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New species and records of *Oxypoda* MANNERHEIM from Spain (Coleoptera: Staphylinidae, Aleocharinae)

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A b s t r a c t : *Oxypoda* (*Bessopora*) *segurae* sp. n. (Andalucía: Sierra de Segura), *O.* (*B.*) *caespita* sp. n. (Andalucía, Aragón), *O.* (*Deropoda*) *andalusica* sp. n. (Andalucía), and *O.* (*Atlantoxypoda*) *grancanariae* sp. n. (Islas Canarias: Gran Canaria) are described and illustrated. The previously unknown aedeagus of *O. hierroensis* ZERCHE is illustrated. Several lesser known species are recorded from mainland Spain and the Canary Islands.

K e y w o r d s : Coleoptera, Staphylinidae, Aleocharinae, *Oxypoda*, West Palaearctic region, Europe, Spain, Canary Islands, endemism, taxonomy, new species.

Introduction

In the Palaearctic region, the genus *Oxypoda* MANNERHEIM is among the most diverse genera of Staphylinidae. Numerous species have been described and reported from Europe, but only few species groups have been revised recently; the sexual characters of many species have not been illustrated. Modern, comprehensive, and revisionary taxonomic studies exist only for the *Oxypoda* fauna of the Canary Islands (ZERCHE 1996) and for some conspicuous species groups (ZERCHE 1986, 1994, 1995, 1999). The *Oxypoda* species occurring in mainland Spain have not been treated comprehensively in the recent past, but TRONQUET (1999) examined and illustrated the types of some species.

Various field trips to the Iberian Peninsula organized in the past decade by several coleopterists have yielded abundant *Oxypoda* material, the greater part of which belongs to common species such as *O. annularis* (MANNERHEIM) and *O. magdalenae* FAGEL, or to locally abundant species like *O. steineri* SCHEERPELTZ. However, the material also contained four apparently undescribed species, three of them from mainland Spain and one from the Canary Islands, which are treated below. I use this opportunity to illustrate the previously unknown aedeagus of *Oxypoda hierroensis* ZERCHE, whose description is based on a single female, and to present some records of lesser known species both from mainland Spain and the Canary Islands.

Material, measurements, and abbreviations

The material referred to in this study is deposited in the following collections:

DEI..... Deutsches Entomologisches Institut

NHMW ..... Naturhistorisches Museum Wien (H. Schillhammer)

cAss ..... author's private collection

cSch ..... private collection M. Schülke, Berlin

cWun..... private collection P. Wunderle, Mönchengladbach

The following abbreviations are used for the measurements, which are given in mm:

AL: length of antenna; HW: head width; PW: maximal width of pronotum; PL: length of pronotum along median line; EL: length of elytra from apex of scutellum to posterior margin; EW: combined width of elytra; AW: maximum width of abdomen; MTi: length of metatibia; MTa: length of metatarsus; MTm1: length of first metatarsomere; Mtm2: combined length of metatarsomeres II - IV; ML: length of aedeagus from apex of ventral process to base; TL: total length.

Oxypoda (*Deropoda*) *andalusica* sp. n. (Figs. 1 - 10)

H o l o t y p e ♂: E - No. 5, Andalucía, Sierra de Segura, 15 km S Pontones, 1580m, 38°04'23N, 02°41'19W, 7.IV.2003, leg. V. Assing / Holotypus ♂ *Oxypoda andalusica* sp. n. det. V. Assing 2003 (cAss). P a r a t y p e s : 2♂♂: same data as holotype (cAss); 2♂♂: same data as holotype, but leg. Wunderle (cWun); 1♀: E - No. 6; Andalucía, Sierra de Segura, 15 km S Pontones, ca. 1700 m, 38°03N, 02°42W, 8.IV.2003, leg. V. Assing (cAss); 2♂♂, 1♀: E. Andalusien,Umg. Ronda, Meybohm, 22.2.2000 / N36°41' W5°1', Sierra de las Nieves, Schneefelder, 1700m (cAss).

D e s c r i p t i o n : Measurements (in mm) and ratios (range; n=7): AL: 0.76 - 0.91; HW: 0.29 - 0.33; PW: 0.42 - 0.50; PL: 0.35 - 0.41; EL: 0.32 - 0.38; EW: 0.45 - 0.53; AW: 0.42 - 0.50; MTi: 0.39 - 0.42; MTa: 0.38 - 0.40; MTm1: 0.11 - 0.14; MTm2: 0.15 - 0.17; ML: 0.37 - 0.41; TL: 2.7 - 3.5; PW/HW: 1.41 - 1.57; PW/PL: 1.15 - 1.22; EL/PL: 0.85 - 0.94; EW/PW: 1.03 - 1.10; AW/EW: 0.88 - 0.94; MTi/MTa: 1.00 - 1.12; MTm1/MTm2: 0.75 - 0.90.

Coloration: head brown to blackish brown, usually with the (anterior part of) frons lighter; remainder of body uniformly ferrugineous, except for the infuscate preapical abdominal segments: segment VI, usually also anterior part of segment VII, and sometimes posterior part of segment V. Facies as in Fig. 2.

Head weakly oblong; punctures coarse and very dense, interstices reduced to narrow ridges and with microsculpture; dorsal surface almost completely matt; eyes moderately large, in dorsal view approximately as long as postocular region and distinctly projecting from lateral outline of head. Preapical joint of maxillary palpus long and slender, more than three times as long as wide. Antennae relatively long and massive, somewhat resembling that of *Callicerus rigidicornis* (ERICHSON); antennomere I weakly oblong; II slightly longer and more slender than I; III oblong and coniform, slightly shorter than II; IV approximately as wide as long; V as wide as long or weakly transverse; VI - X of gradually increasing width and increasingly transverse; X barely 1.5 times as wide as long; XI relatively massive, about as long as the combined length of the two preceding joints (Fig. 3).

Pronotum somewhat depressed, distinctly wider than head, but only moderately transverse (see ratios PW/HW, PW/PL, and Fig. 3); maximum width approximately in the middle; lateral margins convex in dorsal view; posterior margin convex in the middle, near posterior angles weakly concave; posterior angles well-marked; puncturation extremely dense, slightly less coarse and somewhat less well-defined than that of head; surface matt.

Elytra about as wide as pronotum or slightly wider, at suture slightly shorter than pronotum (see ratios EW/PW, EL/PL, and Fig. 3); dorsal surface distinctly flattened; posterior margin distinctly convex, almost angled in the middle, near posterior angles sinuate; microsculpture shallower than that of head and pronotum, surface consequently with more shine; puncturation very dense, sometimes slightly granulose, or ill-defined; dorsal surface matt. Hind wings completely reduced. Legs very long and slender; metatarsus as long as metatibia or nearly so; first metatarsomere very long, almost as long as the combined length of the three following tarsomeres (see ratios MTi/MTa and MTm1/MTm2).

