# **EUROPEAN JOURNAL OF ENTOMOLOGY**

ISSN (online): 1802-8829 http://www.eje.cz Eur. J. Entomol. 117: 442-462, 2020 doi: 10.14411/eje.2020.048

ORIGINAL ARTICLE

# Oxymorus (Coleoptera: Curculionidae: Entiminae: Oosomini), a new genus with nine new species from South Africa

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Key words. Coleoptera, Curculionidae, Entiminae, Oosomini, taxonomy, new genus, new species, South Africa

**Abstract.** A new genus *Oxymorus* Borovec & Meregalli gen. n., belonging to the tribe Oosomini Lacordaire, 1863 of the curculionid subfamily Entiminae, is described. It includes nine new species, all from South Africa: *Oxymorus uitkyk* sp. n., type species, *O. antennalis* sp. n., *O. johnprinei* sp. n., *O. minor* sp. n., *O. obesus* sp. n., *O. oculatus* sp. n., *O. rikae* sp. n., *O. strictifrons* sp. n. and *O. sulcaticollis* sp. n. All species are illustrated and keyed.

ZooBank Article Registration: http://zoobank.org/urn:lsid:zoobank.org:pub:FFC0DCCE-5C14-4C68-9F46-A92C11AAFDF4

#### INTRODUCTION

The tribe Oosomini was named by Lacordaire (1863), who established nine groups for his "Otiorhynchides". The "Group Oosomides", with 12 genera, was placed among the "Otiorhynchides" with corbels "caverneuses", that is, having a true corbel. Marshall (1942) used not only the shape of the antennal sockets and the metatibial corbels and claws for classifying the Afrotropical broad-nosed weevil genera, but also the chaetotaxy on the mandibles. He split Entiminae with 'otiorhynchine' type of antennal sockets into two groups: (1) tribes with three setae on mandibles and (2) tribes with mandible bearing numerous setae, rarely only four. The 12 genera of Lacordaire's Oosomides were then split into two tribes: Oosomini, for genera with free claws, and the newly described tribe Embrithini Marshall, 1942, for genera with connate claws (Marshall, 1942). The tribe Embrithini was more precisely re-defined recently by Borovec & Oberprieler (2013). In contrast, no accurate definition of Oosomini is available, since in Marshall's concept they vary greatly in several of the characters usually applied to delimit a tribe. The tribe, as currently considered (Alonso-Zarazaga & Lyal 1999) and later reduced by transferring six genera to the tribe Embrithini Marshall, 1942 (Borovec & Oberprieler 2013), is composed of several genera from the western and eastern parts of South Africa, but it lacks any modern taxonomic analysis. Therefore, its definition is rather vague and incomplete, and part of the genera now included might have to be removed when phylogenetically analysed. This paper presents a better knowledge of the tribe, the description of a new genus and nine closely related new species, morphologically sister to the type genus *Oosomus*.

#### **MATERIAL AND METHODS**

Some of the specimens examined were found by the authors in South Africa, usually collected by net sweeping or umbrella beating of fynbos vegetation. Other specimens were discovered in large collections of unidentified weevils conserved in museums and institutions in South Africa.

Body length of all specimens was measured in dorsal view from anterior border of eyes to apex of elytra, excluding rostrum. Length/width ratio of rostrum was measured as length between base of rostrum and base of mandibles versus width at base of rostrum. Length/width ratios of pronotum, elytra, antennal and tarsal segments were taken at the maximum length and width of the respective parts in dorsal view. Genitalia were cleared in 10% KOH and carefully dissected; female genitalia were embedded in Solakryl BMX (epoxy resin soluble in toluene; Medika, Prague), male genitalia were mounted dry on the same card as the respective specimen. Terminology of rostrum and genitalia follows Oberprieler et al. (2014). Photographs were taken using a Nikon P 6000 digital camera mounted on a Wild MDG17 microscope, combining images in stacks with Zerene Stacker. All images were cleaned and enhanced as necessary in Adobe Photoshop CS3.

This study was carried out with the following research permits: SANParks. Permit released September 7, 2012, unnumbered, renewed; Cape Nature: AAA007-00085-0056. SANParks. Permit number MERM/AGR/035-2012/2017-2022/V1; Cape Nature: AAA041-00158-0056; Cape Nature: CN44-28-11324.



Labels on the specimens are reported verbatim; additions by the authors are in square brackets.

Specimens are deposited in the following museums and private collections: BMNH – Natural History Museum, London, United Kingdom [formerly British Museum (Natural History)], Maxwell Barclay; MMTI – Massimo Meregalli collection, Torino, Italy; NMBH – National Museum, Bloemfontein, South Africa, Burgert Muller; RBSC – Roman Borovec collection, Sloupno, Czech Republic; SANC – National Collection of Insects, Pretoria, South Africa, Riaan Stals; TMSA – Ditsong National Museum of Natural History (formerly Transvaal Museum), Pretoria, South Africa, Ruth Müller.

#### **TAXONOMY**

#### Genus Oxymorus gen. n.

Figs 1-11

ZooBank taxon LSID: 3F7257A4-35E7-4263-8AF7-EF4928DBB015

**Type species.** Oxymorus uitkyk Borovec & Meregalli sp. n., here designated.

**Diagnosis.** Small to medium sized Oosomini, 2.6–6.9 mm long; rostrum long, in majority of species distinctly longer than wide, with usually slightly concave sides, posteriorly separated from head by shallow depression; epifrons short and narrow, distinctly carinate only in middle third of rostrum; frons large, glabrous, posteriorly not separated from epifrons; epistome not developed; antennal sockets dorsally placed, in profile short, reaching dorsal border of rostrum; short basal part of pronotum curved ventrally, not forming a clear margin; protibiae narrowly conspicuously produced externally; metatibiae amucronate; claws free; suture between ventrites 1 and 2 weakly sinuose; sternite VIII with plate with membranous posterior margin; gonocoxites long elliptical, with styli microscopic, subapical.

**Description.** Body length 2.6–6.9 mm. Body integument brownish to dark brownish, antennae and legs paler, monochromatic. Dorsal and ventral side of body densely covered by appressed rounded squamae (only one species glabrous), only rostrum excepting basal part glabrous, antennal funicles with clubs and tarsi setose. Dorsal side of body with inconspicuous, mostly short semi-appressed to semi-erect piliform setae, forming regular rows on elytral interstriae.

Head wide and short, slightly enlarged posteriorly; vertex flat, as wide as base of rostrum; ventrally smooth, only sparsely squamose. Eyes medium sized, sub dorsal, slightly protruding above outline of head; in profile sub circular, almost reaching dorsal border of head. Rostrum (Figs 1D, E, 2D, F, 3D, E, 4D, E, 5D, E, 6D, E, 7E, G, 8D, F, 9C, E) moderately long, 1.9–2.4× longer than wide, only in some species shorter, 1.3–1.4× longer than wide, in one species as long as wide, widest at base, narrows slightly apically, usually with slightly concave sides, slightly enlarged around antennal insertion; in profile slightly regularly curved, separated from head by shallow, occasionally deep, depression with ill-defined borders. Epifrons short and narrow, distinctly carinate only in middle third of rostrum, carina occupying from one third to one half of

rostrum width, subparallel-sided or triangular and tapered posteriorly. Frons large, glabrous, smooth, only finely punctured, posteriorly not separated from epifrons, with numerous prominent fine setae on lateral parts. Epistome not developed. Antennal sockets dorsally placed, dorsally fully visible, forming elongated fossae or are narrowly reniform; in profile short, dorsal border reaching dorsal border of rostrum, regularly curved, ventral border distinctly shorter than dorsal border, curved, forming a glabrous furrow shortly continuing anteriorly from insertion and further posteriorly, slightly enlarged posteriorly and disappearing well before the eyes. Mandibles small, projecting anteriorly, lacking scales, trisetose. Subgena sparsely setose. Prementum with two short fine setae.

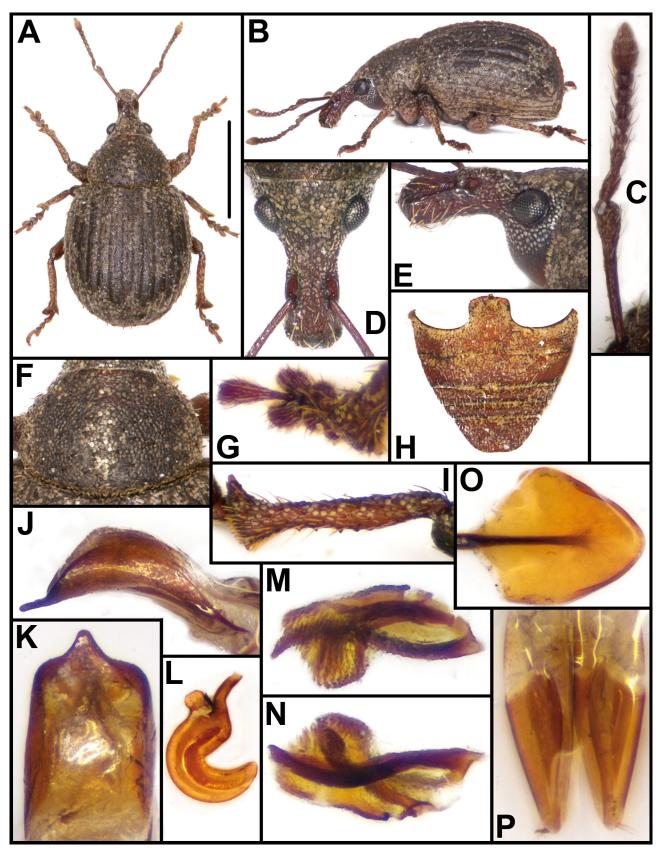
Antennae (Figs 1A, C, 2A, C, 3A, C, 4A, H, 5A, C, 6A, C, 7A, C, 8A, C, 9A, D) slender; scape reaching anterior border of pronotum in repose, longer than funicle; funicle 7-segmented, segments 1 and 2 conical, segments 3–7 as long as wide to slightly transverse, seldom distinctly transverse; club oval.

Pronotum (Figs 1A, F, 2A, E, 3A, E, 4A, E, 5A, G, 6A, H, 7A, F, 8A, E, 9A, F) distinctly domed, widest behind midlength, sides distinctly rounded, base arched; short basal part of pronotum curved ventrally and covered in rest position by basal part of elytra, not forming a clear margin, covered by half-sized scales, different from scales on disc. Anterior border laterally straight without ocular lobes or vibrissae, obliquely directed posteriorly. Procoxal cavities contiguous, round, moderately large, placed nearer to anterior border of pronotum, occupying majority of space on short ventral part of pronotum.

Scutellar shield extremely small, hardly visible.

