

The type material of the species of *Laparocerus* Schönherr, 1834 (Coleoptera, Curculionidae, Entiminae)

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(Accepted 29 September 2006)

Abstract

The type material of all species presently assigned to the curculionid genus *Laparocerus* Schönherr, 1834, and described prior to 2006, is here compiled as an advance of the revision of the genus undertaken by the author. A total of 105 names of taxa of the species level are considered valid and 24 invalid. These later cases relate to homonyms or synonyms, of which the following seven are here newly established (n. syn.): *chaoensis* Uyttenboogaart, 1940=*vandeli* Roudier, 1958; *eliasenae* Uyttenboogaart, 1929=*cymbula* Roudier, 1957; *escalerai* Uyttenboogaart, 1937=*longehirtus* Roudier, 1957; *hirtus* Wollaston, 1854=*doramasensis* Uyttenboogaart, 1929; *morio* Boheman, 1834=*obesulus* Desbrochers, 1904; *sanchezi* Roudier, 1951=*nitidirostris* Roudier, 1951; and *susicus* (Escalera, 1914)=*tessellatus* (Hustache, 1932). *Laparocerus incomptus* (Wollaston, 1864), type species of the subgenus *Amyntas* Wollaston, 1865, is re-established as a good species. Furthermore, *Laparocerus wollastoni* Heer, 1857 (a fossil species) and *L. piceus* Boheman, 1834 are considered *nomina dubia*. A total of 52 lectotypes have been designated, as well as neotypes for *Omius tessellatus* Brullé, 1839 and *Lichenophagus incomptus* Wollaston, 1864. Some photographs of type specimens and of the two neotypes are provided. Depository collections and type locality information has been revised and completed as far as possible.

Keywords: *Azores, Canary Islands, Coleoptera, Curculionidae, fossils, Laparocerus, Madeira, Selvagens, taxonomy*

Introduction

The monographic study of the genus *Laparocerus* Schönherr, 1834, in which I have been involved for the last five years, covers a thorough field prospecting in Macaronesia (archipelagos of the Azores, Madeira, Selvagens, and Canaries) and west Morocco in the mainland (ca 20,000 exx), the systematic revision of all known species, description of new taxa, biological aspects, and the phylogeography of the group based on molecular analysis.

The present contribution is an advance of the revision results, consisting of the study of the type material of all previously described species-level taxa (prior to 2006) that have been ascribed originally or subsequently to the genus *Laparocerus*, regardless of the fact that

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Published 21 December 2006

ISSN 0022-2933 print/ISSN 1464-5262 online © 2006 Taylor & Francis

DOI: 10.1080/00222930601046659

for some taxa this situation may change in the near future. The following general catalogues have been consulted: Marseul (1872), Winkler (1932), Lona (1938), Lundblad (1958), Kocher (1961), Borges (1990), Machado and Oromí (2000), and Izquierdo et al. (2004).

Lectotypes and neotypes are designated as needed, following the rules and recommendations of the International Code of Zoological Nomenclature (ICZN). The global study with detailed diagnosis and identification keys will be presented elsewhere, but some new synonyms are also advanced here.

Material and methods

The type material was studied *in situ* at the museums or on loan in my cabinet, and compared with fresh material from the same or close localities, when available. It was possible to locate almost all the species alive in their original locality, thus gaining a more ample idea of their variation (many species were established on single specimens!). In very few cases dissection of the type material (not always in good condition) was needed. Digital photographs of almost all types were taken and are available upon request. A Nikon Coolpix 990 was used for this purpose. A sample of the photographs is presented in Figures 1–5, 7, 8.

Type status and labelling

Half of all *Laparocerus* taxa were described by Thomas Vernon Wollaston (1822–1878), who never designated a holotype (except for monotypy), but whose type series are easy to recognize in the Atlantic collections of the Natural History Museum, London, or at the Hope Entomological Collections, in the Oxford Museum. The red annealed circular labels indicating “type” to be found attached to some specimens in London are not original from Wollaston. They were placed as a routine curator work presumably by G. J. Arrow (1873–1948), thus having no nomenclatural value (Machado 1992). However, it has been agreed to give preference to the Wollaston Collection in London when designating lectotypes (cf. Smith and Graham 1982). In a few cases, a label in handwriting with the complete species name and the term “type” is attached. These informative labels were placed probably by Adrien Roudier when he studied the type material of Wollaston. Up to the present, no author has formally designated lectotypes or paralectotypes of species of *Laparocerus*.

In the Natural History Museum in London there is additional material of Wollaston that was incorporated in 1981 from the Exeter Museum, but there is no clear evidence that the contained *Laparocerus* are syntypes. Wollaston visited the Canaries and Madeira several times after the species descriptions were published (cf. Machado 2006). In the Madeiran Collection in London, for instance, there are some specimens which bear a locality number (see next paragraph) with a small dot as superindex, referring to material collected by Wollaston in the summer of 1855, a year after *Insecta Maderensia* was published.

Only the original labels pinned with the type specimens are here registered, in the following manner: [Text in brackets and lines of text separated/by a slash]. A small glued paper label with a number preceded by “gen.” (=genitalia) and emergent from the base of the mounting card in some type male specimens of Roudier, gives reference to the microscopic preparations of the aedeagus, which are stored separately (Coll. Roudier).