Abdomen slender, slightly narrower than the combined width of elytra (see ratio AW/EW and Fig. 2); widest at segment IV and gradually tapering posteriad; puncturation on anterior tergites coarse, granulose, and dense, on posterior tergites sparse, fine, and not granulose; posterior margin of tergite VII without palisade fringe; tergites III - IV with weak shine, sometimes almost matt, V with moderate shine, VI - VIII with pronounced shine and without microsculpture; tergite and sternite VIII distinctly oblong (Figs. 4 - 6).

♂: posterior margin of sternite VIII distinctly convex and with long thin marginal setae (Fig. 4); median lobe of aedeagus as in Fig. 8; apical lobe of paramere very long (Fig. 9).

♀: posterior margin of sternite VIII weakly convex and with relatively long modified marginal setae (Figs. 5 - 6); spermatheca as in Fig. 10.

Etymology: The name (adj.) is derived from the Spanish province Andalucía.

Comparative notes: From all other species of the subgenus *Deropoda* BERNHAUER[1], *O. andalusica* is distinguished by the sexual characters, from most species also by the distinctive coloration, the flattened pronotum and elytra, the somewhat smaller eyes, and the reduced wings. From the widespread *O. mutata* SHARP, which is of similar coloration, it is additionally separated by the more massive and apically not infuscate antennae, the relatively smaller and narrower pronotum, the much coarser puncturation of the forebody and the anterior part of the abdomen, and the more strongly tapering abdomen. In *O. amicta* ERICHSON, which has a similarly coarse puncturation of the forebody and similarly long, massive, and light-coloured antennae, the pronotum is larger and partly infuscate, the elytra are much longer, and the anterior segments of the abdomen are less coarsely and less densely punctate. In the similar, but smaller *O. depressipennis* (AUBÉ), the head is of the same colour as the pronotum, the lateral margins of the pronotum are slightly sinuate posteriorly, and the abdomen is only weakly tapering posteriad. For more details on external characters and for illustrations of the genitalia see BERNHAUER (1902) and ZERCHE (1995). *Oxypoda zariquieyi*, which was described from northwestern Spain by PEYERHIMHOFF (1919a), has smaller and less convex eyes, much more transverse preapical antennomeres (about twice as wide as long), an elevated suture of the elytra,

[1] *Deropoda* and *Baptopoda* were both described by BERNHAUER (1902). As there is some doubt that a distinction of these two subgenera is justified, both are here collectively referred to as *Deropoda*.

and carinate lateral margins of the elytra. *Oxypoda transgressa* PEYERHIMHOFF from the Djurdjura range in Algeria, though similar in the near-absence of the lateral carinae of the elytra, is readily distinguished by the non-infuscate head.

Distribution and bionomics: The reduced wings, and pigmentation, as well as the altitudes where the species were found suggest that the distribution of *O. andalusica* is probably restricted to southern Spain. The types were collected under stones in a meadow and on a slope in northern exposure, partly at the edge of snow patches, at elevations of 1580 - 1700 m. One of the localities is illustrated in Fig. 1. For a photograph of the locality where the holotype was found see Fig. 1 in ASSING (2003).

***Oxypoda* (*Bessopora*) *segurae* sp. n. (Figs. 1, 11 - 18)**

Holotype ♂: E - No. 6; Andalucía, Sierra de Segura, 15 km S Pontones, ca. 1700 m, 38°03N, 02°42W, 8.IV.2003, leg. V. Assing / Holotypus ♂ *Oxypoda segurae* sp. n. det. V. Assing 2003 (cAss). Paratypes: 2♂♂: same data as holotype (cAss); 1♀: same data as holotype, but leg. Wunderle (cWun); 1♀: E - No. 9; Andalucía, Sierra de Segura, 20 km S Pontones, 1830 m, 38°00´41N, 02°44´35W, 8.IV.2003, leg. V. Assing (cAss).

Description: Measurements (in mm) and ratios (range; n=4): AL: 0.68 - 0.74; HW: 0.33 - 0.34; PW: 0.42 - 0.44; PL: 0.32 - 0.33; EL: 0.25 - 0.27; EW: 0.44 - 0.48; AW: 0.41 - 0.44; MTi: 0.32 - 0.33; MTa: 0.24 - 0.26; MTm1: 0.06 - 0.08; MTm2: 0.09 - 0.11; ML: 0.32 - 0.33; TL: 2.5 - 2.8; PW/HW: 1.27 - 1.32; PW/PL: 1.33 - 1.38; EL/PL: 0.79 - 0.84; EW/PW: 1.04 - 1.10; AW/EW: 0.91 - 0.97; MTi/MTa: 1.24 - 1.31; MTm1/MTm2: 0.67 - 0.71.

Small (see measurements) and light-coloured brachypterous species. Coloration: whole body uniformly testaceous to light ferrugineous, with the central part of abdominal tergite VI infuscate; sometimes also anterior part of tergite VII indistinctly infuscate. Habitus as in Fig. 11.

Head of subcircular shape, slightly wider than long (length measured from anterior margin of clypeus), widest behind eyes; eyes of moderate size and weakly projecting from lateral outline of head, in dorsal view clearly shorter than postocular region; dorsal surface with fine and moderately dense puncturation, with shallow microsculpture, and with subdued shine. Antennae relatively short and distinctly incrassate apically; antennomere II distinctly oblong, as long as I or slightly longer; III coniform, ca. 1.5 times as long as wide, distinctly shorter than II; IV strongly transverse, almost twice as wide as long; V - IX increasingly transverse and of gradually increasing width; X of similar shape as IX, but slightly longer and less transverse, almost twice as wide as long; XI slightly longer than the combined length of the two preceding antennomeres. Penultimate joint of maxillary palpus of the usual condition, neither distinctly elongated nor conspicuously dilated (Fig. 12).

Pronotum distinctly transverse and wider than head (see ratios PW/HW, PW/PL, and Fig. 12); maximum width approximately in the middle; lateral margins convex in dorsal view; posterior margin almost straight, in the middle very weakly concave; posterior angles obtuse, but well-marked; puncturation extremely dense, rugose, not very deep, and somewhat ill-defined; surface almost without shine; pubescence dense, short, and decumbent.

Elytra slightly wider and at suture distinctly shorter than pronotum (see ratios EW/PW, EL/PL, and Fig. 12); posterior margin weakly sinuate near posterior angles; puncturation

very dense and weakly granulose; pubescence similar to that of pronotum; surface almost without shine. Hind wings completely reduced. Legs not particularly slender; metatarsus distinctly shorter than metatibia or nearly so; first metatarsomere clearly shorter than the combined length of the three following tarsomeres (see ratios MTi/MTa and MTm1/MTm2).

Abdomen slightly narrower than elytra (see ratio AW/EW and Fig. 12); segments III - VI of equal width, VII - VIII slightly tapering; puncturation fine, very dense on anterior tergites and moderately dense on posterior tergites; interstices shining; posterior margin of tergite VII without palisade fringe; tergite VIII as in Fig. 13.

