ventrally; inter-ramal lobes (= E-structures; Fig. 12: irl) elongate, contiguous to median sclerite dorsally; lateral lobes (= H-structures; Fig. 12: lal) present laterally, curved.

Pubescence. Dorsal surface with golden, semirecumbent, simple setae (Fig. 9).

Differential diagnosis. The following combination of characters easily separates *Shibhonia* gen. nov. from any other genera of Mirini: body tumid, rounded, 3.80–5.30 mm long, with contrasting bright orange and brown black colouration; pronotum (except area of callosities) and hemelytra (except embolium and cuneus) evenly punctured; dorsal surface with golden, semirecumbent, simple setae; head declivous, fairly projecting, clypeus visible dorsally; vertex carinate posteriorly; ocular index 1.20–1.35; antennae thin,

almost as long as body length; first segment of labium inflated; pronotal collar narrow; hemelytra with lateral margins markedly rounded, posteriad to costal fracture declivous; tibial spines pale, short; genital capsule with small protuberance near left paramere base; left paramere with ligulate process opposite to sensory process; vesica with two strongly sclerotized processes, both hook-shaped apically; parieto-vaginal rings relatively large, elongate, margins thick, posterior wall wide, membranous with large dorsal structure and elongate median sclerite; inter-ramal sclerites large, inter-ramal lobes elongate, lateral lobes present.

Among Mirini with punctured dorsal surface, a similar colouration pattern combined with an oval body occurs in some colour forms of the Palearctic *Capsus ater* (Linnaeus, 1758) (Fig. 21) and *Capsus wagneri* (Remane, 1950), and in the Oriental *Chilocrates patulus* (Walker,



Figs 6–9. *Shibhonia buxanthi* gen. & sp. nov., morphology and body vestiture. 6–7 – ♂, holotype: 6 – pronotum, 7 – right hemelytron. 8–9 – SEM micrographs: 8 – body in dorsal view (magnification 25×); 9 – detail of head and thorax (47×). Scale bars: 8 – 1.0 mm, 9 – 0.5 mm. Orig. A. Carapezza (6) and P. Kment (7–9).

1873) (Fig. 22) which is a typical Himalayan element, and *Koreocoris bicoloratus* Cho & Kwon, 2008, from South Korea. However, all these four species differ in black tibial spines and completely different male genitalia, particularly in dissimilarly shaped vesical sclerites and the absence of secondary lobe on dorsal surface of left paramere (WAGNER 1974, ZHENG et al. 2004, YASUNAGA & SCHWARTZ 2000, CHO & KWON 2008).

Etymology. The generic name is derived from the name of the area where the holotype was collected, Shibhon plateau. Gender is feminine.

Distribution. Known only from Socotra, Yemen.

***Shibhonia buxanthi* sp. nov.**

(Figs 1–20)

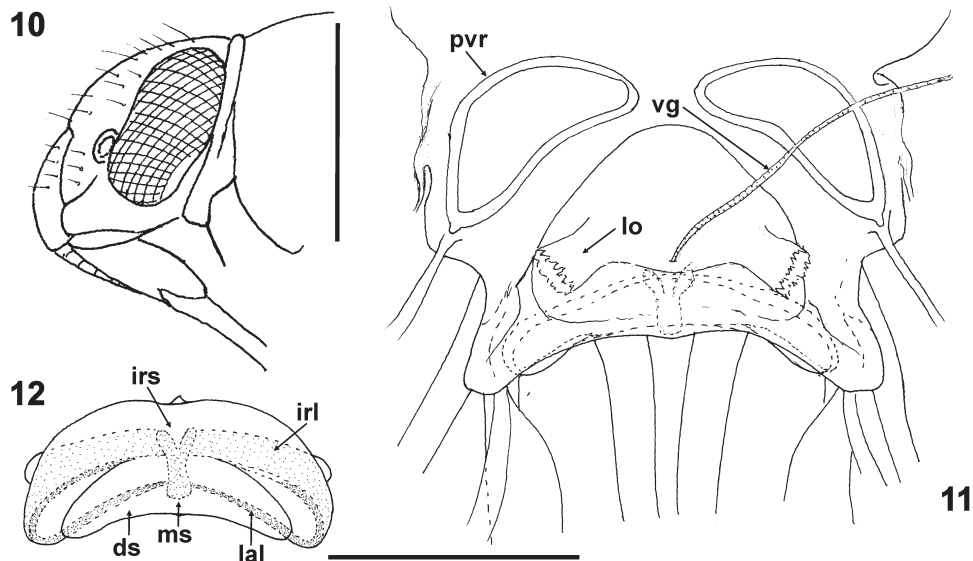
Type locality. Socotra, Shibhon plateau, Eserhe (12°25'12"N 53°56'36"E).