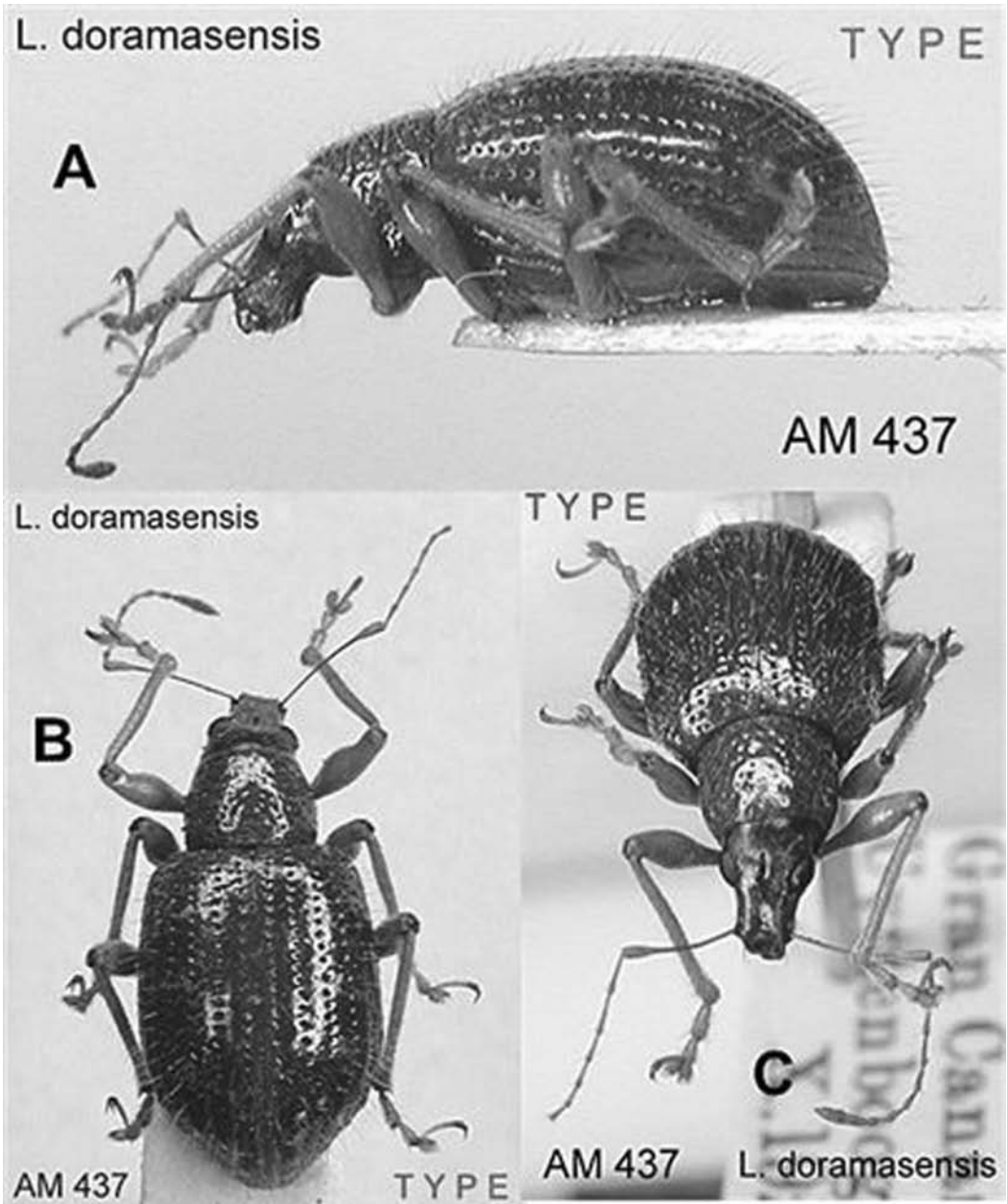


Figure 1. Holotype of *Laparocerus doramasensis* Uyttenboogaart, 1929=*hirtus* Wollaston, 1864. (A) Lateral view; (B) dorsal view; (C) frontal view.

Many type specimens do not bear an identification label, but are placed in the box adjacent to the corresponding name-label fixed on its bottom. In the Oxford Museum, all Wollaston specimens have received newly printed identification labels.

For all designated neotypes, lectotypes, or paralectotypes I have pinned red/orange labels in the form: NEOTYPE/LECTOTYPE/PARALECTOTYPE, original taxon name and the

annotation “A. Machado”, followed by the year when I studied the specimen. Sometimes a number preceded by “AM” (my personal database register) may also be included or attached in a small label. In order to save space, these designation labels are not further commented or copied in the label register of each species. Loan labels from institutions are also not recorded, as they will probably be removed.

Type localities

In the Wollaston collections references to the islands are indicated by a colour code line in the base of the mounting cardboard, or a little colour square paper placed beneath the pinned specimens. The colour code is explained in Table I. In some cases the colour may have changed by age and, for instance, dark blue (Gran Canaria) may look black (La Gomera, leg. Crotch), or red (La Gomera, leg. Wollaston) may look brownish/purple (Lanzarote). The exact localities within the islands are not indicated in all specimens. In most of the first Madeiran material (located in London and Oxford), a number below the mounting card refers to localities registered in separate lists (cf. Israelson 1991), and in some Canary specimens a small abbreviation written in pencil, below the card indicates a locality (i.e. “C”=Las Cañadas, “Tag.”=Taganana, “A.M.”=Agua Mansa). Otherwise, type localities have been deduced from the original descriptions (*ex litt.*), which may also help in defining more precisely the locality, according to the information given. Wollaston was the collector of the majority of the specimens he studied, but not always. A full explanation of all Wollaston collections is available in a biographic book of the Victorian naturalist (Machado 2006).

Numbers in the locality labels of specimens collected by Charles Alluaud refer to localities published in his trip report (Alluaud 1891).

Depositary institutions

A list follows with the private or institutional collections in which type specimens of *Laparocerus* are deposited, preceded by the acronyms used in this contribution. The collections of interest in a given institution will be specified in the main text, with two exceptions: references to NHM, London and UMO, Oxford apply respectively to Wollaston’s first and second collections, unless otherwise stated. AMC, private collection of Antonio Machado Carrillo, La Laguna, Spain; DEI, Deutsches Entomologisches Institut, Müncheberg, Germany; EEZA, Estación Experimental de Zonas Áridas, Almería, Spain; MCNP, Museu de Historia Natural do Porto, Porto, Portugal; MHNT, Muséum d’Histoire Naturelle, Troyes, France; MNCN, Museo Nacional de Ciencias Naturales, Madrid, Spain; MNHN, Muséum National d’Histoire Naturelle, Paris, France; MZLU, Museum of Zoology, Lund University, Lund, Sweden; NHM, The Natural History Museum, London, UK; NMB, Naturhistorisches Museum Basel, Basel, Switzerland; NMNHN, National Museum of Natural History “Naturalis”, Leiden, The Netherlands; NR, Naturhistoriska Riksmuseet, Stockholm, Sweden; RGB, private collection of Rafael García Becerra, Santa Cruz de la Palma, Spain; TFMC, Museo de Ciencias Naturales, Santa Cruz de Tenerife, Spain; ULL, Universidad de La Laguna, Departamento de Biología Animal, La Laguna, Spain; UMO, University Museum, Hope Entomological Collections, Oxford, UK; ZMUA, Zoological Museum, University of Amsterdam, Amsterdam, The Netherlands; ZMUH, Zoological Museum, University of Helsinki, Helsinki, Finland.