♂: posterior margin of sternite VIII distinctly convex and with long thin marginal setae (Fig. 14); median lobe of aedeagus as in Fig. 16; apical lobe of paramere relatively short (Fig. 17).

♀: posterior margin of sternite VIII weakly convex and with weakly modified marginal setae (Fig. 15); spermatheca as in Fig. 18.

Etymology: The name (adj.) is derived from the Sierra de Segura, where the type locality is located.

Comparative notes: From all other species of the subgenus *Bessopora* THOMSON, *O. segurae* is distinguished by the morphology of the primary sexual characters. In addition, it is separated from other similar species as follows:

In *O. soror* THOMSON, which is of similar coloration (except for the non-infuscate abdominal segment VI), the antennae are longer and more slender with much less transverse antennomeres IV - X, the puncturation of the forebody is much finer, the forebody is more shining, the pronotum is less transverse, the elytra are shorter in relation to the pronotum, and the abdomen is much more finely and more densely punctate.

In *O. brachyptera* STEPHENS, whose forebody has a similarly dense and rugose puncturation, the coloration is much darker (head infuscate, pronotum and elytra brown, preapical abdominal segments more extensively infuscate), the pronotum and elytra are more convex in cross-section, and the palisade fringe at the posterior margin of the abdominal tergite VII is not completely reduced (even in brachypterous specimens).

According to DRUGMAND & OUTERELO (1997) two endemic *Bessopora* species have been described from the Iberian Peninsula: *O. bucacoensis* FAGEL and *O. steineriana* SCHEERPELTZ. Both of these species, however, are macropterous, and the former is additionally distinguished by darker coloration and greater body size (SCHEERPELTZ 1958, TRONQUET 1999).

Distribution and bionomics: As in the preceding species, the reductions of wings and pigmentation, as well as the elevations of the type localities suggest that *O. segurae* has a restricted distribution. The type specimens were collected on slopes in northern exposure under stones at the edge of snow patches at altitudes of 1700 - 1830 m (Fig. 1).

Oxypoda (*Bessopora*) *caespita* sp. n. (Figs. 19 - 24)

Holotype ♂: E - No. 17; WNW Teruel, Sierra de Albarracín, NE Noguera, 1640m, 40°29N, 01°35W, 12.IV.2003, leg. V. Assing / Holotypus ♂ *Oxypoda caespita* sp. n. det. V. Assing 2003 (cAss). Paratype: 1♂: E - No. 8; Andalucia, SW Sierra de Segura, Sierra de Pozo, 1610 m, 37°55'26N, 02°43'46W, 9.IV.2003, leg. V. Assing (cAss).

D e s c r i p t i o n : Measurements (in mm) and ratios (holotype, paratype): AL: 0.56, 0.51; HW: 0.32, 0.30; PW: 0.41, 0.38; PL: 0.32, 0.29; EL: 0.21, 0.20; EW: 0.42, 0.39; AW: 0.42, 0.38; MTi: 0.29, 0.24; MTa: 0.24, 0.20; MTm1: 0.06, 0.05; MTm2: 0.09, 0.08; ML: 0.35, 0.33; TL: 2.5, 2.2; PW/HW: 1.29, 1.25; PW/PL: 1.29, 1.28; EL/PL: 0.67, 0.69; EW/PW: 1.04, 1.04; AW/EW: 1.00, 0.96; MTi/MTa: 1.19, 1.19; MTm1/MTm2: 0.67, 0.70.

Small (see measurements) and brachypterous species, in general appearance much resembling the brachypterous morph of *Oxypoda brachyptera*. Coloration: head, including antennae and mouthparts, dark brown to blackish brown, with the basal 2 - 3 antennomeres slightly lighter; pronotum and elytra yellowish brown to light brown; anterior and apical abdominal segments light brown, segments V - VII infuscate; legs testaceous. Habitus as in Fig. 19.

Head slightly wider than long (length measured from anterior margin of clypeus), widest behind eyes; eyes of moderate size, smaller than in *O. brachyptera*, not projecting from lateral outline of head, postocular region in dorsal view approximately 1.5 times as long as eyes; dorsal surface with fine and rather dense puncturation, with shallow microsculpture, and with subdued shine. Antennae relatively short and distinctly incrassate apically, distinctly shorter and less stout than in *O. brachyptera*; antennomere II distinctly oblong, approximately as long as I; III weakly coniform, 1.5 - 2.0 times as long as wide, distinctly shorter than II; IV approximately as wide as long; V weakly transverse; VI - X increasingly transverse and of increasing width; X approximately twice as wide as long; XI less massive than in *O. brachyptera*, slightly longer than the combined length of the two preceding antennomeres. Penultimate joint of maxillary palpus of the usual condition, neither distinctly elongated nor conspicuously dilated (Fig. 20).

Pronotum distintly transverse and wider than head (see ratios PW/HW, PW/PL, and Fig. 20); maximum width in the middle; lateral margins convex in dorsal view; posterior margin weakly convex; posterior angles somewhat rounded, weakly marked; punctuation very fine and dense; surface with subdued shine; pubescence dense, rather short, and decumbent.

Elytra approximately as wide as pronotum and at suture distinctly shorter than pronotum (see ratios EW/PW, EL/PL, and Fig. 20); posterior margin distinctly sinuate near posterior angles; puncturation as in *O. brachyptera*, very dense, rasp-like, and fine, but coarser than that of head and pronotum; surface with subdued shine. Hind wings completely reduced. Legs not particularly slender; metatarsus relatively long in relation to metatibia; first metatarsomere shorter than the combined length of the three following tarsomeres (see ratios MTi/MTa and MTm1/MTm2).

Abdomen approximately as wide as elytra, widest at segment V (see ratio AW/EW and Fig. 20); segments VI - VIII only slightly narrower than segment V; VIII slightly narrower than VII; puncturation fine, very dense on anterior tergites and moderately dense on posterior tergites; interstices with very shallow microsculpture, shining; posterior margin of tergite VII with traces of palisade fringe.

♂: tergite VIII as in Fig. 21; posterior margin of sternite VIII moderately convex, not distinctly pointed in the middle (Fig. 22); median lobe of aedeagus as in Fig. 23, with relatively long flagellum in internal sac; apical lobe of paramere relatively short (Fig. 24).

♀: unknown.

Etymology: The name (Lat., adj. derived from caespes: turf) refers to the fact that both type specimens were found in turf habitats.

Comparative notes: *Oxypoda caespita* is highly similar to *O. brachyptera* in external characters, but readily distinguished from the brachypterous morph of that species especially by the dark (in *O. brachyptera* usually testaceous), much shorter, and much less massive antennae, by the smaller eyes (in *O. brachyptera* as long as postgenae or nearly so), by the much shorter apical lobe of the paramere, by the different shape of the median lobe of the aedeagus, the more pronounced crista apicalis, and by the much longer flagellum in the internal sac.