Type material. HOLOTYPE: ♂ (Fig. 1), 'YEMEN SOCOTRA Island / Shibhon plateau, / ESERHE 13.vi.2012 / *Croton socotranus* shrubland / 12°25.2'N, 53°56.6'E, 547 m [p] // SOCOTRA expedition 2012 / J. Bezděk, J. Hájek, V. Hula, / P. Kment, I. Malenovský, / J. Niedobová & L. Purchart lgt. [p] // HOLOTYPE / *SHIBHONIA* gen. nov. / *BUXANTHI* / sp. nov. / det.Carapezza & Kment 2024' [p, red label] (NMPC). PARATYPES: **SOCOTRA:** Shibhon plateau, Eserhe (12°25.2'N

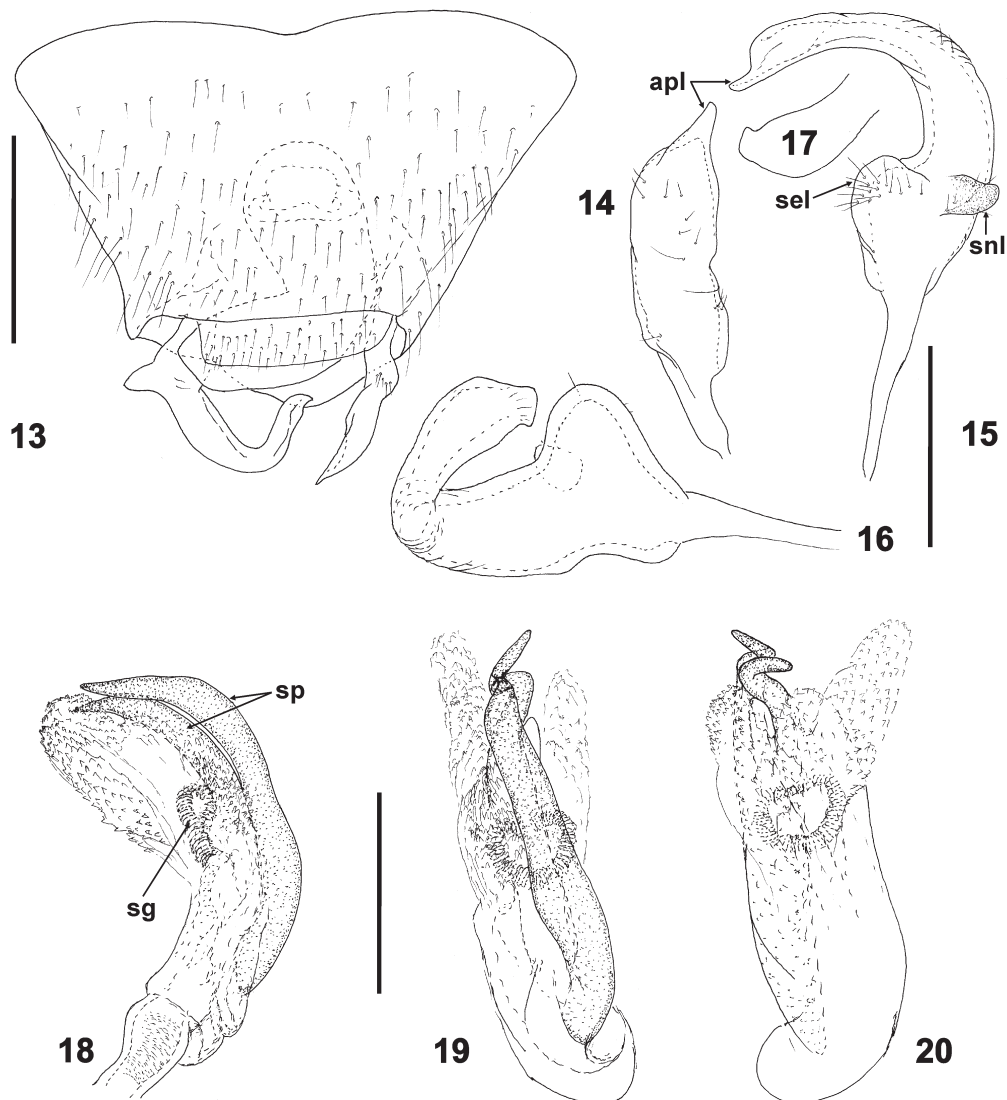
53°56.6'E), *Croton socotranus* shrubland, 547 m a.s.l., 13.vi.2012, 5 ♂♂ 5 ♀♀, Socotra expedition 2012: J. Bezděk, J. Hájek, V. Hula, P. Kment, I. Malenovský, J. Niedobová & L. Purchart lgt. (2 ♂♂ 4 ♀♀ NMPC, 1 ♂ 1 ♀ MMBC, 1 ♂ NHMW); Wadi Ayhaft (12°36'35"N 53°59'18"E), 280 m a.s.l., 10.iv.2008, 1 ♂ 1 ♀, 23.i.2014, 8 ♂♂ 1 ♀, on *Buxanthus pedicellatus* Tiegh., A. Carapezza lgt. (ACPI); Zemhon area [= Aloove] (12°20.58'N 54°06.39'E), 270–350 m a.s.l., 16.–17.vi.2010, 1 ♂ 1 ♀, V. Hula & J. Niedobová lgt. (NMPC). All the paratypes bear the following label: 'PARATYPUS / *SHIBHONIA* gen. nov. / *BUXANTHI* / sp. nov. / det.Carapezza & Kment 2024' [p, red label].