Table I. Locality colour code used by T. Vernon Wollaston.

Canary Islands		Madeiran group	
El Hierro	Violet	Madeira	No colour
La Gomera	Black	Porto Santo	Blue
La Gomera (leg. Crotch)	Light red	Ilhéu de Chão	Yellow
La Palma	Light green	Dezerta Grande	Red
Tenerife	No colour	Ilheu de Bugio	Black
Gran Canaria	Dark blue		
Fuerteventura	Sienna		
Lanzarote	Dark red		

Taxonomic status

All species described prior to 2005 and that have been originally or subsequently assigned to the genus *Laparocerus* Schönherr, 1834, are here listed in alphabetical order. Subgenera are not considered in the headings. The higher systematics of the *Laparocerus* s. l. will be discussed in future contributions; it will change considerably. The specific or subspecific status will also not be discussed in this contribution. The taxa are listed with the same species or subspecies category at which they were described. Properly named “*varietas*” of Wollaston are considered as subspecies (ICZN Art. 10.2). Taxonomic comments will usually refer to full synonymies, invalid substitution names or to highlight that a given species is the type-species of a described genus-level category. Only full species junior synonyms are commented, whether previously published or here established.

List of taxa

Taxa which are presently not valid are indicated by an asterisk (*) after the year of publication; two asterisks (**) indicate a *nomen dubium*. The expression “same data” refers only to locality, date, and collector.

***Laparocerus abditus* Roudier, 1963**

Laparocerus (Atlantis) abditus Roudier 1963, p 136, Figure 2 (aedeagus).

Type locality. Rosario, Island of Madeira.

Holotype: 1♂ [Madeira Rosario/2-7-1957/Lindberg] [Type] [*Laparocerus (Atlantis) abditus* Roudier n. sp./A. Roudier det. Type] [Mus. Zool. H:fors/Spec. typ. No.15213/*Laparocerus abditus* Roud.]. ZMUH (Coll. Lindberg), Helsinki. Aedeagus and ventrites mounted on a second card (Figure 2A). Paratypes: 1♂ fully immature [Madeira/Corujeira/2-5-1959 Lindberg] [Paratype] [*Laparocerus (Atlantis) abditus* Roudier n.sp./A Roudier det. Paratype]/*Laparocerus abditus* Roud.], ZMUH (Coll. Lindberg), Helsinki. 1♂ [Madeira/Valparaiso/13-6-1957 H. Lindberg] [Paratypus] [Genit. 43]. MNHN (Coll. Roudier), Paris.

***Laparocerus aenescens* (Wollaston, 1854)**

Omius aenescens Wollaston 1854, p 383.

Type locality. c. Fonte das Moças–Pico do Arieiro, Island of Madeira.

Lectotype: 1♂ [735], Spring 1849 between Fonte das Moças and Pico do Arieiro, leg. Wollaston [Type]. NHM, London (Figure 3B). Paralectotypes: 2 exx [832], same data NHM, London. 11 exx, same data. UMO, Oxford. 7 exx, same data. MNHN (Coll. Oberthür-Wollaston), Paris.

***Laparocerus aethiops* Wollaston, 1864**

Laparocerus aethiops Wollaston 1864, p 347.

Type locality. Nisdafe, El Hierro, Canary Islands.

Lectotype: 1♂ (violet card-line), Nisdafe (*ex litt.*) [Type] [*Laparocerus/aethiops/type* Woll.] [Canary Is./El Hierro/Wollaston Coll./BM 1864–80]. NHM, London. The elytra of this specimen were loose in the box and glued back on top of the abdomen, once their identity was confirmed with the other syntype kept at Oxford. Paralectotype: 1♂, El Hierro (violet card-line) [Hope Entomological/Collections/Wollaston Coll.] [*Laparocerus/aethiops* Woll.]. UMO, Oxford. The posterior legs are missing.

***Laparocerus alluaudi* Uyttenboogaart, 1940**

Laparocerus alluaudi Uyttenboogaart 1940, p 55.

Type locality. Barranco de Fataga, Gran Canaria, Canary Islands.

Lectotype: 1♂, 29 March 1890, Barranco de Fataga, 400 m (*ex litt.*) [Iles Canaries/Canaria/Ch. Alluaud 1890//85] [&] [*Laparocerus/alluaudi/Uyttenb./Type*] NMNHN (Coll. Uyttenboogaart), Leiden. Aedeagus extracted by me and mounted on a plastic card. Paralectotype: 1♀, same data [Iles Canaries/Canaria/Ch. Alluaud 1890//85] [*Laparocerus/alluaudi/Uyttenb./Type*]. NMNHN (Coll. Uyttenboogaart), Leiden.

***Laparocerus angustulus* (Wollaston, 1857)**

Omius angustulus Wollaston 1857, p 116.

Type locality. *supra* Funchal, Island of Madeira.

Lectotype: 1♂ [54] [Type] s. Funchal, leg. Wollaston [*Omius angustulus*/Woll. type]. NHM, London. Paralectotypes: 1 ex [108] Mountains of Madeira, leg. Bewicke. UMO, Oxford. 1 ex s. Funchal. MNHN (Coll. Oberthür-Wollaston), Paris.

Laparocerus angustulus* (Wollaston, 1863)

Atlantis angustula Wollaston 1863, p 219.