In the light-coloured *O. segurae*, the antennae are much longer and more massive, the puncturation of the head and pronotum is coarser, the elytra are longer in relation to the pronotum, the metatarsus is shorter in relation to the metatibia, the anterior abdominal segments are less densely punctured, the palisade fringe at the posterior margin of the abdominal tergite VII is absent, the apical lobe of the paramere is longer and more slender, the ventral process of the median lobe of the aedeagus is longer and more strongly bent, and the internal structures of the aedeagus are of different morphology.

From *O. pyrenaica* JEANNEL & JARRIGE, which is endemic to the Pyrénées, *O. caespita* is distinguished by the presence of a palisade fringe at the posterior margin of the abdominal tergite VII, by the much more transverse preapical antennomeres (in *O. pyrenaica* only weakly transverse), the more rugosely punctured and less shining elytra, the relatively shorter first metatarsomere (in *O. pyrenaica* approximately as long as the combined length of the three following tarsomeres), the more slender ventral process and the larger crista apicalis of the median lobe of the aedeagus, and by the shorter apical lobe of the paramere.

In *O. arverna* PEYERIMHOFF, another similar species, which was described from the Massif Central (PEYERIMHOFF 1919b), the antennae are longer, the preapical antennomeres are less transverse, the elytra are less coarsely and less rugosely punctured, the abdomen is more shining, the angle between the ventral process and the basal part of the aedeagus (lateral view) is more acute, and the apical lobe of the paramere is longer.

Similarities in the morphology of the aedeagus suggest that *O. caespita* is probably closely related to *O. ferruginea* ERICHSON, which, however, is distinguished by somewhat larger body size, slightly longer antennae with less transverse antennomeres VI - X, a less transverse pronotum, longer elytra, long hind wings, much more densely punctured apical abdominal segments (best visible on tergite VII), and a larger aedeagus with a less pronounced crista apicalis and internal structures of different morphology.

Distribution and bionomics: The fact that *O. caespita* is known both from the Sierra de Albarracín and the Sierra de Segura suggests that it is more widespread in the Iberian Peninsula, where it may previously have been recorded as *O. brachyptera*. Both type specimens were found in turf habitats under stones, at altitudes of 1610 and 1640 m.

Oxypoda (Podoxya) magdalenae FAGEL

Material examined: **Spain**: **Castilla-La Mancha**: 6 exs., Sierra de Alcaraz, ca. 15 km NNE Riópar, 38°32N, 02°25W, 1350 m, stream bank, litter of *Salix* and other trees, 7.IV.2003, leg. Assing (cAss). **Andalucía**: 2 exs., SW Sierra de Segura, Sierra de Pozo, 37°56N, 02°43W, 1550 m,

litter of old pine trees, 9.IV.2003, leg. Assing (cAss); 13 exs., Sierra de Bermeja (CA), Jubrique, 350 m, 26.III.1994, leg. Assing (cAss); 1 ex., Sierra de Bermeja, 1000 m, 26.III.1994, leg. Assing (cAss); 1 ex., Sierra de Bermeja, Puerto de Peñas Blancas, 1200 m, 26.III.1994, leg. Wunderle (cWun); 1 ex., Sierra Bermeja, Reales, 36°29N, 05°12W, 1000 m, 18.II.2000, leg. Meybohm (cAss), 4 exs., Ronda, Sierra de Ubrique (CA), 1000 m, 25.III.1994, leg. Assing (cAss); 4 exs., Ronda, E Grazalemma (CA), 800 m, 25.III.1994, leg. Assing, Wunderle (cAss, cWun); 28 exs., Algeciras, Sierra de Fates (CA), 350 m, 28.III.1994, leg. Assing, Wunderle (cAss, Wun); 22 exs., Algeciras, Sierra de Luna (CA), 200 - 350 m, 28.III.1994, leg. Assing, Wunderle (cAss, cWun); 5 exs., Sierra de Palmitera (MA), 900 m, 24.III.1994, leg. Wunderle (cWun); 1 ex., Sierra Nevada (GR), Capileira, 1400 m, 23.III.1994, leg. Assing (cAss); 2 exs., Sierra Nevada, Puerta de la Ragua (GR), 2000m, 31.VII.2002, leg. Pütz (cAss); 4 exs., Cerro de la Novia, Puerto de Galis, barranco at km 6 A-375, 36°37N, 05°30W, 700 m, 19.II.2000, leg. Lompe (cAss); 16 exs., same data, but 500 m, leg. Meybohm (cAss); 6 exs., Cortez della Frontera, Penon del Berrueco, 36°37N, 05°25W, 700 m, oak forest, 19.II.2000, leg. Meybohm (cAss); 2 exs., Sierra de Aracena, Acebuches, 37°53N, 06°48W, 5.IV.2001, leg. Meybohm (cAss). **Portugal**: 1 ex., Algarve, N Faro, Alportel, 37°11N, 07°55W, 370 m, 9.IV.2001, leg. Meybohm (cAss); 1 ex., Algarve, N Faro, Freixo-Seco, 37°16N, 06°03W, 9.IV.2001, leg. Meybohm (cAss).

Remarks: In the south of the Iberian Peninsula, *O. magdalenae* is rather common. It has also been collected in several localities in Madeira (ASSING unpubl.). According to TRONQUET (1999), who illustrates the genitalia, the species is distributed from NW-Africa (Tunisia, Algeria) to northeastern Spain.

Oxypoda (*Podoxya*) *steineri* SCHEERPELTZ

Material examined: **Spain**: **Andalucía**: 2 exs., SW Sierra de Segura, Sierra de Pozo, 37°56N, 02°43W, 1550 m, litter of old pine trees, 9.IV.2003, leg. Assing (cAss). **Aragón**: 155 exs., 40 km E Teruel, Sierra de Gúdar, 40°24N, 00°39W, 1890 m, litter of old pine trees, 13.IV.2003, leg. Assing (cAss); 3 exs., Sierra de Gúdar, peak of Penarroya, 40°23N, 00°40W, 2020 m, sifted from grass roots in pine forest, 13.IV.2003, leg. Assing (cAss); 6 exs., 60 km E Teruel, Sierra del Rayo, 10 km E Valdelineares, 40°23N, 00°31W, 1800 m, pine forest, 13.IV.2003, leg. Assing (cAss); 10 exs., 30 km S Teruel, Sierra del Javalambre, 40°09N, 01°00W, 1700 m, N-slope with scattered pine trees, 14.IV.2003, leg. Assing (cAss); 16 exs., same data, but 40°07N, 01°01W, 1860 m, N-slope with spruce and pine (cAss); 3 exs., same data, but 1840 m, litter and grass below pine trees (cAss). **Cantabria**: 4 exs., Picos de Europa, Fuente Dé, Peña Vieja, 43°10N, 04°48W, grass and moss in shade of rocks, 17.VII.2003, leg. Assing (cAss).