Additional material. SOCOTRA: Shibhon plateau, Eserhe, (12°25.2'N 53°56.6'E), *Croton socotranus* shrubland, 547 m a.s.l., 13.vi.2012, 6 larvae (5 L5 1 L4) (in pure ethanol), on *Buxanthus pedicellatus*, Socotra expedition 2012: J. Bezděk, J. Hájek, V. Hula, P. Kment, I. Malenovský, J. Niedobová & L. Purchart lgt. (NMPC).

Description. Male. Colouration (Figs 1–2). Colouration marked by contrasting bright orange and brown black parts of body, orange colour tending to fade in preserved specimens. Head uniformly orange both dorsally and ventrally; labium pale with apical half of segment IV embrowned; scape (segment I) and pedicel (segment II) orange, pedicel apically embrowned; basiflagellum (segment III) and distiflagellum (segment IV) pale brown. Pronotum including collar and propleuron uniformly orange; meso- and



Figs 10–12. *Shibhonia buxanthi* gen. & sp. nov.: 10 – head in lateral view; 11–12 – female internal genitalia: 11 – genital chamber; 12 – posterior wall. Lettering: ds – dorsal structure, irl – inter-ramal lobe (= E-structure), irs – inter-ramal sclerites (= A-structures), lal – lateral lobe (= H-structure), lo – lateral oviduct, ms – median sclerite (= sigmoid process), pvr – parieto-vaginal ring, vg – vermiform gland. Scale bars: 0.5 mm. Orig. A. Carapezza.



Figs 13–20. *Shibhonia buxanthi* gen. & sp. nov., male genitalia: 13 – genital capsule, dorsal view; 14 – right paramere; 15–16 – left paramere in two different views; 17 – apex of left paramere; 18–20 – vesica in three different views. Lettering: apl – apical process, sel – sensory lobe, snl – secondary lobe, sg – secondary gonopore, sp – sclerotized processes. Scale bars: 13 – 0.5 mm, 14–20 – 0.3 mm. Orig. A. Carapezza.

metapleuron orange, often with brown-black central spot; metathoracic scent gland peritreme and evaporatorium orange; legs entirely orange; tibial spines pale brown. Scutellum and hemelytra including membrane uniformly brown black or black; abdomen either entirely orange or pregenital abdomen black with ventrites VI–VIII marginally orange and genital capsule orange.

Structure. Body tumid and rounded (Figs 1–3), 1.85–2.00 times longer than maximum width across hemelytra and 2.6 times longer than basal width of pronotum. Head declivous, in dorsal view 2.5 times wider across eyes than medially long, in lateral view 1.3 times longer than high, in frontal view 1.2 times wider than high; clypeus protruding beyond anterior margin of frons (Fig. 10), preocular part equal to two fifths of total length of head; posterior margin of vertex carinate (Fig. 9); eyes moderately large, touching anterior margin of pronotal collar, occupying about two thirds of head height in lateral view; ocular index 1.20–1.25; antennal insertion in contiguity with antero-inferior margin of eye, dorsal to ventral margin of eye (Fig. 10); antennae thin and long, little shorter than body length; scape exceeding anterior margin of clypeus by two thirds of its length, pedicel very slightly incrassate from base to apex, 1.1 times longer than basal width of pronotum and 1.1 times longer than combined length of basi- and distiflagellum; basiflagellum thinner than pedicel, 1.3 times longer than distiflagellum; labium extending to metacoxae, first labiomere inflated, about twice thicker than the three distal labiomeres; length of labiomeres (mm): 0.48–0.46–0.24–0.42. Pronotal collar short, its length inferior to maximal width of scape, close to maximal width