Type locality. Arguineguín, Gran Canaria, Canary Islands.

Lectotype: 1♂ (violet card-line). Spring 1858, Arguineguín, leg. Wollaston (*ex litt.*). NHM, London. Paralectotypes: 2♀♀ slightly immature. Same data, leg. Wollaston; 1 ex, La Isleta, leg. Loewe. [Typus/*Atlantis angustula*/Woll. type] NHM, London. 2 exx, Arguineguín, leg. Wollaston (Coll. Dale), 6 exx (Coll. Wollaston). UMO, Oxford. 4 exx, Spring 1858, Arguineguín/El Monte? MNHN, Paris (Coll. Oberthür-Wollaston).

Remarks. Having transferred *Omius angustulus* Wollaston, 1854, to the genus *Atlantis*, the secondary homonymy with *Atlantis angustula* Wollaston, 1863, was solved by Wollaston establishing a new name for the latter species: *Atlantis (Canopus) grayana* Wollaston, 1865 (Wollaston 1865, p 309). This solution is also valid under *Laparocerus*. The present name of the species is *Laparocerus grayanus* (Wollaston, 1865).

Laparocerus australis (Wollaston, 1854)*

Atlantis australis Wollaston 1854, p 370.

Type locality. Quinta das Palmeiras, *supra* Funchal, Island of Madeira.

Lectotype: 1♂ without anterior legs [637] Quinta das Palmeiras, til tree, 1850, leg. Wollaston [♂] [*lauripotens*, Woll. elim.]. NHM, London. Paralectotypes: 2♀♀ one immature [637]. Same data. [type] [♀] [*Atlantis*/(*noctivagans*)/*australis*/Type Woll.]. NHM, London.

Remarks. Wollaston (1857, p 114) synonymized this species and *A. lauripotens* Wollaston, 1854 with *A. noctivagans* Wollaston, 1854, but later he recognized *A. lauripotens* as a valid species, to which *A. australis* should be ascribed as synonym (Wollaston 1871, p 273).

Laparocerus azoricus Drouet, 1859

Laparocerus azoricus Drouet 1859, p 256.

Type locality. Horta–Caldeira, Island of Faial, Azores.

Lectotype: 1♂ [Açores]. Road from Horta to Caldeira, May to September 1857, leg. Drouet (*ex litt.*). The box label=[*Laparocerus Azoricus* A.Drouet/*Otiorrhynchus Hartungi* Heer, Iles Açores]. MHN, Troyes. Paralectotypes: 6 exx [Açores]+one of them [*Laparocerus* n.sp.]. MHN, Troyes. 2 exx [Azores], MNHN, Paris.

Remarks. According to Drouet (1859) the original series was almost 100 specimens. I have found many very old specimens of *L. azoricus* in several institutional collections, but unfortunately they do not bear any supporting evidence of being syntypes. Hartung and Morelet also collected the species in abundance during the same trip. *L. azoricus* is the type species of the subgenus *Droetius* Méquignon, 1942, by original designation. The above-mentioned *Otiorrhynchus hartungi* Heer is a *nomen nudum*.

***Laparocerus bacalladoi* Machado, 2005**

Laparocerus bacalladoi Machado 2005, p 540, Figures 1, 2 (habitus, aedeagus).

Type locality. Valle San Lorenzo, Tenerife, Canary Islands (UTM 28R 03383 31041).

Holotype: 1♂ [Tenerife, Islas Canarias/Valle de San Lorenzo, 200 m/27-12-2002, *Kleimia, Lavand.*/# 2580 leg. A. Machado] [Holotypus/*Laparocerus bacalladoi* n.sp./A. Machado] TFMC (reg. CO-15501), Santa Cruz de Tenerife. Paratypes: 2 exx, same data, NHM, London. 2 exx same data. MNCN, Madrid. 2 exx same data, DEI, Müncheberg. 2 exx, same data; 1 ex (immature) [Tenerife, El Médano, 8-1-1978J.M. Fernández] TFMC, Santa Cruz de Tenerife. 99 exx, same data as holotype, 2 exx, idem. 25 January 2002, leg. A. Machado, AMC, La Laguna. 5 exx, 4 February 1964, Los Cristianos, leg. Th. Palm. MZLU, Lund.

Remarks. The holotype is no longer in my private collection. Following the recommendations of the ICZN, I have donated it to the Natural History Museum of Tenerife (September 2006).

Laparocerus bellopterus* Marseul, 1872

Laparocerus (Laparocerus) bellopterus Marseul 1872, p 527.

Remarks. This is an invalid replacement name for *Laparocerus lepidopterus* Wollaston, 1865, as already recognized in Winkler (1932, p 1448).

Type material. Its type material is the same as for the replaced species name.

***Laparocerus bellus* Roudier, 1957**

Laparocerus (Canopus) bellus Roudier 1957a, p 31, 37, Figure 15 (aedeagus).

Type locality. Barranco de Tahodio, Tenerife, Canary Islands.

Holotype: 1♂ (gen. 19) [19-8-1952, Bco. de Tahodio/base du Monte Aguirre (Tenerife)/au pied d'un eucalyptus/J.M.♀ Fernandez] [Type] [*Laparocerus (Canopus) bellus* n.sp./A. Roudier det.]. MNHN (Coll. Roudier), Paris. Paratype: 1♀, same data [Paratypus]. MNHN (Coll. Roudier), Paris.

***Laparocerus bolivari* Uyttenboogaart, 1937**

Laparocerus (Wollastonicerus) bolivari Uyttenboogaart 1937, p 97, 101.

Type locality. Pinar de Icod, Tenerife, Canary Islands.

Holotype: 1♀ [P. Icod/IV. 921] (P=pinewood) [*Laparocerus bolivari* n. sp./Uyttenboogaart/Type] [M.N.C.N./Madrid]. MNCN, Madrid. Paratypes: 1♂ [El Sauzal/2. 921] [*Laparocerus bolivari* n. sp./Uyttenboogaart/Cotype] [M.N.C.N./Madrid]. 1♀ [Tenerife/I-1921 M. Escalera] [Fuente Fría/(Tacoronte)] [*Laparocerus bolivari* n. sp./Uyttenboogaart/Cotype]. NMNHN (Coll. Uyttenboogaart), Leiden.