Elytra (Figs 1A, 2A, 3A, 4A, 5A, 6A, 7A, 8A, 9A) oval to elongate oval, at base slightly wider than base of pronotum, lacking humeral calli; base arched; slope of declivity overhanging apices of elytra in dorsal view. Elytra 10-striate; striae punctate, punctures hidden under vestiture, interstriae wide and flat. Hindwings missing. Mesocoxae semiglobular, mesosternal process extremely slender. Metacoxae transverse, metaventral process obtuse or slightly arrow-shaped, distinctly narrower than transverse diameter of metacoxa. Tergite VII and VIII in females weakly sclerotized, large, subtriangular; in males tergite VIII weakly sclerotized, very short and wide, tergite VIII bowl-shaped, apically rounded, well sclerotized.

Legs (Figs 1A, 2A, 3A, 4A, 5A, 6A, 7A, 8A, 9A) robust. Femora swollen, unarmed. Trochanters with one long seta. Protibiae (Figs 1I, 2H, 3G, 4C, 5F, 6F, 7I, 8G, 9L) short and robust, narrowly conspicuously produced externally in a very narrow long lobe, only in one species almost equally enlarged internally and externally, apically truncated or rounded, fringed with very short bristles or spines, with small unobtrusive mucro, lacking spur; inner side in majority of species slightly denticulate; mesotibiae weakly, metatibiae distinctly enlarged externally, mesotibiae shortly mucronate, metatibiae amucronate; apical surface of metatibiae glabrous, deepened, externally fringed with very short brownish spines. Tarsi (Figs 1G, 2J, 3J, 4C,



**Fig. 1.** Oxymorus uitkyk sp. n., paratypes, male (A–K, M, N) and female (L, O, P): A – habitus, dorsal view; B – habitus, lateral view; C – antenna; D – head with rostrum, dorsal view; E – head with rostrum, lateral view; F – pronotum; G – tarsus; H – abdominal ventrites; I – right protibia; J – penis, lateral view; K – penis, dorsal view; L – spermatheca; M – sclerites of endophallus, dorsal view; N – sclerites of endophallus, lateral view; O – plate of female sternite VIII; P – gonocoxites.

5F, 6F, 7J, 8H, 9K) slender, with segment 1 slightly shorter than 2+3, segment 3 bilobed, distinctly wider than segment 1 or 2; onychium shorter or longer than segment 3; claws free, somewhat divaricate.

Ventrites (Figs 1H, 2I, 4I, 5H, 6I, 7H, 9G) subtriangular; ventrite 1 at middle slightly longer, behind metacoxa as long as ventrite 2; ventrite 2 as long as ventrites 3 and 4 combined; ventrite 5 in males shorter, apically obtusely truncated, in females longer, apically subtriangular. Suture between ventrites 1 and 2 fine, weakly sinuose, between the other sutures wide, deep and straight.

Male terminalia. Penis (Figs 1J, K, 2K, L, 4J, K, 6J, K, 8J, K) rather short, well sclerotized, temones 1.1–1.8× longer than body of penis; endophallus with 1–3 long, slender, pointed, often curved sclerites. Tegmen (Fig. 6M) with slender complete ring with two short parameres, separated at base, manubrium as long as diameter of ring or only slightly longer. Sternite IX moderately elongate, anteriorly curved and tapered, posteriorly with fused short basal arms; hemisternites comma-shaped, curved.

Female terminalia. Sternite VIII (Figs 10, 3H, 5I, 7K, N, 8M, 9I) with short and moderately robust apodeme, widest at midlength and terminating on apical part of plate, with short transverse anterior bar; plate umbrella-shaped, 0.3–0.4× as long as length of entire sternite, with slender anterior margin apically fringed with sparse fine and short setae and ill-defined, membranous posterior margin. Gonocoxites (Figs 1P, 3I, 5J, 7M, 8L, 9H) elongate, elliptical, well sclerotized, narrowly rounded apically, styli microscopic, subapical, not projecting from gonocoxites, with several fine, laterally prominent setae. Spermatheca (Figs 1L, 3K, 5K, 7L, 8I, 9J) with rounded corpus and well developed ramus and collum, with shapes differing among the species.

**Sexual dimorphism.** Sexes externally indistinguishable except for slight differences in shape of ventrite 5.

**Derivation of name.** The genus takes its name from the contradiction of being "short-nosed weevils" (the common definition of Entiminae) having a long nose. It is derived from the Greek ὀξύς (oxýs), "sharp, keen, acute" and  $\mu\omega\rho\delta\varsigma$  (mōros), "dull, stupid, foolish", a rhetorical figure conjoining words or terms apparently contradictory. Gender masculine.

**Distribution.** The genus is known only from South Africa, Western Cape province.

**Biology.** All the species in the new genus seem to inhabit fynbos vegetation, i.e., evergreen, hard-leaved shrub land occurring on nutrient-poor soils, associated with grass-like perennials (Manning, 2018), restricted to a relatively narrow strip along the coast in the south western part of Western Cape, between Vanrhynsdorp in the north and Port Elizabeth in the east. The species that were collected by the authors were sampled in the evening and at night by net sweeping or tree beating in fynbos in which the dominant vegetation is Restionaceae and shrubs. The specimens that were examined in museum collections were collected using pitfall traps (1 specimen, casually), by sweeping in flower meadows (1 specimen), or found in humus under bushes (1 species, 8 specimens).

Taxonomic remarks. The new genus belongs to the tribe Oosomini, based on its free claws (this character distinguishes it from Embrithini Marshall, 1942), trisetose mandibles (distinguishing it from Otiorhynchini Schoenherr, 1826), dorsally placed antennal sockets (distinguishing it from Brachyderini Schoenherr, 1826 and Sciaphilini Sharp, 1891), lack of ocular lobes and vibrissae (distinguishing it from Tanyrhynchini Schoenherr, 1826 and Tanymecini Lacordaire, 1863) and lack of a protruding humeral callus (distinguishing it from Polydrusini Schoenherr, 1823). Within the Oosomini, Oxymorus shares several characters with the nominotypical genus *Oosomus*: rostrum longer than wide, slightly widened apically and with sides rounded around antennal sockets, posteriorly continuous with head, epifrons very narrow, distinctly carinate only between antennal sockets, carina poorly defined posteriorly, frons large, glabrous, not carinate posteriorly, epistome not developed, antennal sockets dorsally placed, in profile very short, disappearing well before the eyes, metatibiae with apical surface glabrous and wide, suture between ventrites 1 and 2 sinuose. Oxymorus differs from Oosomus in the following characters: the short basal part of pronotum does not form a clear margin, but it is curved ventrally and covered in resting position by the basal margin of the elytra, the visible part of pronotum is covered by appressed scales similar to those on the elytra, the narrow hidden base is covered by half-sized, reciprocally isolated scales (in Oosomus the basal part of pronotum forms a clear sharp margin, lacking a hidden part); the female sternite VIII has a large, longer than wide, umbrella-shaped plate, with poorly delimited posterior border (vs. plate small, with well visible basal margin) and the gonocoxites with short, microscopic, almost invisible, subapical styli and a tuft of setae directed laterally (vs. short but visible apical styli with a tuft of setae directed apically).

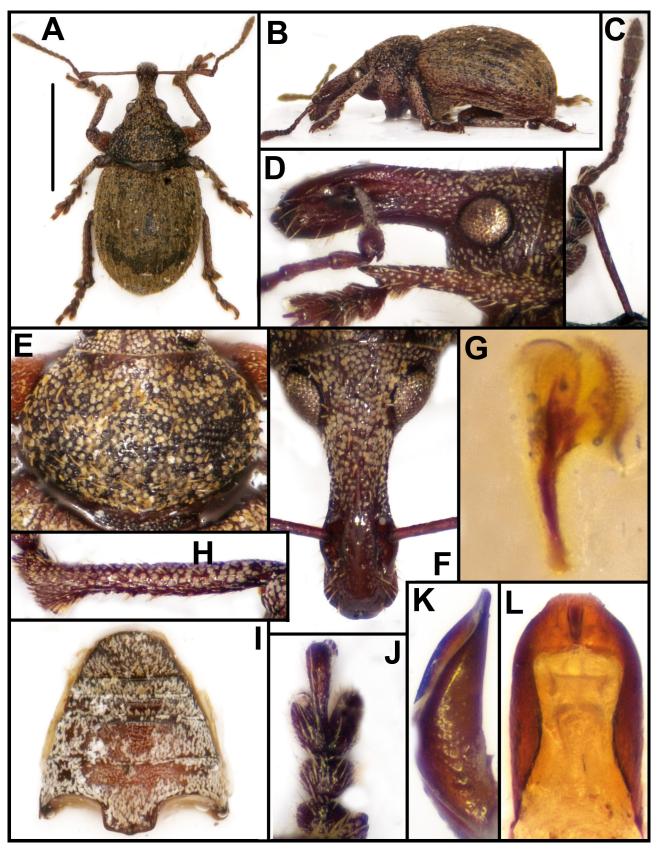
#### Oxymorus uitkyk sp. n.

Figs 1, 10

ZooBank taxon LSID: 996747FC-A019-4813-A10C-20886BBA0A66

**Differential diagnosis.** *Oxymorus uitkyk* sp. n. resembles *O. johnprinei* sp. n., in having a long rostrum, pronotum without longitudinal ridges, short antennal scapes and funicle segment 2 as long as 1, epifrons not carinate at base of rostrum and elytra with visible raised setae. It differs from *O. johnprinei* sp. n. in the pronotum and elytra densely covered with rounded appressed scales, the rostrum at base 1.2–1.3× wider than at apex, denticulate protibiae and the spermatheca with collum curved at base.

**Description.** Body length 4.03–5.13 mm, holotype 4.25 mm. Body dark brownish, rostrum, antennae and legs paler, monochromatic, reddish brown. Dorsal and ventral part of body, antennal scapes and legs, except rostrum and tarsi, regularly densely covered with small, regularly rounded, finely longitudinally striate, greyish appressed scales with a pearly sheen, 5–6 across one elytral interstria, on pronotum slightly bigger than on remaining parts of body. Elytra with one regular row of slender, semi-erect, inconspicuous,



**Fig. 2.** Oxymorus antennalis sp. n., male, holotype: A – habitus, dorsal view; B – habitus, lateral view; C – antenna; D – head with rostrum, lateral view; E – pronotum; F – head with rostrum, dorsal view; G – sclerites of endophallus, dorsal view; H – right protibia; I – abdominal ventrites; J – tarsus; K – penis, lateral view; L – penis, dorsal view.

hair-like setae on each interstria, about as long as half an interstria width.