Remarks: The known distribution of this species extends from southwestern France to northwestern, central, and southeastern Spain. The species was previously known from the Sierra de Guadarrama and Sierra de Gredos, the type localities of *O. steineri* and its junior synonym *O. castillana* FAGEL; the synonymy was established by TRONQUET (2001). TRONQUET (1999) reports *O. steineri* from the Pyrénées-Orientales (France) and illustrates the genitalia. The material listed above was collected mostly in pine forests, but also from roots of grass and shrubs at altitudes of 1550 - 1940 m.

Oxypoda (*Canaroxypoda*) *hierroensis* ZERCHE (Fig. 25)

Material examined: see ASSING (2000).

Remarks: The original description of *O. hierroensis* is based on a single female (ZERCHE 1996). Since a male has now become available, the previously unknown aedeagus is illustrated in Fig. 25.

Oxypoda (*Canaroxypoda*) *canariensis* ZERCHE

Material examined: **Islas Canarias, Gran Canaria**: 1 ex., NNW Lanzarote, Bco. de la Virgen, 500 m, fragments of degraded laurisilva, 20.XII.1997, leg. Assing (cAss); 1 ex., S Las Lagunetas, Bco. de la Miña, 1200 m, degraded laurisilva, 21.XII.1997, leg. Assing (cAss); 5 exs., E Tejeda, 1300 m, ruderal meadow, under stones, 25.XII.1997, leg. Assing (cAss).

Remarks: Despite its long wings, large eyes, and the fact that it was found also in ruderal habitats, the species is still only known from Gran Canaria and apparently an island endemic.

Oxypoda (*Atlantoxypoda*) *aranensis* (ISRAELSON)

Xenomma hierrensis PACE i. l.: FRANZ (1996: 88).

Material examined: 1♂: El Hierro, Las Playas / HOLOTYPUS Xenomma hierrensis m., det. R. Pace 1989 / Xenomma hierrensis sp. n., det. R. Pace 1989 (NHMW); 1♀, El Hierro, S Tigaday, 4./18.II.2003, leg. Fiedler & Cocco (cSch).

Remarks: The aedeagus of the male, on which the record of *Xenomma hierrensis* from El Hierro (FRANZ 1996) is based, had been dissected prior to the present study and is somewhat damaged, but there is no evidence that its morphology differs from that of *O. aranensis*. Similarly, no differences were found in the external characters and in the shape of the spermatheca, suggesting that the El Hierro population should be specifically distinct from *O. aranensis*. This species was previously known only from La Gomera, where it is very common in the laurisilva areas (ASSING 1999, ZERCHE 1996); in El Hierro, it is apparently much rarer. The only other endemic species of Staphylinidae occurring in both La Gomera and El Hierro, but absent from the remaining Canary islands, is *Stenus aeneotinctus* WOLLASTON (ASSING 2000).

Oxypoda (*Atlantoxypoda*) *grancanariae* **sp. n. (Figs. 26 - 36)**

Holotype ♂: E. Islas Canarias, 16, Gran Canaria, 1600m, Cruz de Tejeda, 26.XII.1997, Assing / Holotypus ♂ *Oxypoda grancanariae* sp. n. det. V. Assing 2003 (cAss). Paratypes: 2♂♂, 1♀ [♀ with mature egg in ovaries]: E Gran Canaria, Str. von Cruz de Tejeda-Pinos d. Cadar, 1600m, km 3.75, 28.12.1997, P. Wunderle (cWun, cAss); 2♂♂: same data, but 25.12.1997 (DEI, cWun).

Description: Measurements (in mm) and ratios (range, arithmetic mean; n=6): AL: 0.65 - 0.72, 0.69; HW: 0.36 - 0.39, 0.37; PW: 0.45 - 0.50, 0.48; PL: 0.36 - 0.41, 0.38; EL: 0.23 - 0.26, 0.24; EW: 0.45 - 0.51, 0.48; AW: 0.47 - 0.54, 0.50; MTi: 0.35 - 0.38, 0.36; MTa: 0.28 - 0.32, 0.29; MTm1: 0.08 - 0.09, 0.09; MTm2: 0.10 - 0.11, 0.11; ML: 0.35; TL: 2.5 - 3.1, 2.8; PW/HW: 1.25 - 1.32, 1.28; PW/PL: 1.22 - 1.29, 1.25; EL/PL: 0.61 - 0.67, 0.64; EW/PW: 0.97 - 1.03, 1.01; AW/EW: 0.97 - 1.03, 1.01; MTi/MTa: 1.19 - 1.27, 1.23; MTm1/MTm2: 0.71 - 0.92, 0.82.

Coloration ferrugineous to dark brown, with the preapical abdominal segments more or less extensively infuscate; elytra sometimes slightly lighter than head and pronotum; legs testaceous; antennae dark brown with the basal antennomeres testaceous to light brown. Habitus as in Fig. 26.

Head slightly wider than long (length measured from anterior margin of clypeus), widest behind eyes; eyes weakly convex, slightly more than half the length of postocular region in dorsal view; dorsal surface with very fine and moderately dense puncturation, with shallow microsculpture, and with subdued shine. Antennae relatively short and distinctly

incrassate apically; antennomeres I - III distinctly oblong, I and II of subequal length and somewhat longer than III; IV about as wide as long; V - X of increasing width; V - IX increasingly transverse; IX approximately twice as wide as long; X slightly longer and less transverse than IX, slightly more than 1.5 times as wide as long; XI approximately as long as the combined length of IX and X. Penultimate joint of maxillary palpus of similar shape as in other species of the subgenus, e. g. *O. aranensis*.

Pronotum distintly transverse and wider than head (see ratios PW/HW, PW/PL, and Fig. 27); maximum width in or a little behind the middle; lateral margins weakly convex in dorsal view; posterior margin weakly convex; posterior angles somewhat rounded; puncturation very dense, sometimes slightly granulose, much more distinct than that of head; surface with subdued shine; pubescence dense, rather short, and decumbent.

Elytra approximately as wide as pronotum and at suture distinctly shorter than pronotum (see ratios EW/PW, EL/PL, and Fig. 27); posterior margin moderately sinuate near posterior angles; puncturation rasp-like, coarser, less dense, and more distinctly granulose than that of pronotum; surface with subdued shine. Hind wings completely reduced. Legs not particularly slender; first metatarsomere shorter than the combined length of the three following tarsomeres (see ratios MTi/MTa and MTm1/MTm2).

Abdomen approximately as wide as elytra, widest at segment V (see ratio AW/EW and Fig. 26); segments VI - VIII only slightly narrower than segment V; VIII slightly narrower than VII; puncturation fine and dense everywhere, not or only slightly sparser on posterior than on anterior tergites; interstices without microsculpture; posterior margin of tergite VII without palisade fringe; tergite VIII as in Fig. 28.