Laparocerus brunneus Lindberg, 1953

Laparocerus brunneus Lindberg 1953, p 14, Figure 11 (aedeagus).

Type locality. Tamadaba 1100 m, Gran Canaria, Canary Islands.

Holotype: 1♂ exx [Gran Canaria/Tamadaba 1100 m/13-3-50 Lindberg] [*Laparocerus brunneus* m./Harald Lindb. det.] [Mus. Zool. H:fors/Spec. typ. No. 2615/*Laparoc. brunneus*/Har. Lindb.] ZMUH (Coll. Lindberg), Helsinki]. Originally they were two specimens on the same pin. Paratypes: 18 exx+14 exx more (not seen) [Gran Canaria/Tamadaba 1100 m/13-3-50 Lindberg]. ZMUH (Coll. Lindberg), Helsinki. 1 ex same data. NHM (General Coll.), London. 1 ex (Coll. Ch. Alluaud), 2 exx [gen.34] (Coll. Roudier), same data, MNHN, Paris.

Laparocerus calcator Marseul, 1872*

Laparocerus calcator Marseul 1872, p 546.

Remarks. This is an invalid replacement name for *Laparocerus calcatrix* (Wollaston, 1854), despite that it has been subsequently used by Roudier (1958, 1963).

Type material. Its type material is the same as for the replaced species name.

Laparocerus calcatrix (Wollaston, 1854)

Atlantis calcatrix Wollaston 1854, p 366.

Type locality. Ribeiro Frio, Island of Madeira.

Lectotype: 1♂ immature (with mandibular appendage), much rubbed [372] Ribeiro Frio (*ex litt.*) leg. Wollaston [Type] [*Atlantis/calcatrix*/Woll. type]. NHM, London. Paralectotype: 1♀ Fateiras (*ex litt.*). NHM, London.

Remarks. Marseul (1872, p 546) proposed the invalid replacement name *L. calcator* for this taxon.

Laparocerus canalistrois Marseul, 1872*

Laparocerus (Laparocerus) canalistrois Marseul 1872, p 537.

Remarks. This is an invalid replacement name for *Laparocerus sulcistrois* Wollaston, 1865, as already recognized in Winkler (1932, p 1448).

Type material. Its type material is the same as for the replaced species name.

Laparocerus canariensis Boheman, 1842

Laparocerus canariensis Boheman, in Schönherr 1842, p 228.

Type locality. Tenerife, Canary Islands.

Lectotype: 1♂ [Téneriffe] [499] [Coll. Chevrolat], NR (Coll. Schönherr ex Coll. Cheverolat), Stockholm. Paralectotype: 1♂ partially damaged by the pin [Téneriffe] [834] [Col. Chevrolat] [Type]. NR (Coll. Chevrolat), Stockholm.

Remarks. Type species by monotypy of the subgenus *Amphora* Wollaston, 1864 (non Cumberland, 1826) and of the subgenus *Guanchothrox* Alonso Zarazaga and Lyal, 1999 (replacement name). It is a common insect in the highlands of the island above 2000 m altitude, for instance, in Las Cañadas.

Laparocerus chaoensis Uyttenboogaart, 1940

Laparocerus chaoensis Uyttenboogaart 1940, p 57.

Type locality. Ilheu de Chão, Ilhas Dezertas, Madeiran archipelago.

Lectotype: 1♀, Islas Dezertas, Chão. leg. Ch. Alluaud, May 1938. NMNH (Coll. Uyttenboogaart), Leiden. Paralectotypes: 1♂, 1♀, same data. MNHN, Paris (Coll. Alluaud).

Remarks. Uyttenboogaart (1947 p 15) synonymized his species with *L. morio* Boheman, 1834, but Roudier (1958) indirectly resurrected the name when he described *L. morio vandeli*, as a junior synonym of it.

Laparocerus clavatus (Wollaston, 1854)

Atlantis clavatus Wollaston 1854, p 363, Table 7, Figure 3 (habitus).

Type locality. Pouso-Fateiras, Island of Madeira.

Holotype: 1♀ pinned, missing club of left antenna [256] Spring 1848, Pouso-Fateiras, leg. Wollaston [Typus] [*Laparocerus/clavatus*, type Woll.]. NHM, London.

Remarks. Eight specimens kept at the Wollaston Collection at Oxford are not syntypes. They were collected by Wollaston in December 1858 in the mountains of Madeira [1134].

Laparocerus colasi Roudier, 1958

Laparocerus (Atlantis) Colasi Roudier 1958, p 205, Figure 3 (aedeagus).

Type locality. Pousada da Serra, Island of Madeira.

Holotype: 1♂ [Pousada da Serra/600 m 21-4-57] [Type] [*Laparocerus/(Atlantis)/Colasi* Roudier n.sp./A. Roudier det,] [Muséum Paris/Mission/Colas – Mateu]. MNHN, Paris. Aedeagus and ventrites on additional card. Paratype: 1♀, same data. MNHN (Coll. Roudier), Paris.

Laparocerus compactus Wollaston, 1864

Laparocerus compactus Wollaston 1864, p 359.

Type locality. *supra* San Mateo, Gran Canaria, Canary Islands.

Lectotype: 1 ♂ (dark blue card-line), Spring 1858, Gran Canaria, above San Mateo, leg. Wollaston [*Laparocerus/compactus*/Woll. type]. MNH, London. Paralectotype: 1 ex, same data [typus]. MNH, London. 2 exx, same data [Hope Entomological/Collections/Wollaston Coll.] [*Laparocerus/compactus* Woll.]. UMO, Oxford.