Rostrum (Figs 1D, E) 1.98–2.13× longer than wide at apex, widest at base, at base 1.2–1.3× wider than at apex, very short base, distinctly tapered anteriorly, majority of the rostral length subparallel-sided with slightly concave sides, slightly enlarged only at midlength around sockets and the short apical part; in profile weakly regularly curved, basally indistinctly, separated from head by a shallow depression. Epifrons small, sub rectangular, creating a slender area between antennal insertions, about as wide as half of the corresponding width of rostrum, finely punctate, glabrous. Frons large, glabrous, smooth, finely sparsely punctate. Antennal insertion before middle of rostrum. Sockets dorsally narrowly reniform, parallel. Head very wide and short; vertex flat, wider than rostrum at apex. Eyes convex, hardly protruding beyond outline of head; in profile not reaching dorsal border of head.

Antennae (Fig. 1C) slender and short, scape  $1.2\times$  longer than funicle, 0.7– $0.8\times$  as long as protibia, at apex as wide as club; funicle segment  $1\ 1.8$ – $2.0\times$  longer than wide, as long as segment 2, which is 2.1– $2.2\times$  longer than wide; segment  $3\ 1.3\times$  longer than wide; segment  $4\ 1.2\times$  longer than wide; segment  $5\ 1.1\times$  longer than wide; segment  $6\ as$  long as wide; segment  $7\ 1.1\times$  wider than long; club 1.6– $1.7\times$  as long as wide.

Pronotum (Fig. 1F) wide, domed, 1.43–1.48× wider than long, widest at basal third, with distinctly rounded sides, weakly constricted behind anterior border; base weakly arched. Integument under scales finely, densely, regularly granulate.

Elytra (Fig. 1A) oval, robust, 1.09–1.14× longer than wide, widest at midlength with regularly rounded sides, broadly rounded apically, at base slightly wider than base of pronotum; in profile convex. Interstriae wide and flat; striae narrow. Integument under scales finely, densely, regularly granulate.

Protibiae (Fig. 1I) short and robust, 7.2–7.4× longer than wide at midlength, narrowly conspicuously produced externally, creating a narrow long lobe, at apex truncated, apically armed with a dense fringe of short yellowish bristles and several short, stout yellowish spines on slender process, with short mucro; inner side of apical two thirds denticulate with 7–9 brownish small spines. Tarsi (Fig. 1G) moderately slender, segment 2 1.2–1.3× wider than long; segment 3 1.1–1.2× wider than long and 1.3–1.4× wider than segment 2; onychium 1.1–1.2× longer than segment 3.

Penis (Figs 1J, K) short and wide, parallel-sided with only indistinctly rounded sides, apical part bluntly truncate, with distinct subtriangular tip; in profile ventral side almost straight and dorsal side distinctly convex, tip distinctly elongate, slender, straight; endophallus (Figs 1M, N) with one long, black, S-shaped sclerite and two wider irregularly elongate and angular brownish sclerites.

Spematheca (Fig. 1L) with short and wide, regularly curved and pointed cornu; ramus rounded, slightly shorter than wide; collum slender, tube-shaped, about 3× longer than wide, at base distinctly curved.

Type material. Holotype: 16, "RSA [South Africa], Western Cape, Cederberg Mts., SE Uitkyk Pass, Rd. to Welbedaght, 32°25.427'S, 19°09.975'E, 914 m, 17.x.2019, night general sweeping (grass netting) of vegetation in fynbos, R. Borovec & M. Meregalli lgg." (TMSA). Paratypes: 92, same data as the holotype (BMNH, MMTI, RBSC, SANC); 22, "RSA [South Africa], Western Cape, Cederberg Mts., SE Uitkyk pass, rd. to Welbedaght, 32°25.426'S, 19°09.974'E, 914 m, 11.xi.2018, general sweeping (grass netting) of vegetation in fynbos, R. Borovec & M. Meregalli lgg." (MMTI, RBSC); 5\,\text{."RSA [South Africal, Western Cape, Cederberg Mts., 4 km SE Uitkyk pass, 32°25.765′S, 19°08.434′E, 923 m, 11.xi.2018, general sweeping (grass netting) of vegetation in fynbos, R. Borovec & M. Meregalli lgg." (MMTI, RBSC); 12, "RSA [South Africa], Western Cape, Cederberg Mts., Uitkyk pass, 32°24.408′S, 19°06.481′E, 1029 m, 26.x.2011, sweeping, R. Borovec lgt." (RBSC); 1♂, "S. Afr. [South Africa], Cape Prov. [Western Cape now], Sederhoutkloof, 32°27'S, 19°09'E, 950/1300 m, 1.XI.1988, W. Wittmer [lgt.]" (SANC).

**Type locality.** South Africa, Western Cape, Cederberg Mts, SE Uitkyk Pass, Rd. to Welbedaght (Fig. 10).

**Derivation of the name.** The species is named from the type locality, Uitkyk Pass.

**Bionomics.** All the specimens were collected by evening or late evening sweeping of fynbos where Restionaceae is predominant (Fig. 12).

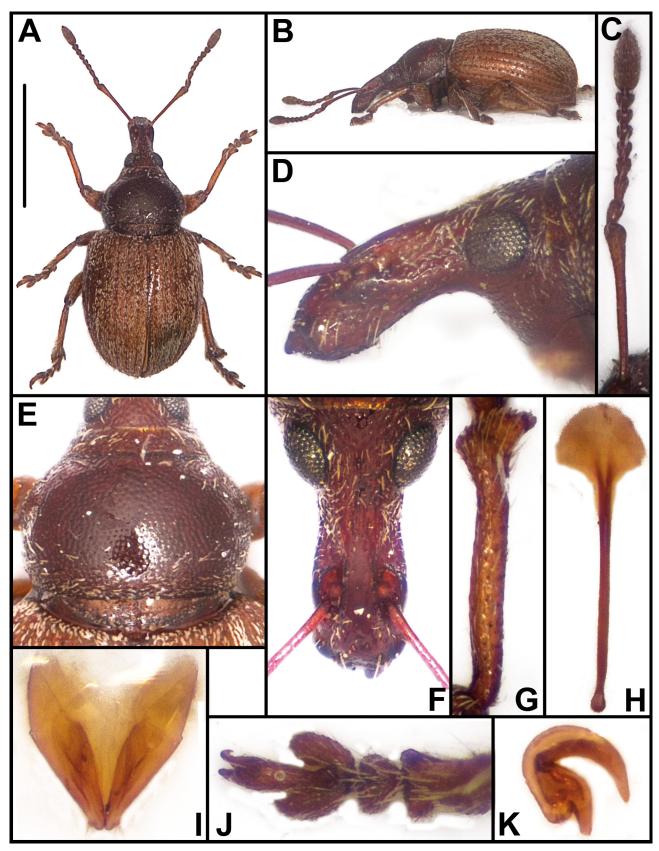
#### Oxymorus antennalis sp. n.

Figs 2, 11

ZooBank taxon LSID: A096CF8D-C23A-48AA-9E40-CD184022D085

**Differential diagnosis.** Oxymorus antennalis sp. n. is similar, and probably closely related, to O. oculatus sp. n., with which it shares long antennae with scape as long as protibia, funicle segment 2 longer than segment 1 and protibia equally enlarged externally and internally; it has also similarly shaped sclerites of the endophallus. It differs from O. oculatus sp. n. as its elvtra have long, conspicuous, semi-erect, apically pointed setae, longer than half the width of one interstria, basal third of rostrum distinctly narrower than at apex, and rostrum in profile equally wide along the entire length, the eyes only slightly protruding beyond the outline of head, the elytra oval, 1.28× longer than wide, the tarsi narrower, with segment 3 as long as wide and the penis in profile wide, irregularly enlarged, widest at basal third, with tip shortly projecting and in dorsal view with lateral sclerified margins distinctly curved inward at midlength and with apex shorter, slightly prominent medially.

**Description.** Body length 3.66 mm. Body including antennae and legs reddish brown. Body except antennae and tarsi regularly densely covered with rounded, isolated, appressed scales, 5 across width of one interstria, pronotal scales slightly bigger than those on remaining part of body. Scales light brownish, elytra with slender, crescent-shaped transverse stripe on posterior declivity. Elytra with a single row of semi-erect, distinct, piliform, apically pointed setae, distinctly longer than half the width of one interstria; pronotum with short, erect setae. Head, rostrum and legs with short, semi-appressed setae.



**Fig. 3.** Oxymorus johnprinei sp. n., female, holotype: A – habitus, dorsal view; B – habitus, lateral view; C – antenna; D – head with rostrum, lateral view; E – pronotum; F – head with rostrum, dorsal view; G – right protibia; H – female sternite VIII; I – gonocoxites; J – tarsus; K – spermatheca.

Rostrum (Figs 2D, F) 2.46× longer than wide at apex, widest at base and at place of antennal insertion, at base 1.23× as wide as at apex; between base and antennal insertion distinctly regularly concave, in narrowest point distinctly narrower than at apex; in profile slightly curved, not wider at antennal insertion. Epifrons narrow, with slightly convex sides, smooth, glabrous, sparsely punctate, at antennal insertion as wide as one third of corresponding width of rostrum, occupying less than half the rostral length. Frons large, glabrous, in middle part unpunctuated, posteriorly not separated from epifrons. Epistome not developed. Antennal sockets dorsally placed, reniform. Antennal insertion on apical third of rostrum. Head very short; vertex flat, as wide as rostrum at base. Eyes slightly protruding beyond outline of head; in profile near to dorsal border of head.

Antennae (Fig. 2C) slender and very long, scape almost as long as funicle or protibia, significantly exceeding anterior border of pronotum in repose, straight, slightly enlarged short apical portion, here as wide as club; funicle segment 2 very long,  $3.4\times$  longer than wide,  $1.4\times$  longer than segment 1, which is  $2.1\times$  longer than wide; segments 3 and 4  $1.7\times$  longer than wide; segments 5 and 6  $1.4\times$  longer than wide; segment 7  $1.2\times$  longer than wide; club slender,  $3.0\times$  longer than wide; club very slender,  $3.1\times$  longer than wide.

Pronotum (Fig. 2E) 1.48× wider than long, transverse oval, with rounded sides, widest in posterior part, significantly constricted behind anterior border, at base distinctly wider than anteriorly; base arched; disc distinctly, regularly domed, finely, densely, regularly granulated, granules with small puncture on top.

Elytra (Fig. 2A) oval, 1.28× longer than wide; widest at midlength, with regularly rounded sides, apically broadly rounded. Base as wide as base of pronotum. Interstriae wide, almost flat; striae narrow, finely punctate. Integument under vestiture weakly mat, finely punctate.

Protibiae (Fig. 2H) straight, 7.4× longer than wide, at apex slightly more widened laterally than medially, apically slightly rounded, fringed with short, sparse, yellowish spines, shortly mucronate with brush of yellowish setae; inner side of apical half of protibiae denticulate with 8 small blackish spines. Tarsi (Fig. 2J) medium sized, segment 2 1.2× wider than long; segment 3 as long as wide and 1.4× wider than segment 2; onychium 0.6× as long as segment 3.