♂: posterior margin of sternite VIII obtusely angled in the middle (Fig. 29); median lobe of aedeagus and apical lobe of paramere as in Figs. 31 - 35.

♀: posterior margin of sternite VIII weakly convex, and with relatively short modified marginal setae (Fig. 30); spermatheca as in Fig. 36.

Etymology: The name (Lat., noun, genitive) is derived from Gran Canaria, where the species is endemic.

Comparative notes: The other brachypterous and endemic species of the subgenus *Atlantoxypoda*, none of which is known from Gran Canaria, are distinguished from *O. grancanariae* as follows:

Oxypoda assingi ZERCHE from Tenerife is larger, has longer antennae with less transverse preapical antennomeres, larger eyes, a less transverse pronotum, and a larger aedeagus with a longer and much more slender ventral process and internal structures of different shape.

Oxypoda silosensis ZERCHE (Tenerife), too, is larger, has a larger and more transverse pronotum, somewhat longer elytra, a larger aedeagus with a longer and more slender ventral process and internal structures of different shape, and a spermatheca with a less slender duct.

Oxypoda piniphila ZERCHE (Tenerife), which is of similar size, is of lighter coloration, has longer antennae with less transverse preapical antennomeres, a relatively larger and less transverse pronotum, slightly longer elytra, an even more densely and finely punctured abdomen, and an aedeagus with a more slender ventral process of the median lobe and internal structures of different shape.

Oxypoda teydensis (PALM) from Tenerife is of smaller size, lighter coloration, has relatively longer and more slender antennae, smaller eyes, a less transverse pronotum, a less densely punctured abdomen, an aedeagus with a relatively longer and basally straight (lateral view) ventral process and with internal structures of different morphology, and a spermatheca with a differently shaped capsule.

Oxypoda lehmanni ASSING & WUNDERLE from Tenerife is much smaller and lighter, has more slender antennae and smaller eyes, a less transverse pronotum, a smaller aedeagus with a basally straight (lateral view) ventral process and internal structures of different morphology, and a smaller spermatheca.

Oxypoda aranensis (ISRAELSON) from La Gomera and El Hierro, which is of similar size, is usually of lighter coloration, has longer and more massive antennae with less transverse preapical antennomeres, an aedeagus with an apically less slender and basally straight (lateral view!) ventral process, and with internal structures of different morphology, a more slender apical lobe of the paramere, and a spermatheca with a longer duct.

Oxypoda ductifera ZERCHE from La Palma has a less transverse head with smaller eyes and more slender antennae, a larger and less transverse pronotum, much more slender metatarsi with an extremely long first metatarsomere (at least as long as the combined length of the three following tarsomeres), an aedeagus with a much longer and more slender ventral process and with different internal structures, and a spermatheca with a differently shaped capsule.

For comparison see the figures in ZERCHE (1996) and ASSING & WUNDERLE (1999).

Distribution and bionomics: External characters such as the small eyes and reduced wings, as well as the restricted distributions of the other brachypterous species of the subgenus suggest that *O. grancanariae* is an island endemic of Gran Canaria. It was collected near Cruz de Tejeda at an altitude of 1600 m by sifting grass roots in a stand of *Pinus canariensis*. The female paratype had a mature egg in the ovaries.

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I am most grateful to Marc Tronquet, Molitg-les-Bains, for helpful comments, as well as for photos and drawings of *Oxypoda pyrenaica* and *O. arverna*. Benedikt Feldmann, Münster, kindly reviewed the mauscript.

Zusammenfassung

Oxypoda (*Bessopora*) *segurae* sp. n. (Andalucía: Sierra de Segura), *O.* (*B.*) *caespita* sp. n. (Andalucía, Aragón), *O.* (*Deropoda*) *andalusica* sp. n. (Andalucía) und *O.* (*Atlantoxypoda*) *grancanariae* sp. n. (Islas Canarias: Gran Canaria) werden beschrieben; Habitus und wesentliche Differentialmerkmale dieser Arten sowie der bisher unbekannte Aedoeagus von *O. hierroensis* ZERCHE werden abgebildet.