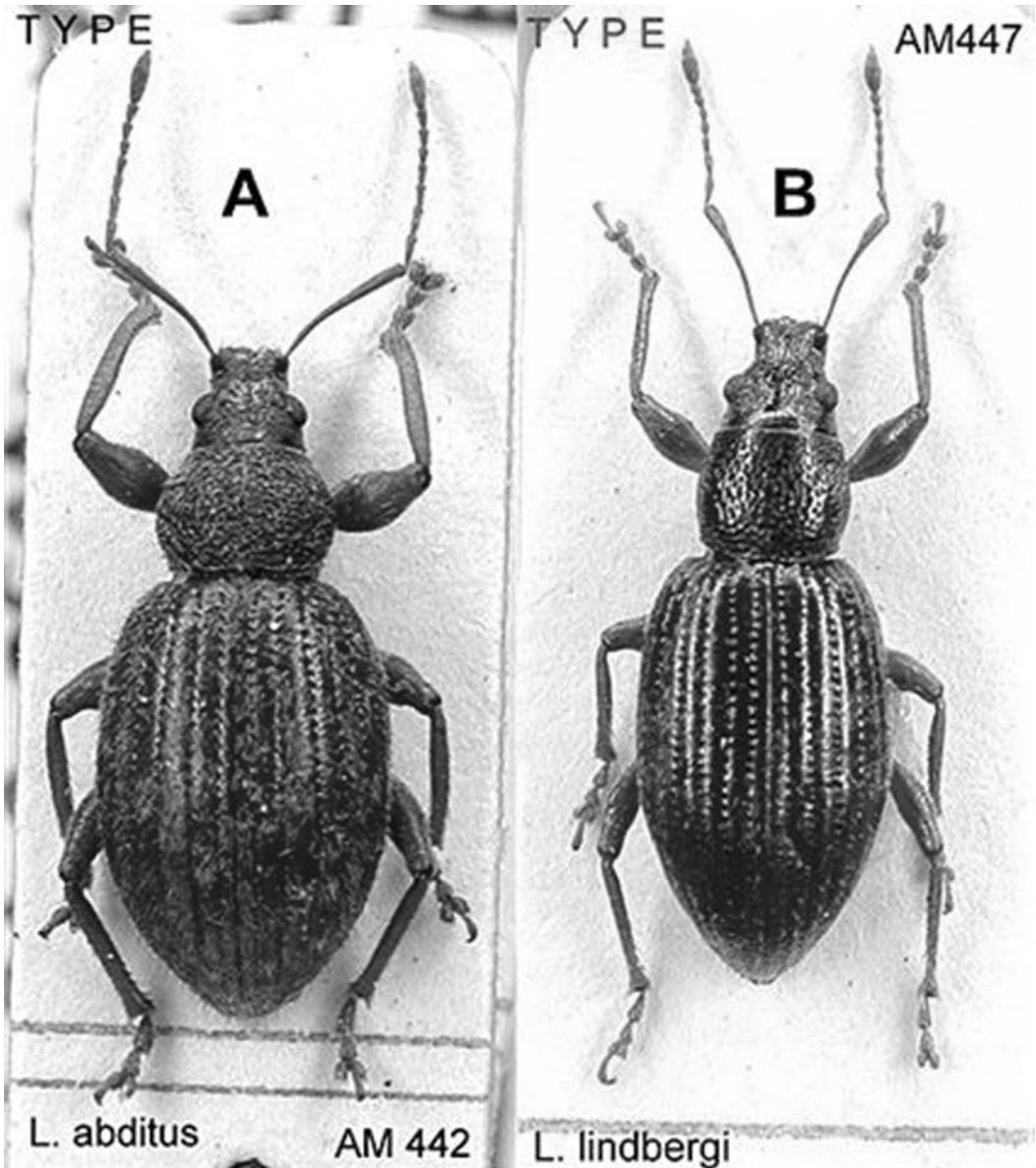


Figure 2. (A) Holotype of *Laparocerus abditus* Roudier, 1963; (B) holotype of *Laparocerus lindbergi*, Roudier, 1963.

Laparocerus crassifrons Wollaston, 1863

Laparocerus crassifrons Wollaston 1863, p 220.

Type locality. La Fortaleza and Cumbre of Orotava, Tenerife, Canary Islands.

Lectotype: 1♂, Tenerife (white), May 1859, La Fortaleza or Cumbre of Orotava, leg. Wollaston. (*ex litt.*). NHM, London. Paralectotypes: 10 exx, same data. NHM, London. 12 exx, same data [Hope Entomological/Collections/Wollaston Coll.] [*Laparocerus/crassifrons* Woll.]. UMO, Oxford. 4 exx, MNHN (Coll. Oberthür-Wollaston), Paris.

Remarks. On the mounting label there is no reference to which of the two localities, mentioned by Wollaston, belongs the lectotype: "...the elevated Cumbre adjoining the Cañadas, above Ycod el Alto" (=La Fortaleza), and "...on the opposite Cumbre, above the Agua Mansa" (=Cumbres de La Orotava). Both are ecologically equivalent.

Laparocerus crassirostris Wollaston, 1864

Laparocerus crassirostris Wollaston 1864, p 345.

Type locality. Pinar de Tirajana, Gran Canaria, Canary Islands.

Holotype: 1♀, April 1858, Gran Canaria (dark blue card-line), Pinar of Tirajana (above San Bartolomé), leg. Wollaston [Type] [*crassirostris*, W.]. NHM, London.

Remarks. In his book on the Coleoptera of Morocco, Escalera (1914, p 405) comments in a footnote on "*Laparocerus conicirostris* Woll." (an incorrect subsequent spelling) as having been collected in Morocco by von Fritsch and Rein and reported by Heyden (1887). However, Heyden only lists *L. crassirostris* as being collected by von Fritsch and Rein in Gran Canaria, where the species is endemic (Heyden 1875).

Laparocerus crassus Roudier, 1957

Laparocerus crassus Roudier 1957a, p 28.

Type locality. Las Mercedes, Tenerife, Canary Islands.

Holotype: 1♀ [Canaries/Pécoud/1933] [Type] [*Laparocerus/crassus*/n.sp. Roudier/A. Roudier det.]. MNHN, Paris (Coll. Ruter).