Penis (Figs 2K, L) short, subparallel-sided, apically narrowly obtuse, constricted before tip, lateral sclerified margins distinctly curved inwards; in profile wide, irregularly enlarged, basal third widest, tip shortly projecting; endophallus (Fig. 2G) with one long and slender dark sclerite and two basal flat, light brownish, rounded plates.

**Type material.** Holotype: 1♂ "S. Africa, C.P. [Cape Province, Western Cape now] Wiedouw 309, Vanrhynsdorp, 31°44′S, 18°47′E, 20–24 Sept. 1985, Louw, v. Rensburg, NMBH, 20853" (NMBH).

**Type locality.** South Africa, Western Cape, Vanrhynsdorp (Fig. 11).

**Derivation of the name.** One of the main characters of this species are the very long antennae, hence the specific epithet.

Bionomics. Unknown.

## Oxymorus johnprinei sp. n.

Figs 3, 11

ZooBank taxon LSID: 57AC2B4A-237B-448E-911F-BB6E0D51F254

**Differential diagnosis.** Oxymorus johnprinei sp. n. is similar to O. uitkyk sp. n. in its long rostrum, pronotum without longitudinal ridges, short antennal scapes and funicle segment 2 as long as 1, epifrons not carinate to base of rostrum and elytra with distinct semi-erect setae. It differs from O. uitkyk sp. n. in that the pronotum and elytra are sparsely covered by long oval appressed scales, rostrum at base as wide as at apex, protibiae not denticulate and collum of the spermatheca is straight.

**Description.** Body length of holotype 3.63 mm. Body brownish, pronotum and head with rostrum darker, dark brownish. Dorsal and ventral part of body sparsely covered by slender, long oval appressed scales, not covering integument, 5–6 across one elytral interstria, legs and antennae sparsely covered by semi-appressed slender, hairlike setae, lacking scales. Elytra with one regular row of semi-erect hair-like setae, about as long as half an interstria width, bent backwards, visible mainly in profile.

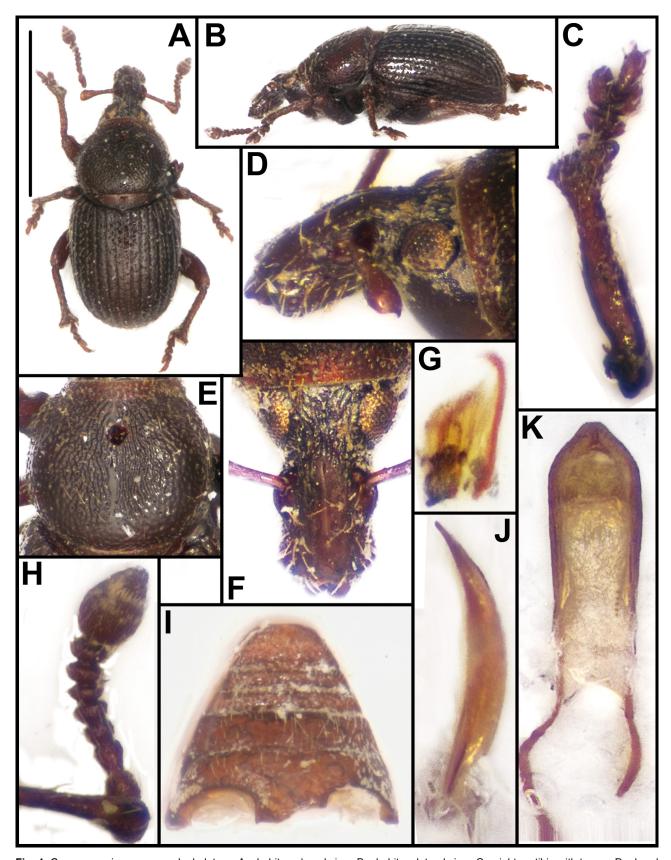
Rostrum (Figs 3D, F) 1.88× longer than wide at apex, at base as wide as at apex, in basal half with slightly concave sides, distinctly broadened around sockets, then slightly enlarged apically; in profile regularly curved, basally barely distinct from head by a shallow depression. Epifrons less than half of corresponding width of rostrum, impunctate, smooth. Frons short, smooth, impunctate. Antennal insertion slightly before midlength of rostrum. Sockets dorsally forming elongate fossae. Vertex narrow with a small median fovea. Eyes convex, slightly protruding above outline of head; in profile reaching dorsal border of head.

Antennae (Fig. 3C) slender and moderately long, scape  $1.2\times$  longer than funicle,  $0.9\times$  as long as protibia, at apex  $0.8\times$  as wide as club; funicle segment  $1.7\times$  longer than wide and as long as segment 2, which is  $1.9\times$  longer than wide; segment  $3.1.2\times$  longer than wide; segment  $4.1.1\times$  longer than wide; segment 5 and 6 as long as wide; segment  $7.1.1\times$  wider than long; club slender and long,  $2.1\times$  longer than wide.

Pronotum (Fig. 3E) 1.31× wider than long, distinctly domed, basal third widest, with distinctly rounded sides, weakly constricted behind anterior border; integument smooth, shiny, very finely, densely punctuate.

Elytra (Fig. 3A) long oval, 1.24× longer than wide, widest at midlength, sides distinctly rounded, narrowly rounded apically, at base slightly wider than base of pronotum. Interstriae wide and flat; striae punctuate. Integument smooth, shiny.

Protibiae (Fig. 3G) slender, 8.6× longer than wide at midlength, narrowly conspicuously produced externally in a narrow elongate lobe, at apex slightly rounded, apically armed with a dense fringe of short yellowish bristles and several short, stout yellowish spines on process, with short mucro; inner side not denticulate. Tarsi (Fig. 3J) slender,



**Fig. 4.** Oxymorus minor sp. n., male, holotype: A – habitus, dorsal view; B – habitus, lateral view; C – right protibia with tarsus; D – head with rostrum, lateral view; E – pronotum; F – head with rostrum, dorsal view; G – sclerites of endophallus, dorsal view; H – antenna; I – abdominal ventrites; J – penis, lateral view; K – penis, dorsal view.

segment 2  $1.1\times$  longer than wide; segment 3  $1.1\times$  wider than long and  $1.6\times$  wider than segment 2; onychium  $0.8\times$  as long as segment 3.

Spermatheca (Fig. 3K) with long and slender, regularly curved cornu; corpus rounded; ramus short and wide, wider than long, tapered apically; collum straight, twice as long as wide, distinctly evenly tapered apically.

**Type material.** Holotype: 1♀ "S. Afr. [South Africa], S. W. Cape [Western Cape now], Swellendam – Heidelbg., 34.06S–20.46E [= 34°06′S 20°46′E], 21.9.1985; E-Y: 2257, flowering meadows, leg. Endrödy-Younga" (TMSA).

**Type locality.** South Africa, Western Cape, Swellendam (Fig. 11)

**Derivation of the name.** This species is named in memory of the late John Prine (1946–2020), American folk singer and songwriter who sadly passed away due to Coronavirus while we were completing this paper.

**Bionomics.** According to the label, the type specimen was collected in flowering meadow.

## Oxymorus minor sp. n.

Figs 4, 11

ZooBank taxon LSID: 47AC8716-1A7D-4909-8400-ADD9ABA01932

**Differential diagnosis.** Oxymorus minor sp. n., the smallest species in the genus, is mainly characterized by its glabrous body lacking appressed scales, the vertex narrower than the base of rostrum, the funicle segments 4–7 distinctly transverse, about twice as wide as long, the pronotum with punctures merged into narrow longitudinal furrows and the long and slender penis with a single sclerite.

**Description.** Body length, holotype 2.56 mm. Body dark brownish, antennae and legs monochromatic, reddish brown. Body dorsally and ventrally glabrous, lacking appressed squamae; interstriae with a single row of semi-appressed hair-like setae, setae slightly longer than half the width of one interstria, pronotum with similar setae directed posteriorly.

Rostrum (Figs 4D, F) 1.33× longer than wide at apex, at base as wide as at apex, at middle conspicuously enlarged around antennal insertion; in profile almost flat, curved only in short basal part, separated from head by shallow depression. Epifrons short and wide, as wide as club, parallel-sided, shiny, laterally finely punctate, with indistinct longitudinal median keel. Frons smooth, not punctate, almost as long as a third of rostral length. Sockets dorsally fully visible, forming elongated fossae. Antennal insertion behind middle of rostrum. Head wide; vertex narrower than base of rostrum. Eyes moderately large, hardly protruding above outline of head; in profile almost reaching dorsal border of head.

Antennae (Fig. 4H) short and robust, scape as long as funicle,  $0.6\times$  as long as protibia, at apex  $0.7\times$  as wide as club; funicle segment  $1.1.1\times$  longer than wide and as long as segment 2, which is  $1.5\times$  longer than wide; segment 3 as long as wide; segments 4 and 5  $1.9\times$  wider than long; segment 6 twice as wide as long; segment 7  $2.1\times$  wider than long; club short and wide,  $1.2\times$  longer than wide.

Pronotum (Fig. 4E) 1.17× wider than long, almost as wide as elytra, widest shortly behind midlength with distinctly rounded sides, domed, but on disc somewhat flattened, just behind anterior border slightly constricted; disc finely densely punctuate, punctures merged into irregular, narrow longitudinal furrows, with inconspicuous, narrow, impunctate, longitudinal median line.

Elytra (Fig. 4A) elongate-oval, 1.25× longer than wide, widest slightly before midlength, with regularly rounded sides, apically narrowly rounded; disc glossy; interstriae flat, with a single row of sparse, very fine punctures; striae deep, shallowly punctate.

Protibiae (Fig. 4C) straight, 5.9× longer than wide at midlength, constricted before apex, conspicuously enlarged externally, expanded to a narrow long lateral lobe, apically armed with short, minute, sparse, yellowish spines, with small, unobtrusive mucro; on inner side not denticulate. Tarsi (Fig. 4C) short and robust, segment 2 1.3× wider than long; segment 3 1.5× wider than long and 1.4× wider than segment 2; onychium as long as segment 3.

Penis (Figs 4J, K) long, with straight sides, indistinctly evenly enlarged apically, apex subtriangular with slightly concave sides, tip narrowly rounded; in profile weakly regularly curved, apex evenly pointed; endophallus (Fig. 4G) with a single, slender, long, apically U-shaped curved sclerite.

**Type material.** Holotype: 1♂ "S. Afr. [South Africa], S. Cape Mt. [Western Cape], Matjiesfontein Mt., 33.16S–20.30E [= 33°16′S 20°30′E], 25.10.1978; E-Y: 1478, ground traps set for 39 days with meat bait, leg. Endrödy-Younga" (TMSA).