of pedicel. Pronotum rather convex, 1.87 times wider than medially long, evenly punctured behind callal region; lateral margins rounded, deflected, posterior margin straight in middle, laterally rounded; posterior margin of pronotum 1.72 times as wide as head across eyes. Mesoscutum not exposed. Scutellum (Fig. 9) widely and shallowly punctured, tumid, with modest basal depression, basally as wide as medially long. Hemelytra evenly punctured except on cuneus (Figs 7, 8), widely surpassing apex of abdomen, lateral margins markedly rounded, posteriad to costal fracture declivous (Figs 1, 8). Tibial spines little longer than diameter of tibia; metatarsi with metatarsomere III subequal to II and 1.5 times longer than I. Metathoracic scent efferent system with elongate ostiole and ear-shaped peritreme. Male genitalia as for the genus.

Pubescence. Dorsal surface with golden, semirecumbent, simple setae (Fig. 9). Antennae and legs with short, recumbent pale setae.

Female (Fig. 3). Similar to male in colouration, structure and pubescence. Body 1.80–1.94 times longer than maximum width across hemelytra and 2.6 times longer than basal width of pronotum, ocular index 1.30–1.35; in a few specimens base of scutellum orange or with small, triangular, orange spot; in one specimen whole scutellum except for the tip is orange; posterior margin of pronotum 1.87 times as wide as head across eyes. Female genitalia (Figs 11–12) as for the genus.

Larva (4th and 5th instars) (Figs 4–5). Body oval, yellow, eyes and apex of labium black, tibiae white (Fig. 5). In last instar larvae head, thorax and apex of abdomen



Figs 21–22. Dorsal habitus of red and black representatives of dorsally punctate Mirini: 21 – *Capsus ater* (Linnaeus, 1758), ♀, Sicily, Menfi (ACPI); 22 – *Chilocrates patulus* (Walker, 1873), ♀, Bhutan, Probjika valley (ACPI). Scale bar: 1.0 mm. Orig. A. Carapezza.

with variable orange markings, most intense on pronotum (Fig. 4); area around ostioles of anterior dorsal abdominal scent gland (situated between tergites III and IV) orange; distiflagellum grey. Body and appendages sparsely covered with black setae (Fig. 4).

Measurements. *Males* (n = 8; median (minimum–maximum); mm). Body length: 4.36 (3.80–4.80); maximum width across hemelytra 2.31 (2.20–2.46); head width: 1.00 (0.93–1.05); minimum dorsal interocular distance: 0.38 (0.35–0.40); pronotum width: 1.72 (1.58–1.84); pronotum median length: 0.92 (0.83–1.05); length of antennomeres: I – 0.58 (0.56–0.59), II – 1.88 (1.80–1.93), III – 0.96 (0.90–1.00), IV – 0.74 (0.71–0.77).

Females (n = 7; median (minimum–maximum); mm). Body length: 4.92 (4.06–5.33); maximum width across hemelytra 2.60 (2.40–2.93); head width: 1.04 (0.97–1.08); minimum dorsal interocular distance: 0.42 (0.39–0.45); pronotum width: 1.87 (1.74–2.06); pronotum median length: 1.00 (0.90–1.06); length of antennomeres: I – 0.58 (0.56–0.61), II – 1.84 (1.74–1.93), III – 0.98 (0.89–1.06), IV – 0.79 (0.72–0.85).

Larva of instar 5 (n = 5; median (minimum–maximum); mm). Body length: 3.28 (2.94–3.43), maximum body width across abdominal segment IV 1.96 (1.86–2.06).

Larva of instar 4 (n = 1; mm). Body length: 2.74, maximum body width across abdominal segment IV 1.47.

Differential diagnosis. As for the genus.

Etymology. The specific epithet of the new species is based on its host plant, *Buxanthus pedicellatus*, a junior synonym of *Buxus hildebrandtii*; noun in genitive case standing in apposition.