Remarks. The type has no indication of locality, except for "Canaries". In his voyage to the Canaries in 1933, Pécoud collected in three islands: Gran Canaria (Telde, Cruz de Tejada), Tenerife (Las Mercedes, Los Silos, Montaña Bermeja), and La Gomera (Hermigua, Valle Gran Rey). I have been able to locate several closely related but different species of this group in Tenerife, La Palma, and Gran Canaria. All the specimens coincident with the type of *L. crassus* come from the NW of Tenerife, the old massif of Anaga. Pécoud's locality of "Las Mercedes" is in Anaga.

***Laparocerus curvipes* Lindberg, 1950**

Laparocerus (Wollastonicerus) curvipes Lindberg 1950, p 17.

Type locality. San Miguel, Tenerife, Canary Islands.

Holotype: 1♀ [Tenerife/San Miguel/26.1.49 Lindberg] [*Laparocerus/curvipes m./Harald Lindb. det.*] [Mus. Zool. H:fors/Spec. typ. No.2523 [*Laparocerus/curvipes* Har. Lindb. ZMUH (Coll. Lindberg), Helsinki. Right anterior tarsus and left intermediate tarsus are missing. Paratypes: 1♂ [Tenerife/San Miguel/26.1.49 Lindberg]. ZMUH (Coll. Lindberg), Helsinki (Figure 7A). 1♂ [gen. 33], same data. MNHN (Coll. Roudier), Paris. 1♀, same data. NHM (General Coll.), London. 1♀, same data. NR (General Coll.), Stockholm.

Remarks. According to Lindberg and Lindberg (1958, p 24), the original type series was formed by nine specimens. It seems the rest is not in the Zoological Museum of Helsinki at present (perhaps related to Loan C-89 1764–65). To date, I have not met this species *in natura*.

Laparocerus cymbula* Roudier, 1957

Laparocerus (Pecoudius) cymbula Roudier 1957a, p 38, Figure 18 (aedeagus).

Type locality. Los Tilos, Gran Canaria, Canary Islands.

Holotype: 1♂ [Gen. 24] [Moya (Gde Canarie)/Bois de laurier, sous pierres/Mars 51. Pécoud] [TYPE] [*Laparocerus (Pecoudius subg. n.)/cymbula* Roudier n.sp./A. Roudier det.]. MNHN (Coll. Roudier), Paris. Ventrites separated. Aedeagus on separate preparation (Roudier, no.24). Paratypes: 2♀♀, same data, 1♀ [La Palma/M. Pécoud]=labelling error! MNHN, Paris. 1♀, Gran Canaria, El Brezal, 21–23 March 1952, J. Mateu (f. Roudier).

Remarks. *L. cymbula* is identical with *L. eliasenae* Uyttenboogart 1929, becoming a junior synonym of it (new synonym!). It is the type species of the subgenus *Pecoudius* Roudier, 1957, by original designation.

***Laparocerus dacilae* García, 1988**

Laparocerus dacilae García 1988, p 45, Figures 1 (habitus), 2 (aedeagus), 3a (rostrum).

Type locality. Cueva de los Palmeros (Fuencaliente), La Palma, Canary Islands.

Holotype: 1♂ [La Palma/Cueva de Los Palmeros/17-7-1991/Rafael G.B.] [Holotipo/*Laparocerus dacilae* n.sp./García]. RGB, Santa Cruz de la Palma. Paratypes: La Palma: 2♂♂, 19 January 1996, Cueva de los Callejones; 1♀, 30 October 1994, Cueva A del canal lávico de Jedey; 1♀, 28 April 1993, Cueva del salto de Tígalate, leg. R. García. RGB, Santa Cruz de la Palma. 1♂, 5 February 1995, Cueva del Ratón, leg. R. García.. ULL, La

Laguna. 1♀, 10 October 1996, La Palma, Cueva del Canal (Bco. Hondo), leg. R. García. TFMC, Santa Cruz de Tenerife.

Laparocerus debilis Wollaston, 1865

Laparocerus debilis Wollaston 1865, p 324, Appendix p 53.

Type locality. Tenerife, Canary Islands.

Holotype: 1♀ [*Laparocerus/debilis*, W.] [Type]. Tenerife, leg. Messrs Crotch (*ex litt.*). MNH, London.

Remarks. This species is found on the northern coast of the island, for instance, in Garachico or the Barranco de Ruiz.

Laparocerus dispar Wollaston, 1864

Laparocerus dispar Wollaston 1864, p 357.

Type locality. Base of El Risco (Famara), Lanzarote, Canary Islands.

Lectotype: 1♂, Lanzarote (purple card-line) [Type] [*dispar*, Woll.]. Paralectotype: 1 ex, all tarsi and right posterior leg missing. NHM, London. 1♂, 1♀ [Hope Entomological Collections/Wollaston Coll.] [*Laparocerus/dispar* Woll.]. UMO, Oxford.

Remarks. One of the four syntypes was collected by Mr Gray; the rest by Wollaston.

Laparocerus dissimilis Lindberg, 1950

Laparocerus dissimilis Lindberg 1950, p 17.

Type locality. San Miguel, Tenerife, Canary Islands.

Holotype: 1♀ [Tenerife/San Miguel/1.49 Lindberg] [*Laparocerus/dissimilis* m./Harald Lindb. det] [Mus. Zool. H:fors/Spec. typ. No. 2525/*Laparocerus dis-/similis* Har. Lindb.] ZMUH (Coll. Lindberg), Helsinki. Paratypes: 1♂ [Tenerife/San Miguel/26.1.49 Lindberg]. 1♂, 1♀ mutilated [Tenerife/Valle de Santiago 1000 m/20-21.2.50 Lindberg]. ZMUH (Coll. Lindberg), Helsinki. 1 ex (Coll. Atlantides), 2 exx (Coll. Roudier), same data. MNHN, Paris. 3 ex [Tenerife s. Adeje/Questa d.l. Pasos, 1200 m/25-2-50 Lindberg]. NHM (General Coll.), London. 2 exx, same data. NR (Coll. General), Stockholm.