**Type locality.** South Africa, Western Cape, Matjiesfontein Mt. (Fig. 11).

**Derivation of the name.** This is the smallest species so far known, hence its specific epithet.

**Bionomics.** The type specimen was collected in pitfall trap baited with meat.

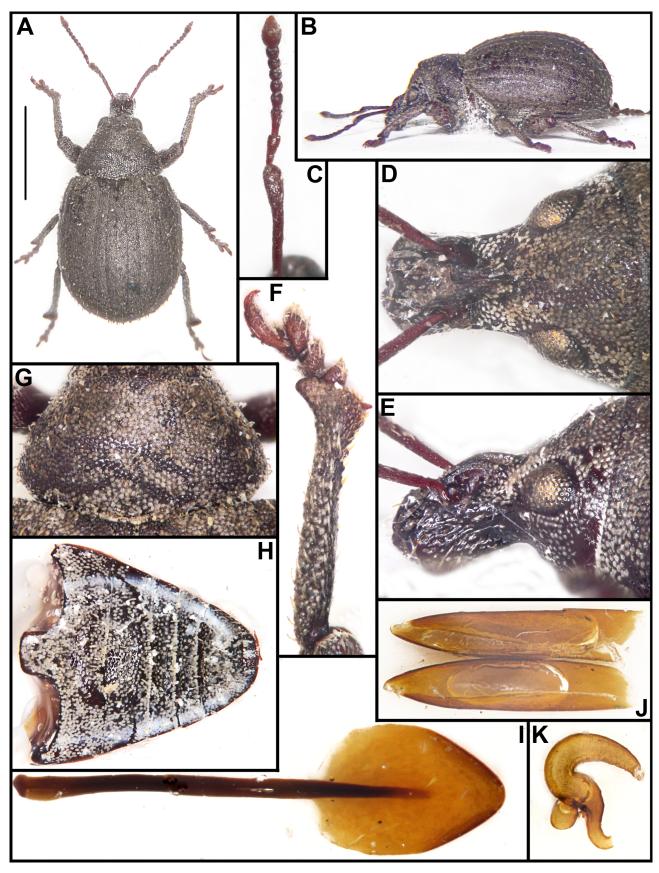
#### Oxymorus obesus sp. n.

Figs 5, 11

ZooBank taxon LSID: 86185630-4F6A-4E2F-9188-2D805B2E287F

**Differential diagnosis.** Oxymorus obesus sp. n. is characterized by rostrum short, 1.3–1.4× longer than wide at apex, separated from head by a distinct, deep, transverse furrow, epifrons subtriangular, clearly tapered posteriorly, the pronotum widest at base and the shape of the spermatheca. Oxymorus obesus sp. n., because of its short oval, robust, distinctly convex body with a short rostrum, resembles weevils of the genus Mimaulus Schoenherr, 1847 (Cneorhinini), from which it is easily distinguished by the "otiorhynchine" type, dorsally placed antennal sockets.

**Description.** Body length 4.13–5.44 mm, holotype 4,13 mm. Body dark brownish, antennae and legs paler, monochromatic, reddish brown. Dorsal and ventral part of body, antennal scapes and legs excepting tarsi regularly densely covered with small, greyish appressed scales, on pronotum slightly larger than on other parts, 7–8 across one elytral interstria, scales densely finely striolate. Underside of head



**Fig. 5.** Oxymorus obesus sp. n., female, paratype: A – habitus, dorsal view; B – habitus, lateral view; C – antenna; D – head with rostrum, dorsal view; E – head with rostrum, lateral view; E – left protibia with tarsus; E – pronotum; E – abdominal ventrites; E – female sternite VIII; E – gonocoxites; E – spermatheca.

sparsely scaled, lateral parts of rostrum with only short, sparse, hair-like appressed setae. Elytra with one regular row of slender hair-like setae on each interstria, setae on disc semi-appressed, curved posteriorly, on declivity semi-erect, inconspicuous, almost as long as half the width of an interstria.

Rostrum (Figs 5D, E) 1.32-1.39× longer than width at apex, widest at base, with evenly and distinctly concave sides, narrowest at midlength, at base 1.27–1.33× as wide as at apex; in profile flat, at base abruptly bevelled, distinctly separated from head by a deep transverse furrow. Epifrons small and narrow, subtriangular, evenly tapered posteriorly with straight sides, at apex as wide as one third, at base as one fifth, of corresponding width of rostrum; epifrons shallowly deepened, laterally carinate with very slender median longitudinal carina. Frons finely punctuate, posteriorly not separated from epifrons. Sockets dorsally fully visible, reniform, posteriorly become closer, their distance on posterior border equal to width of club. Antennal insertion before middle of rostrum. Head wide, distinctly enlarged posteriorly; vertex flat, about as wide as rostrum at midlength. Eyes moderately large, almost flat, barely protruding above outline of head; in profile very near to dorsal border of head.

Antennae (Fig. 5C) slender and short, scape  $1.1\times$  longer than funicle, 0.8– $0.9\times$  as long as protibia, reaching anterior border of pronotum in repose, at apex as wide as club, straight, apical quarter weakly evenly enlarged; funicle segments 1 and 2 equally long, segment 1 2.3– $2.4\times$  longer than wide; segment 2 2.0– $2.2\times$  longer than wide; segment 3 1.1– $1.2\times$  longer than wide; segment 4  $1.1\times$  longer than wide; segments 5 and 6 as long as wide; segment 7 as long as wide to  $1.1\times$  wider than long; club spindle-shaped,  $1.8\times$  as long as wide.

Pronotum (Fig. 5G) wide, 1.68–1.74× wider than long, sub trapezoidal, widest at base, evenly tapered anteriorly with slightly rounded sides, behind anterior border indistinctly constricted, disc regularly convex, scales inserted on small round granules, with some sparse punctate granules bearing a short seta; base weakly arched.

Elytra (Fig. 5A) oval, robust, 1.09–1.15× longer than wide, widest at midlength, at base slightly wider than base of pronotum, with regularly rounded sides, apically broadly rounded; in profile convex. Interstriae wide and flat, below scales finely, regularly sparsely punctate; striae finely punctate, punctures covered by vestiture.

Protibiae (Fig. 5F) straight, moderately robust, 6.6–6.8× longer than wide at midlength, constricted before apex, expanded externally in a narrow long lateral lobe, armed apically with short minute yellowish spines, at inner angle shortly mucronate; inner side of protibiae indistinctly denticulate on apical half. Tarsi (Fig. 5F) with segment 2 1.3–1.4× wider than long; segment 3 1.3–1.4× wider than long and 1.4–1.5× as wide as segment 2; onychium 0.9× as long as segment 3.

Spermatheca (Fig. 5K) with regularly curved and apically tapered cornu; weakly elongate corpus; ramus oval, slightly longer than wide; collum tube-shaped, S-shaped, curved upwards.

**Type material.** Holotype: 1  $\updownarrow$ , "[South Africa, Eastern Cape] Table Mt., Cape of G. Hope [approximately 33°58′S 18°25′E], W. Bevins., 1906–167." (BMNH). Paratypes: 5  $\updownarrow$ , same data as the holotype (BMNH).

**Type locality.** South Africa, Eastern Cape, Table Mountain (Fig. 11).

**Derivation of the name.** The dumpy, robust, distinctly convex body suggested the specific epithet.

Bionomics. Unknown.

#### Oxymorus oculatus sp. n.

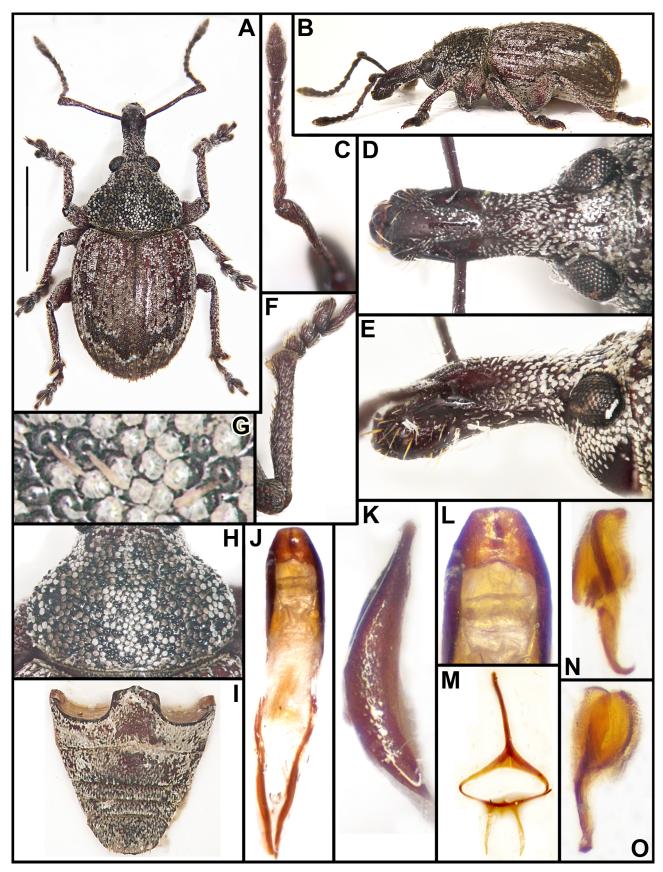
Figs 6, 11

ZooBank taxon LSID: 85E34774-4B55-414A-AFD4-3FEB08118975

**Differential diagnosis.** Oxymorus oculatus sp. n. is distinguished from most other species in the genus by its long antennae with scape as long as protibia, the funicle segment 2 1.4–1.5× longer than segment 1 and shape of penis, including the form of the sclerites. In all these characters it is similar only to *O. antennalis* sp. n., from which it can be distinguished mainly by the elytra with short, inconspicuous, semi-appressed, apically rounded setae, shorter than half the width of an interstria, rostrum in basal third slightly narrower than at apex and in profile widest at antennal insertion, eyes conspicuously protruding beyond the outline of head, elytra long oval, 1.13–1.19× longer than wide, tarsi robust, with segment 3 1.2–1.3× wider than long and penis narrow in profile and with obtuse apex.

**Description.** Body length 3.84–5.06 mm, holotype 4.52 mm. Body including antennae and legs dark brownish to dark reddish brown. Dorsal and ventral part of body excepting antennae and tarsi densely covered with rounded, finely striate appressed scales, 5-6 across width of one interstria, on elytra imbricate, on remaining part of body isolated, scales on pronotum twice as large as those on other parts of body. Scales grevish, elytra with two ill-defined, light or dark brownish U-shaped spots longitudinally placed on interstriae 5 and 7-8, connected by transverse stripe of dark brownish scales of irregular width on posterior declivity. Elytra with one regular row of short, inconspicuous, semi-appressed, narrowly subspatulate setae, apically rounded, bent posteriorly, barely shorter than half the width of an interstria. Pronotum with similar setae as on elytra, but shorter, semi-appressed, directed posteriorly, inserted on small punctate granules. Head with rostrum and legs with very short, hardly visible semi-appressed setae.