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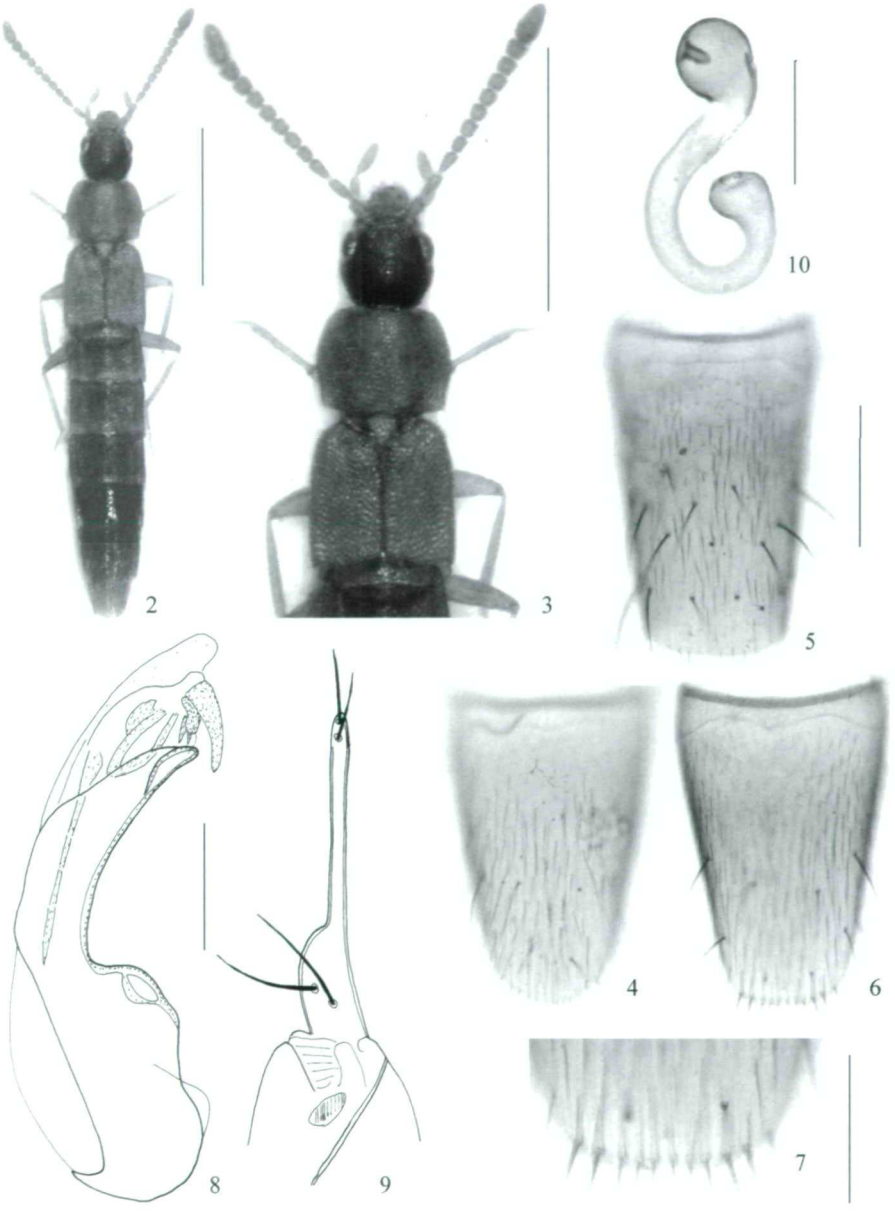
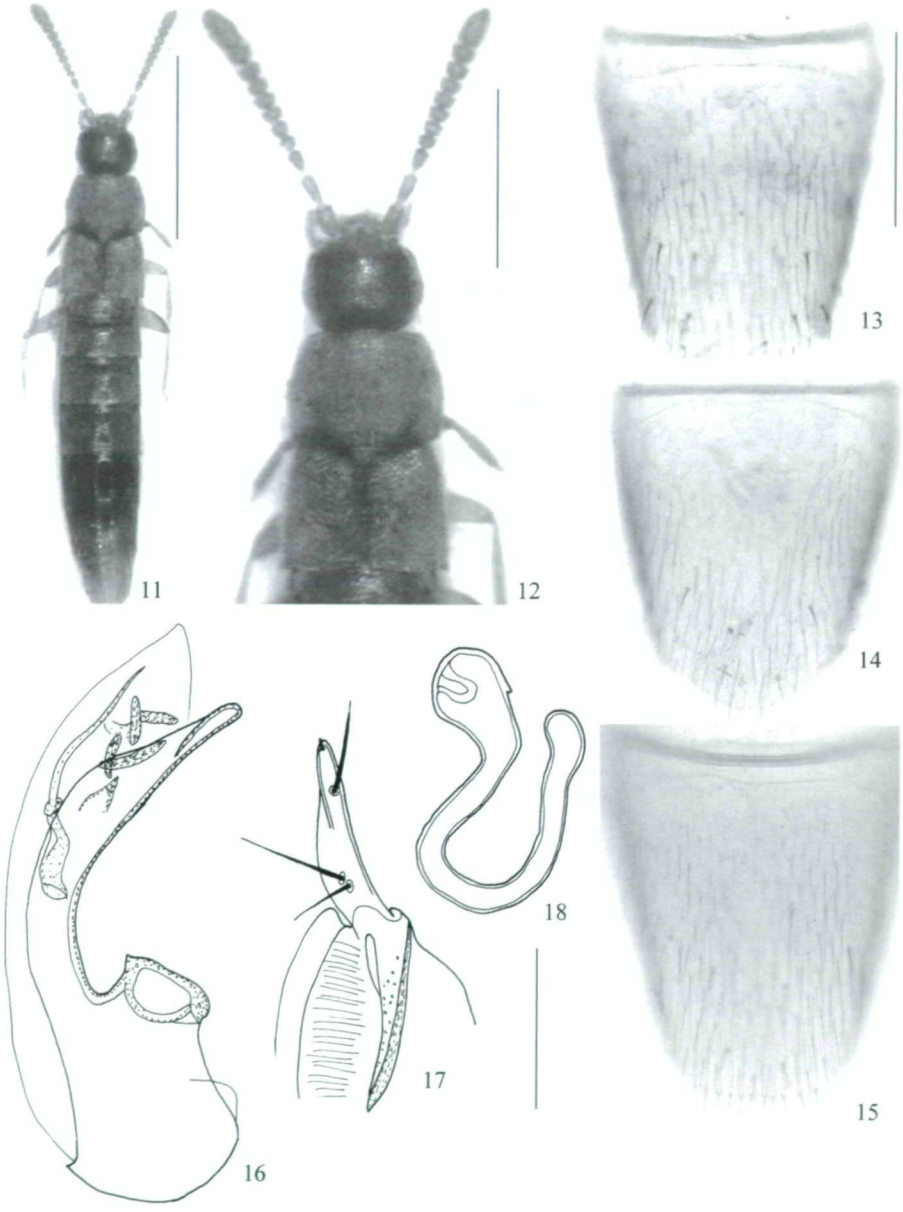
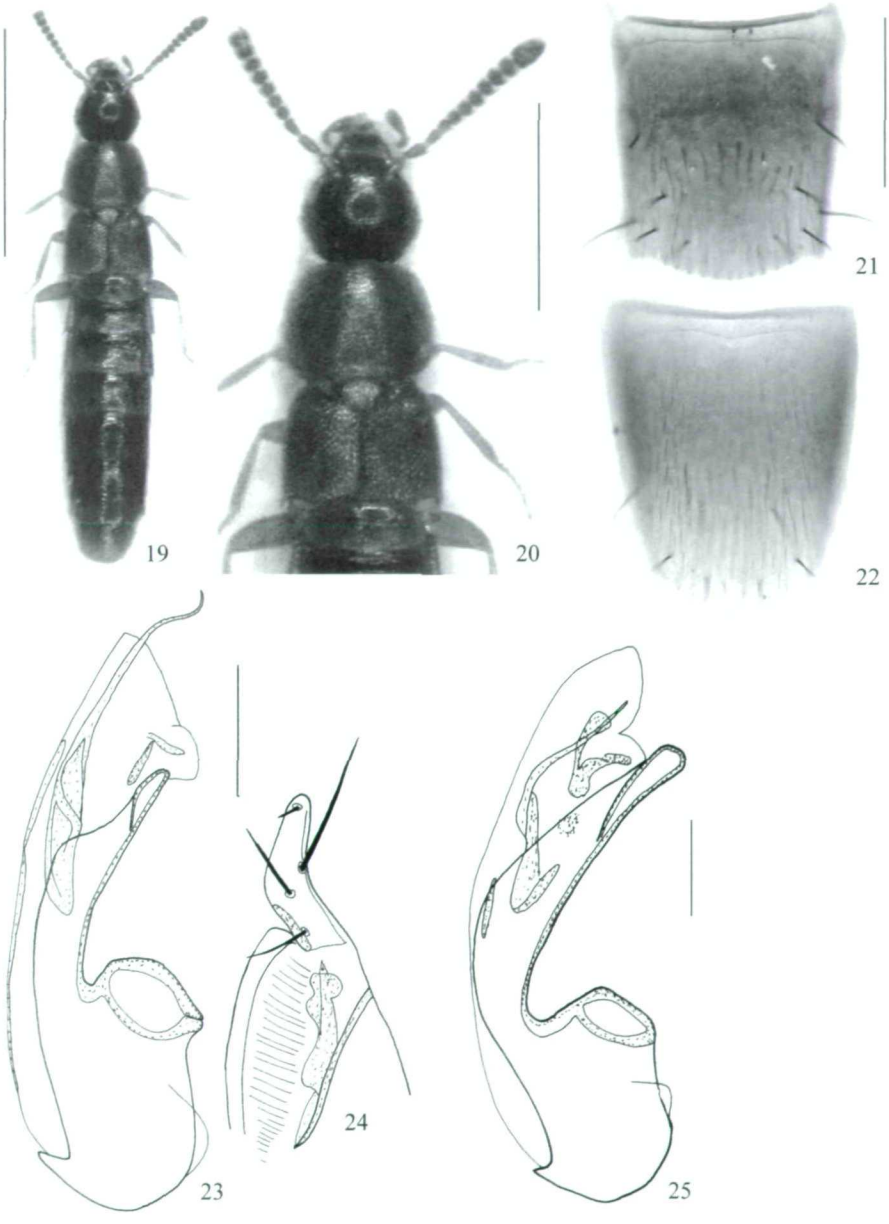
Fig. 1: Locality in the Sierra de Segura ("no. 6"), where the holotype and three paratypes of *Oxypoda segurae* sp. n. and a paratype of *O. andalusica* sp. n. were collected.