Host plant and habitat. Adults and larvae of the new taxon were collected by beating branches of *Buxus hildebrandtii* (Buxales: Buxaceae) in a woody area of the low elevation zone (Fig. 24) and in *Croton socotranus* shrubland in the medium elevation zone (Fig. 23) of Socotra Island. *Buxus hildebrandtii* is an evergreen shrub or small tree (Fig. 25), generally short, below 6 meters in height, but can grow up to 9 meters high and a trunk diameter of up to 15 cm under favorable conditions. The leaves are oval in shape, leathery and olive-green, 2 to 5 cm long and 0.5 to 2.5 cm wide. It is growing on the mountains of the island, on both limestone and granite. It is an important component of the shrubland and often the dominant shrub in large areas (MILLER & MORRIS 2004, ANONYMUS 2024). Specimens of *Shibhonia buxanthi* gen. & sp. nov. were collected in altitudes between 270 and 547 m a.s.l.

Distribution. Endemic to Socotra.

Discussion

Taxonomic placement. Due to its main characters, *Shibhonia buxanthi* gen. & sp. nov. belongs to the informal group of dorsally punctate Mirini. Within it the new taxon meets almost completely the morphological conditions indicated



Figs 23–25. Habitats of *Shibhonia buxanthi* gen. & sp. nov. in Socotra, *Croton socotranus* shrubland: 23 – Shibhon plateau, Eserhe (photo by I. Malenovský). 24 – Wadi Ayhaft (photo by A. Carapezza). 25 – *Buxus hildebrandtii*, host plant of *Shibhonia buxanthi* gen. & sp. nov. in Socotra, Shibhon plateau, Eserhe (photo by P. Kment).

in recent literature for inclusion in the *Lygus* complex: moderately sized body (4–6 mm); pronotum, sometimes also hemelytra, more or less distinctly punctate (if pronotal punctation indistinct, then vertex with distinct transverse basal carina); vestiture usually including patchy or generally restricted silky, silvery setae and uniformly distributed reclining simple setae; posterior margin of pronotum 1.6–2.3 times as wide as head across the eyes; antennal fossae usually situated somewhat dorsal to the ventral margin of the eye; inner margin of the eye strongly concave; calli of pronotum usually only weakly raised; males with sensory lobe of left paramere variously raised, usually bearing spinules (YASUNAGA et al. 2002, NAMYATOVA et al. 2021). The placement of *Shibhonia buxanthi* gen. & sp. nov. in the *Lygus* complex however must be regarded as provisional because the *Lygus* complex itself is presently considered a group of convenience, assembling taxa sorted by plesiomorphies (YASUNAGA et al. 2002). In the few available phylogenetic analyses the *Lygus* complex was recognized as non-monophyletic and with high support including other genera of Mirini not previously included in it (NAMYATOVA & CASSIS 2018, KIM & JUNG 2019, NAMYATOVA et al. 2021, ZAMANI & HOSSEINI 2022). In particular, the relationships of the genera of the *Lygus* complex with the rest of dorsally punctate Mirini are not clear, and one of the main reasons for this confused situation is the poor definition of most of the recognized genera. A big step forward to help clarify this unsatisfactory situation is the forthcoming publication of a preliminary review of the world genera of dorsally punctate Mirini (F. Chérot, T. Yasunaga, M. D. Schwartz, A. Carapezza, D. L. Carpintero and Yeshwanth H. M., in prep.) which will allow a satisfactory phylogenetic assessment of suprageneric taxonomy of the relevant groups of the genera of Mirini.

Distribution. *Shibhonia buxanthi* gen. & sp. nov. is currently considered endemic of Socotra, which increases the numbers of endemics to three genera and 23 species (see KMENT & CARAPEZZA 2022). However, its host plant, *Buxus hildebrandtii*, is also found in the foothills and mountains of eastern Ethiopia, Djibouti, Somaliland, northern and central Somalia. It grows in semi-arid semi-evergreen or evergreen shrubland communities, generally between 600 and 2000 meters elevation, which lie between lowland *Acacia-Commiphora* bushlands and thickets and high-elevation juniper forests. In coastal central Somalia, *Buxus hildebrandtii* is also found in Hobyo grasslands and shrublands, where limestone gorges provide shelter and moisture which sustains shrubland plant communities at lower elevations (MILLER & MORRIS 2004, ANONYMUS 2024). As these areas are only very poorly sampled (e.g. LINNAVUORI 1976, 1977, 1982, 1986; LINNAVUORI & VAN HARTEN 2001) the future research must confirm the status of this as well as many other Socotran true bug species as truly endemic. There are two additional species, *Batyhcoelia alkyone* Linnavuori, 1989 (Pentatomidae) and *Euthetus granti* Kirkaldy, 1899 (Alydidae), originally described as Socotran endemics, that were later also found in southern Yemen (LINNAVUORI & VAN HARTEN 2002 and LINNAVUORI 1987, respectively).

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