Rostrum (Figs 6D, E) 2.35–2.39× longer than wide at apex, widest at base and where the antennae are inserted, between base and antennal insertion slightly regularly concave, at narrowest point only slightly narrower than apex of rostrum, from antennal insertion weakly evenly tapered apically, at base 1.22–1.25× as wide as at apex; in profile weakly curved, widest at place of antennal insertion, separated from head by shallow depression. Epifrons narrow, at place of antennal insertion about as wide as one third



**Fig. 6.** Oxymorus oculatus sp. n., male, paratype: A – habitus, dorsal view; B – habitus, lateral view; C – antenna; D – head with rostrum, dorsal view; E – head with rostrum, lateral view; E – right protibia with tarsus; E – detail of appressed scales on pronotal disc; E – pronotum; E – abdominal ventrites; E – penis, dorsal view; E – penis, lateral view; E – apex of penis, dorsal view; E – tegmen; E – sclerites of endophallus, lateral view; E – sclerites of endophallus, dorsal view.

of corresponding width of rostrum, occupying less than half the rostral length, weakly tapering posteriorly, weakly convex, glabrous, finely punctate with slender longitudinal median unpunctured keel. Frons large, glabrous, finely and sparsely punctate, posteriorly not separated from epifrons. Epistome not developed. Sockets dorsally reniform. Antennal insertion on apical third of rostrum. Head very short and wide; vertex flat, about as wide as rostrum at apex. Eyes large, conspicuously protruding beyond outline of head but not distinctly more so posteriorly; in profile very near to dorsal border of head.

Antennae (Fig. 6C) slender and very long, scape as long as funicle and protibia, distinctly exceeding anterior border of pronotum in repose, straight, weakly enlarged apically, at apex as wide as club; funicle segment 2 very long, 2.7–2.8× longer than wide, 1.4–1.5× longer than segment 1, which is 1.8–1.9× longer than wide; segment 3 1.5× longer than wide; segments 4 and 5 1.2–1.3× longer than wide; segments 6 and 7 1.2× longer than wide; club slender, 2.5–2.7× longer than wide.

Pronotum (Fig. 6H) 1.30–1.35× wider than long, transverse oval, with distinctly rounded sides and basal third widest, significantly constricted behind anterior border, posterior border twice as wide as anterior one; base weakly arched; disc regularly domed, under vestiture finely densely granulated, granules lacking scales, punctate on top, bearing a slender brownish seta.

Elytra (Fig. 6A) elongate-oval, 1.13–1.19× longer than wide, widest at midlength, with regularly rounded sides, apically broadly rounded. Base as wide as base of pronotum. Interstriae wide and slightly convex; striae narrow, punctate. Integument under vestiture glabrous, shiny, sparsely and finely punctate.

Protibiae (Fig. 6F) straight, robust, 6.6–7.2× longer than wide, equally enlarged laterally and medially, apically distinctly rounded with numerous, very short and fine, yellowish to brownish spines, at inner angle shortly mucronate with short brush of setae; inner side of protibiae denticulate on apical half with 6–7 small blackish spines. Tarsi (Fig. 6F) robust, segment 2 1.3–1.4× wider than long; segment 3 1.2–1.3× wider than long and 1.3–1.4× wider than segment 2; onychium 0.5–0.6× as long as segment 3.

Penis (Figs 6J, K, L) short, with strongly sclerotized sides, dorsum membranous, subparallel-sided along whole length, apical part evenly rounded, apically broadly obtuse, weakly constricted before tip; in profile weakly regularly curved, widest at midlength, tip shortly projecting; endophallus with one long and slender, dark brownish sclerite and basal flat, light brownish, rounded sclerite.

**Type material.** Holotype: 1♂ "RSA, Western Cape, Aurora Mts., 32°41.638′S, 18°32.350′E, 9.ix.2013, 715 m, beating fynbos, R. Borovec lgt." (TMSA). Paratypes: 2♂, the same data as holotype (RBSC); 1♂, same data as the holotype, M. Meregalli lgt. (MMTI).

**Type locality.** South Africa, Western Cape, Aurora Mts (Fig. 11).

**Derivation of the name.** The peculiar, strongly posteriorly prominent eyes suggested the specific epithet.

**Bionomics.** All the specimens were collected umbrella beating various shrubs in fynbos.

## Oxymorus rikae sp. n.

Figs 7, 10

ZooBank taxon LSID: B81DC678-14FD-4782-87A3-7AF41842F773

**Differential diagnosis.** This is the biggest species in the genus, mainly characterized by the epifrons distinctly carinate just at the base of rostrum, tricarinate along entire length, elytra lacking erect or semi-erect setae in profile and shape of spermatheca.

**Description.** Body length 6.44–6.86 mm, holotype 6.51 mm. Body blackish, antennae and legs paler, monochromatic, reddish brown. Entire body excepting rostrum, antennal funicle, clubs and tarsi densely covered with small, regularly rounded appressed scales, 9–10 across one elytral interstria, greyish; elytra with horseshoe-shaped dark brownish spot on posterior declivity, reaching middle of elytra on interstriae 4 and 5 and with a dark stripe on sutural interstria on apical half. Elytra with one regular row of very short, appressed, long oval setae, as long as diameter of two appressed scales, invisible in profile.

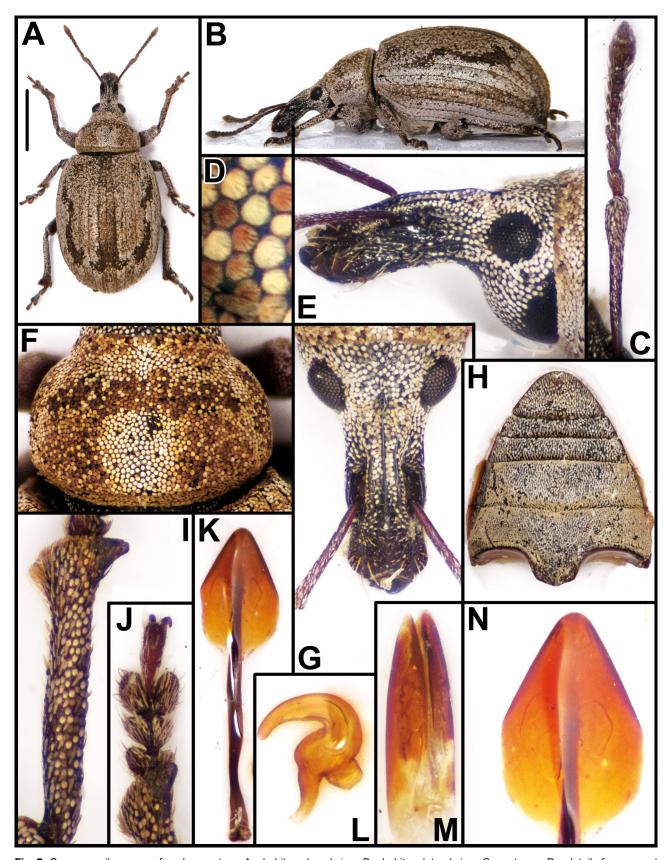
Rostrum (Figs 7E, G) 1.95–2.11× longer than wide at apex, at base 1.28-1.35× wider than at apex, only the short basal part tapers anteriorly, then parallel-sided with straight sides, except for broadening around sockets; in profile only slightly curved, basally slightly separated from head by shallow depression. Epifrons narrow, more slender in basal third, distinctly wider basally and evenly gradually widens apically, with narrow longitudinal median keel and distinctly carinate borders reaching almost to base of rostrum, here distinctly more slender than space between anterior margins of eyes. Frons large, smooth, finely sparsely punctuate, convex. Sockets dorsally narrowly reniform; antennal insertion on middle of rostrum. Antennal insertion before middle of rostrum. Vertex slightly wider than rostrum at apex. Eyes convex and protruding well above the outline of head; in profile not reaching dorsal border of head.

Antennae (Fig. 7C) slender and short, scape  $1.2-1.3 \times 10$  longer than funicle,  $0.8 \times 10$  as protibia, at apex  $0.9 \times 10$  as wide as club; funicle segment  $1.7-1.8 \times 10$  longer than wide and as long as segment 2, which is  $1.9-2.0 \times 10$  longer than wide; segments 3-6 as long as wide; segment  $7.1.2-1.3 \times 10$  wider than long; club  $1.8-1.9 \times 10$  longer than wide.

Pronotum (Fig. 7F) 1.39–1.45× wider than long, widest at basal third, with distinctly rounded sides, weakly constricted behind anterior border, distinctly domed.

Elytra (Fig. 7A) long oval, 1.27–1.31× longer than wide, widest at midlength with slightly rounded sides, at base slightly wider than base of pronotum; in profile convex. Interstriae wide and flat; striae narrow.

Protibiae (Fig. 7I) short, 7.0–7.1× longer than wide at midlength, strongly produced externally in a narrow expansion, apically slightly rounded, with dense fringe of very short, yellowish bristles, outer part stouter and with short mucro; inner side of apical half indistinctly denticu-



 $\begin{tabular}{ll} \textbf{Fig. 7. } Oxymorus\ rikae \ sp.\ n., female, paratype: A-habitus, dorsal view; B-habitus, lateral view; C-antenna; D-detail of appressed scales on pronotal disc; E-head with rostrum, lateral view; F-pronotum; G-head with rostrum, dorsal view; H-abdominal ventrites; I-right protibia; J-tarsus; K-sternite VIII; L-spermatheca; M-gonocoxites; N-plate of sternite VIII. \\ \end{tabular}$ 

late with 5–6 brownish very small spines. Tarsi (Fig. 7J) slender, segment 2  $1.2-1.3\times$  wider than long; segment 3  $1.4\times$  wider than long and  $1.8\times$  wider than segment 2; onychium  $1.2-1.3\times$  longer than segment 3.

Spermatheca (Fig. 7L) with moderately slender, regularly curved and pointed cornu; corpus large, slightly angular; ramus as long as wide, slightly tapering apically; collum slender, about 3× longer than wide at base, evenly tapering apically, before tip distinctly curved.

**Type material.** Holotype: 1, "RSA [South Africa], Western Cape, Cederberg Mts., 4 km SE Uitkyk pass,  $32^{\circ}25.765$ 'S,  $19^{\circ}08.434$ 'E, 923 m, 11.xi.2018, general sweeping (grass netting) of vegetation in fynbos, R. Borovec & M. Meregalli lgg." (TMSA). Paratypes: 2, same data as the holotype (MMTI, RBSC).

**Type locality.** South Africa, Western Cape, Cederberg Mts., 4 km SE Uitkyk pass (Fig. 10).

**Derivation of the name.** We name this species after Rika du Plessis, Conservation Manager of the Cederberg Complex, Cape Nature.