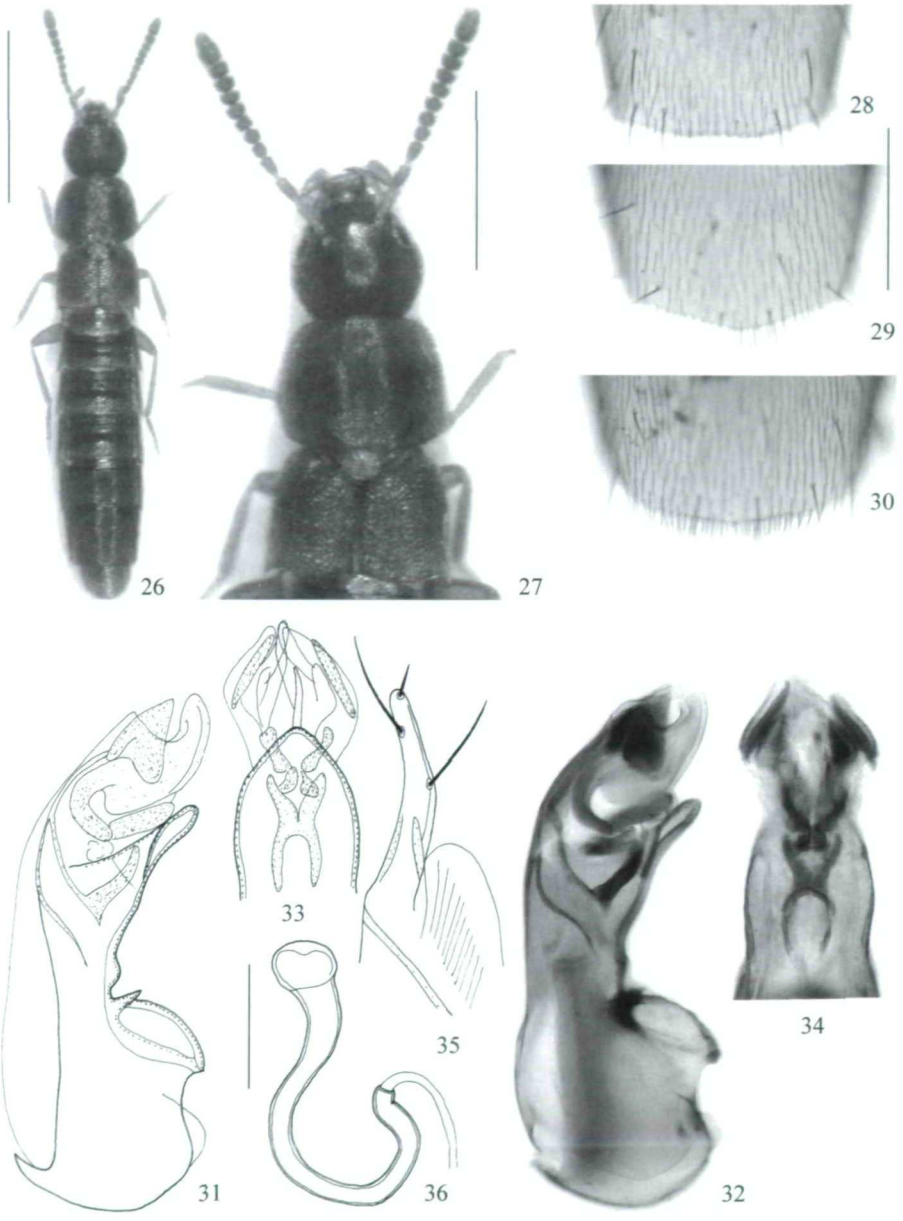
Figs. 2 - 10: *Oxypoda andalusica* sp. n.: **2** – facies; **3** – forebody; **4** – ♂ sternite VIII; **5** – ♀ tergite VIII; **6** – ♀ sternite VIII; **7** – posterior part of ♀ sternite VIII; **8** – median lobe of aedeagus in lateral view; **9** – apical lobe of paramere; **10** – spermatheca. Scale bars: 2 - 3: 1.0 mm; 4 - 6: 0.2 mm; 7 - 10: 0.1 mm.



Figs. 11 - 18: *Oxypoda segurae* sp. n.: **11** – facies; **12** – forebody; **13** – ♂ tergite VIII; **14** – ♂ sternite VIII; **15** – ♀ sternite VIII; **16** – median lobe of aedeagus in lateral view; **17** – apical lobe of paramere; **18** – spermatheca. Scale bars: 11: 1.0 mm; 12: 0.5 mm; 13 - 15: 0.2 mm; 16 - 18: 0.1 mm.



Figs. 19 - 25: *Oxypoda caespita* sp. n. (**19 - 24**) and *O. hierroensis* ZERCHE (**25**): **19** – facies; **20** – forebody; **21** – ♂ tergite VIII; **22** – ♂ sternite VIII; **16, 25** – median lobe of aedeagus in lateral view; **24** – apical lobe of paramere. Scale bars: 19: 1.0 mm; 20: 0.5 mm; 21 - 22: 0.2 mm; 23 - 25: 0.1 mm.



Figs. 26 - 36: *Oxypoda grancanariae* sp. n.: **26** – facies; **27** – forebody; **28** – ♂ tergite VIII; **29** – ♂ sternite VIII; **30** – posterior half of ♀ sternite VIII; **31, 32** – median lobe of aedeagus in lateral view; **33, 34** – apex of median lobe of aedeagus in ventral view; **35** – apical lobe of paramere; **36** – spermatheca. Scale bars: 26: 1.0 mm; 27: 0.5 mm; 28 - 30: 0.2 mm; 31 - 36: 0.1 mm.