**Bionomics.** The type specimens were collected by sweeping in fynbos, together with *O. uitkyk*.

#### Oxymorus strictifrons sp. n.

Figs 8, 10

ZooBank taxon LSID: 14C1ADD3-53F6-4B81-A613-36DF4FCBFE9B

**Differential diagnosis.** Oxymorus strictifrons sp. n. differs from all other species as its rostrum is as long as wide, evenly tapering apically, with straight sides, epifrons with significantly convex sides, protibiae equally enlarged externally and internally, whole rostrum, except the frons, densely squamose, elytra with 1–2 irregular rows of wide, subspatulate setae and the peculiar shape of its penis and sclerites on the endophallus.

**Description.** Body length 4.84–5.38 mm, holotype 5.13 mm. Body dark brownish, funicles with clubs and tarsi paler, reddish brown. Dorsal and ventral part of body including rostrum, antennal scapes and legs except tarsi regularly densely covered with small, rounded, distinctly longitudinally striolate appressed scales, 6–8 across interstria width. Elytra with 1–2 irregular rows of wide, subspatulate setae, appressed on basal half, semi-appressed on posterior declivity, setae as long as half the width of interstria; pronotum and head with rostrum with the same semi-appressed spatulate setae irregularly densely scattered, shorter than those on elytra. Elytra light brownish, with dark brownish longitudinal stripes on interstriae 1 and 5 and transverse stripes on posterior declivity and at apex; pronotum dark brownish with slender longitudinal stripes on middle and lateral parts; head and rostrum light brownish.

Rostrum (Figs 8D, F) as long as wide at apex, widest at base, evenly tapering apically with straight sides, at base 1.13–1.19× as wide as at apex; in profile vaulted, distinctly separated from head by a deep transverse furrow. Epifrons flat, small, short and narrow, apical half parallel-sided,

basal half distinctly tapering posteriorly, with significantly convex sides, at apex as wide as half, at base a quarter of corresponding width of rostrum. Frons short, glabrous, punctuate. Sockets dorsally fully visible, reniform, their distance on posterior border equal to width of protibia at midlength. Antennal insertion before middle of rostrum. Head wide, distinctly enlarged posteriorly; vertex flat, slightly wider than rostrum at apex. Eyes small, slightly protruding above outline of head; in profile very near to dorsal border of head.

Antennae (Fig. 8C) slender and short, scape  $1.2-1.3\times$  as long as funicle,  $0.8\times$  as long as protibia, at apex as wide as club, regularly curved, apical quarter inflated; funicle segments 1 and 2 conical, equally long, segment 1  $1.5-1.6\times$  longer than wide, segment 2  $1.5-1.7\times$  longer than wide; segments 3 and 4 as long as wide; segment 5  $1.1\times$  wider than long; segments 6 and 7  $1.2\times$  wider than long; club  $1.6-1.7\times$  longer than wide.

Pronotum (Fig. 8E) 1.29–1.36× wider than long, basal third widest, with distinctly rounded sides, somewhat constricted behind anterior border, conspicuously regularly domed.

Elytra (Fig. 8A) long oval, robust, 1.25–1.31× longer than wide, widest posteriorly, with prominent shoulders and somewhat straight sides, broadly rounded apically; in profile flattened on disc. Interstriae slightly vaulted, wide; striae finely punctate, punctures covered by vestiture.

Protibiae (Fig. 8G) straight, robust, 6.1–6.3× longer than wide at middle, equally enlarged externally and internally, apically rounded, armed with 15–20 very short, yellowish spines, with small, unobtrusive mucro; inner side of apical half indistinctly denticulate with 4–6 microscopic blackish spines. Tarsi (Fig. 8H) slender, segment 2 1.3–1.4× wider than long; segment 3 1.2–1.3× wider than long and 1.4–1.5× wider than segment 2; onychium 1.2–1.3× longer than segment 3.

Penis (Figs 8J, K) short, widest at base, slightly evenly tapering apically to a conspicuously long tip with distinct concave sides; in profile distinctly curved with long straight tip; endophallus (Figs 8N, O, P) with 3 long, pointed and 1 U-shaped sclerite.

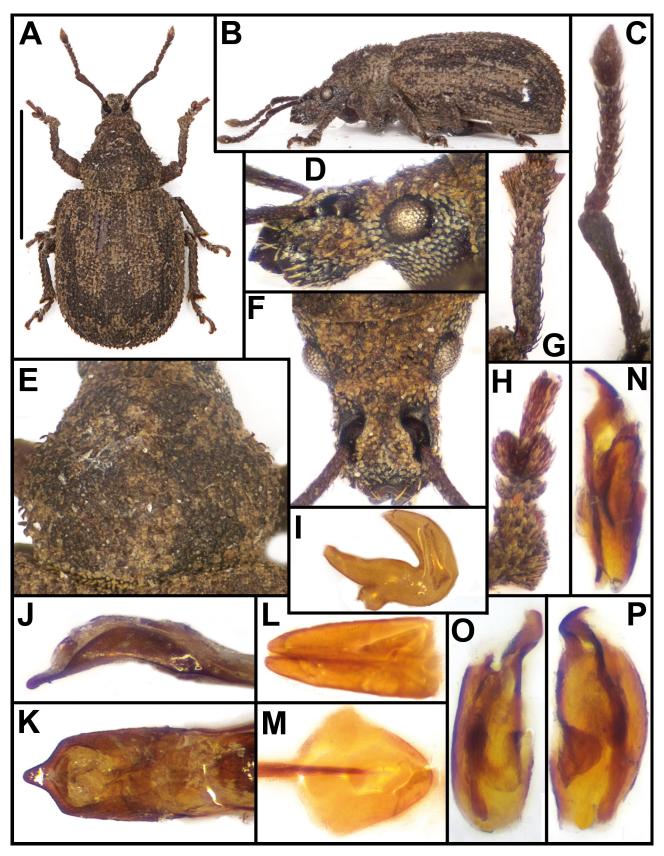
Spermatheca (Fig. 8I) with regularly curved, somewhat wide cornu; corpus elongated; ramus rounded, small, slightly wider than long, with oblique to longitudinal axis; collum slender and long, almost straight, evenly tapering apically, about  $3 \times$  longer than wide at base.

**Type material.** Holotype: 1& "ZA [South Africa, Western Cape], 100, Sederberg [Cederberg Mts.]: Middelberg (Elskloofrivier) [approx. 32°22′S 19°04′E], 1400 m, VII.1962, Humus under bushes, N. Leleup [lgt.]" (TMSA). Paratypes: 7 spec., same data as the holotype (TMSA).

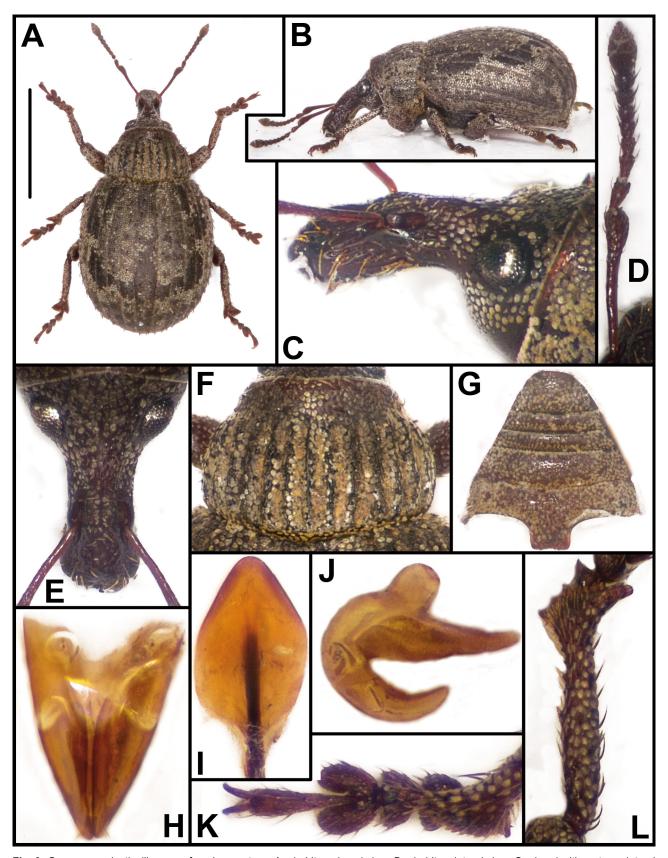
**Type locality.** South Africa, Western Cape, Cederberg (Fig. 10).

**Derivation of the name.** The very narrow from where the antennae are inserted suggested the specific epithet.

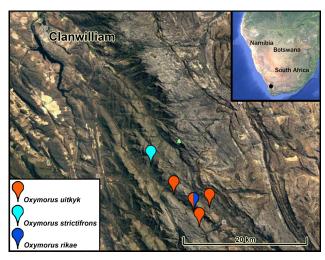
**Bionomics.** According to the locality label, it was found in humus under bushes.



**Fig. 8.** Oxymorus strictifrons sp. n., paratypes, male (A–H, J, K, N–P) and female (I, L, M): A – habitus, dorsal view; B – habitus, lateral view; C – antenna; D – head with rostrum, lateral view; E – pronotum; F – head with rostrum, dorsal view; G – right protibia; H – tarsus; I – spermatheca; J – penis, lateral view; K – penis, dorsal view; L – gonocoxites; M – plate of female sternite VIII; N – sclerites of endophallus, lateral view; O – sclerites of endophallus, dorsal view.



**Fig. 9.** Oxymorus sulcaticollis sp. n., female, paratype: A – habitus, dorsal view; B – habitus, lateral view; C – head with rostrum, lateral view; D – antenna; E – head with rostrum, dorsal view; F – pronotum; G – abdominal ventrites; H – gonocoxites; I – plate of sternite VIII; J – spermatheca; K – tarsus; L – right protibia.



**Fig. 10.** Map showing the distributions of *Oxymorus uitkyk* sp. n., *O. strictifrons* sp. n. and *O. rikae* sp. n. Map data: Google Earth, Maxar Technologies, used according to Google Earth Terms of Service.

#### Oxymorus sulcaticollis sp. n.

Figs 9, 11

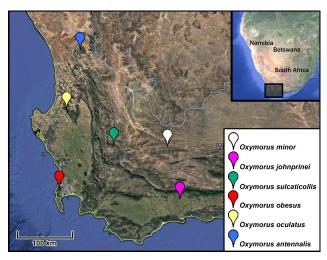
ZooBank taxon LSID: EFB6CE41-02DD-4FE1-BC67-B0A51AA7E8F2

**Differential diagnosis.** Oxymorus sulcaticollis sp. n. differs from all other species in the genus by the dorsal part of pronotum bearing distinct and regular longitudinal ridges separated by deep narrow grooves.

**Description.** Body length 3.63–4.25 mm, holotype 3.81 mm. Body dark brownish, rostrum, anterior border of pronotum, antennae and legs paler, reddish brown. Dorsal and ventral part of body, antennal scapes and legs, except rostrum and tarsi, regularly densely covered with small, regularly rounded, greyish appressed scales with a slight cupreous sheen, 6–7 across one elytral interstria. Elytra with one regular row of slender, semi-appressed, inconspicuous, hair-like setae on each interstria, shorter than half the width of an interstria, well visible in profile.

Rostrum (Figs 9C, E) 1.74–1.89× as long as wide at apex, at base 1.19–1.24× wider than at apex, with slightly concave sides, indistinctly enlarged around sockets; in profile weakly regularly curved, short apical part declined, basally indistinctly separated from head by shallow depression. Epifrons elongate, angular, creating slender area between antennal insertions, about as wide as half of corresponding width of rostrum, with weakly concave sides, finely punctate, glabrous. Frons large, glabrous, smooth, indistinctly finely sparsely punctate. Sockets dorsally narrowly reniform, parallel; in profile very short, extended posteriorly. Antennal insertion before middle of rostrum. Head very wide and short; vertex flat, as wide as rostrum at apex. Eyes convex, barely protruding above the outline of head; in profile not reaching dorsal border of head.

Antennae (Fig. 9D) slender and short, scape  $1.2 \times$  longer than funicle,  $0.8 \times$  as long as protibia, at apex  $0.8 \times$  as wide as club; funicle segment 1,  $1.7-1.8 \times$  longer than wide, as long as segment 2, which is  $2.2-2.4 \times$  longer than wide;



**Fig. 11.** Map showing the distributions of *Oxymorus antennalis* sp. n, *O. johnprinei* sp. n., *O. minor* sp. n., *O. obesus* sp. n., *O. oculatus* sp. n. and *O. sulcaticollis* sp. n. Map data: Google Earth, Maxar Technologies, used according to Google Earth Terms of Service.

segments 3 and 4  $1.3 \times$  longer than wide; segment 5 as long as wide; segment 6  $1.1 \times$  wider than long; segment 7  $1.2 \times$  wider than long; club  $1.6 \times$  longer than wide.

Pronotum (Fig. 9F) 1.40–1.44× wider than long, basal third widest and distinctly tapering anteriorly. Disc with very conspicuous, regular longitudinal ridges separated by deep narrow grooves along the whole length, only a short strip just behind anterior border smooth.

Elytra (Fig. 9A) short oval, 1.11–1.15× longer than wide, widest in middle with regularly rounded sides, broadly rounded apically, at base distinctly wider than base of pronotum; interstriae wide and flat; striae narrow. Integument under scales finely, densely, regularly granulate.

Protibiae (Fig. 9L) short and robust, 6.1–6.5× longer than wide in middle, at apex produced externally into a long slender process, apically truncated, inner part with dense row of short yellowish setae, on outer third very short and stout yellowish spines; inner side on apical half denticulate, with 6–8 small blackish spines. Tarsi (Fig. 9K) moderately long, segment 2 1.3× wider than long; segment 3 1.2–1.3× wider than long and 1.3–1.4× wider than segment 2; onychium 1.4–1.5× longer than segment 3.

Spermatheca (Fig. 9J) with short and wide, evenly curved and pointed cornu; ramus sub quadrate, as long as wide; collum about as long as cornu, 3× as long as width at base, straight, evenly distinctly tapering apically.

**Type material.** Holotype: 1  $\bigcirc$  "RSA, Western Cape, Ceres, Waboonberg Mts.,  $33^{\circ}15.541'S$ ,  $19^{\circ}28.129'E$ , 15.x.2019, 1602 m, night time sweeping of fynbos, R. Borovec & M. Meregalli lgt." (TMSA). Paratypes: 5  $\bigcirc$ , the same data as holotype (BMNH, MMTI, RBSC).

**Type locality.** South Africa, Western Cape, Ceres, Waboonberg Mts (Fig. 11).

**Derivation of the name.** This species takes its name from the conspicuous longitudinal ridges on pronotum.

**Bionomics.** The type specimens were collected early at night sweeping shrubby vegetation in fynbos.



Fig. 12. Photograph of habitat of Oxymorus, locality of O. uitkyk sp. n. and O. rikae sp. n. Fynbos vegetation near Uitkyk Pass in Cederberg mountains, where specimens were collected by net sweeping in the evening.

# Key to the species of Oxymorus gen. n.

- Rostrum 1.9–2.4× longer than wide at apex (Figs 6D, 7G).
   Epifrons subparallel-sided (Figs 6D, 7G).

- Pronotum finely punctuate and without longitudinal ridges (Figs 6H, 2E). Base of elytra slightly wider than base of pronotum (Figs 6A, 2A). Spermatheca with collum distinctly shorter than cornu or conspicuously curved (Figs 3K, 7L)...5
- Antennal scape distinctly shorter than protibia (Figs 7A, 1A).
   Funicle segment 2 as long as segment 1 (Figs 1C, 7C). Eyes slightly protruding from head (Figs 1D, 7G). Protibiae produced externally into a long slender process (Figs 1I, 7I).... 7
- 6 Elytra with short, inconspicuous, semi-appressed, apically rounded setae, shorter than half the width of an interstria. Rostrum in profile widest where antennae are inserted (Fig.

- 6E). Eyes more prominent in posterior part (Fig. 6D). Penis in profile scarcely and uniformly thickens (Fig. 6K), in dorsal view with lateral sclerified margins narrow, not curved inwards, apex subtruncate (Fig. 6L). Length 3.8–5.1 mm........
- Elytra with long, conspicuous, semi-erect, apically pointed
- Elytra with long, conspicuous, semi-erect, apically pointed setae, longer than half the width of an interstria. Rostrum in profile equally wide along its length (Fig. 2D). Eyes regularly convex (Fig. 2F). Penis in profile wide, irregularly enlarged, widest at basal third (Fig. 2K), in dorsal view with lateral margins distinctly curved inwards, apex slightly prominent medially (Fig. 2L). Length 3.7 mm ......... O. antennalis sp. n.
- 7 Larger, 6.4–6.9 mm long. Rostrum black (Figs 7E, G). Epifrons tricarinate, with slender and sharp keels in middle and on borders, distinctly carinate also at base of rostrum (Fig. 7G). Elytra in profile without any prominent setae. Spermatheca with collum distinctly curved before tip (Fig. 7L)...

  O. rikae sp. n.

- Elytra with sparse, slender, long oval appressed scales, not hiding integument (Fig. 3A). Pronotum glabrous (Figs 3A, 3E). Rostrum at base as wide as at apex (Fig. 3F). Protibiae slender, not denticulate (Fig. 3G). Epifrons at antennal insertion as wide as club (Fig. 3A). Collum of spermatheca entirely straight (Fig. 3K). Length 3.6 mm. *O. johnprinei* sp. n.

**ACKNOWLEDGEMENTS.** We are grateful to the following colleagues for helping with the loans of important material: M.V. L. Barclay (BMNH); B. Muller (NMBH); R. Müller (TMSA) and R. Stals (SANC). We also wish to thank the staff of the Cederberg Conservancy for their support. C. Lyal (BMNH) very kindly checked the English. The study was funded by grant IGA No. A\_19\_01 of the Czech University of Life Sciences, Prague, Faculty of Forestry and Wood Sciences.

#### **REFERENCES**

Alonso-Zarazaga M.A. & Lyal C.H.C. 1999: A World Catalogue of Families and Genera of Curculionoidea (Insecta: Coleoptera) (Excepting Scolytidae and Platypodidae). Entomopraxis S.C.P. Edition, Barcelona, 315 pp.

- Borovec R. & Oberprieler R.G. 2013: *Afrophloeus*, a new genus of African weevils of the tribe Embrithini (Coleoptera: Curculionidae: Entiminae), with description of a new species and notes on the composition of Embrithini. *Zootaxa* 3693: 365–378.
- LACORDAIRE T. 1863: Histoire naturelle des insectes. Genera des Coléoptères ou exposé méthodique et critique de tous les genres proposés jusqu'ici dans cet ordre d'insectes, Vol. 6. Roret, Paris, 637 pp.
- Lona C. 1937: Curculionidae: Otiorrhynchinae II. In Schenkling S. (ed.): *Coleopterorum Catalogus, Pars 160*. W. Junk, Gravenhage, 412 pp.
- MARSHALL G.A.K. 1942: On some East African Otiorrhynchinae (Col., Curcul.). *Ann. Mag. Nat. Hist. (Ser. 11)* 9: 1–26.
- MARSHALL G.A.K. 1952: Taxonomic notes on Curculionidae (Col.). *Ann. Mag. Nat. Hist. (Ser. 12)* **5**: 261–270.
- MARSHALL G.A.K. 1955: New South African Curculionidae (Col.). Ann. Mag. Nat. Hist. (Ser. 12) 8: 1–24.
- MARSHALL G.A.K. 1957: New African Curculionidae (Col.). *Ann. Mag. Nat. Hist. (Ser. 12)* **9**: 833–852.
- MARSHALL G.A.K. 1958: New South African Curculionidae (Col.). *Ann. Mag. Nat. Hist. (Ser. 12)* 10: 737–751.
- MARSHALL G.A.K. 1959: New South African Curculionidae (Col.). *Ann. Transvaal Mus.* 4: 387–401.
- OBERPRIELER R.G. 1995: Systematic position and composition of the tribes Tanyrhynchini and Myorhinini (Coleoptera: Curculionidae). — Mem. Entomol. Soc. Wash. 14: 155–167.
- Oberprieler R.G., Anderson R.S. & Marvaldi A.E. 2014: 3. Curculionoidea Latreille, 1802: Introduction, Phylogeny. In Leschen R.A.B. & Beutel R.G. (eds): *Handbook of Zoology, Arthropoda: Insecta; Coleoptera, Beetles, Vol. 3: Morphology and Systematics (Phytophaga)*. Walter de Gruyter, Berlin/Boston, pp. 285–300.
- Schoenherr C.J. 1826: Curculionidum dispositio methodica cum generum characteribus, descriptionibus atque observationibus variis seu Prodromus ad Synonymiae Insectorum, partem IV. Fleischer, Lipsiae, x + 338 pp.
- Schoenherr C.J. 1834: Genera et species curculionidum, cum synonymia hujus familiae. Species novae aut hactenus minus cognitae, descriptionibus a Dom. Leonardo Gyllenhal, C.H. Boheman, et entomologis aliis illustratae. Vol. 2(2). Roret, Paris, pp. 329–669.
- Schoenherr C.J. 1842: Genera et species curculionidum, cum synonymia hujus familiae. Species novae aut hactenus minus cognitae, descriptionibus a Dom. Leonardo Gyllenhal, C.H. Boheman, et entomologis aliis Illustratae. Vol. 7(1). Roret, Paris, 479 pp.

Received June 3, 2020; revised and accepted September 24, 2020 Published online November 16, 2020