Laparocerus distortus (Wollaston, 1854)

Cyphoscelis distorta Wollaston 1854, p 357, Table 7, Figure 2 (habitus).

Type locality. Lombo das Vacas, Island of Madeira.

Lectotype: 1♂ [487]=Lombo das Vacas. 21 June 1850 (*ex litt.*), leg. Wollaston. NHM, London. Paralectotypes: 2♀♀ [581]=Cruzinhas, July 1850 (*ex litt.*) [*Cyphocelis distorta* Woll. type]; 2♀♀ [253]=Lombo dos Peçegueiros, July 1850 (*ex litt.*). NHM, London. 2♀♀ [728] [Hope Entomological/Collections/Wollaston Coll.] [*Laparocerus/distortus* Woll.]; 6 exx [427]. UMO, Oxford. All collected by Wollaston.

Remarks. Type species by monotypy of the genus *Cyphocelis* Wollaston 1854, regarded as subgenus of *Laparocerus* since Lacordaire (1863).

Laparocerus doramasensis Uyttenboogaart, 1929*

Laparocerus doramasensis Uyttenboogaart 1929, p 352.

Type locality. Los Tilos, Gran Canaria, Canary Islands.

Holotype: 1♀ immature [Gran Canaria/Uyttenboogaart/X.1927] [Los Tillos] [♀] [*Laparocerus/doramasen-/sis/Uyttenb./Type*]. NMNHN (Coll. Uyttenboogaart), Leiden (Figure 1).

Remarks. The holotype is a small specimen of *L. hirtus* Wollaston, 1864 and therefore *L. doramasensis* must be regarded as a junior synonym (new synonym!).

Laparocerus eliasenae (Uyttenboogaart, 1929)

Cyphocelis (?) *eliasenae* Uyttenboogaart 1929, p 353.

Type locality. Los Tilos, Gran Canaria, Canary Islands.

Holotype: 1♀ [Gran Canaria/Uyttenboogaart/X.1927] [Los Tillos] [&] [*Cyphocelis/eliasenae/Uyttenb./Type*]. NMNHN (Coll. Uyttenboogaart), Leiden.

Laparocerus ellipticus Wollaston, 1863

Laparocerus ellipticus Wollaston 1863, p 220.

Type locality. Vueltas de Taganana, Tenerife, Canary Islands.

Lectotype: 1♂ Tenerife [Tag.]=Taganana, leg. Wollaston. NHM, London. Paralectotypes: 2 ♀♀ [Tag.] Taganana [*Laparocerus/ellipticus/type* Woll.], 1♀ [L.M.] Las Mercedes, leg. Wollaston; 1♀ (green card-line)=La Palma [Type], leg. Wollaston. NHM, London. 5 exx, Tenerife, Agua García; 1 ex immature, La Palma, leg. Wollaston [Hope Entomological/Collections/Wollaston Coll.]. [*Laparocerus/ellipticus* Woll.]. UMO, Oxford. 1 ex, Tenerife, 1 ex, La Palma, leg. Wollaston. MNHN, Paris (Coll. Oberthür-Wollaston).

Remarks. Wollaston refers in the description to the sylvan districts above Taganana (a village), which are known as Vueltas de Taganana, a much more precise locality. There must be other paralectotypes somewhere; at least from Agua Mansa (leg. Loewe).

Laparocerus escalerae Uyttenboogaart, 1937

Laparocerus (Wollastonicerus) escalerae Uyttenboogaart 1937, p 96, 101.

Type locality. Monte de Los Silos, Tenerife, Canary Islands.

Holotype: 1♂ [Tenerife/M. Silos/V.1921/M.M. Escalera] [♂] [*Laparocerus/escalerae*/Uyttenboogaart/Type] [M.N.C.N./Madrid]. MNCN, Madrid (Canarian Col.) (Figure 5B).

Laparocerus espanoli Roudier, 1954

Laparocerus (Wollastonicerus) espanoli Roudier 1954, p 84.

Type locality. Fuerteventura, Canary Islands.

Holotype: 1♀ [*Fuerteventura*] [TYPE] [*Laparocerus (Wollastonicerus) Espanoli* nov.sp.]. MNHN (Coll. Roudier), Paris.

Remarks. Roudier (1957a) treated *espanoli* as a subspecies of *L. curvipes* Lindberg, 1950. The insect lives in the higher parts of the peninsula of Jandía.

Laparocerus excavatus Wollaston, 1863

Laparocerus excavatus Wollaston 1863, p 219.

Type locality. Vueltas de Taganana, Tenerife, Canary Islands.

Lectotype: 1♂, slightly immature, Tenerife [Tag.]=Vueltas de Taganana, leg. Wollaston [Type] [*excavatus*, Woll.]. NHM London. Paralectotypes: 2♀♀, Tenerife [Tag.]. leg. Wollaston NHM, London. 5♂♂, 2♀♀, Tenerife [Hope Entomological/Collections/Wollaston Coll.] [*Laparocerus/excavatus* Woll.]. UMO, Oxford. 3 exx, Tenerife, leg. Wollaston. MNHN (Coll. Oberthür-Wollaston), Paris.

Remarks. Localities recorded by Wollaston for the type series are: Las Mercedes, Barranco de Paso Alto, and the “sylvan slopes above” Punta Anaga and Taganana.

Laparocerus excavatus lugubris Wollaston, 1864

Laparocerus excavatus var. *β lugubris* Wollaston 1864, p 341.

Type locality. Agua García, Tenerife, Canary Islands.

Lectotype: 1♀ [var *β lugubris* W.] Tenerife, Agua García, leg. Wollaston (*ex litt.*). MNH, London. Paralectotypes: 1♀ [var *β lugubris* W.], probably from Icod el Alto, leg Crotch [Hope Entomological/Collections/Wollaston Coll.]. UMO, Oxford. 2♂♂, 2♀♀ [var *β lugubris* W.] Agua García, MNHN, Paris (Coll. Oberthür-Wollaston).

Remarks. Roudier (1957a, p20) relates the four specimens kept in the Collection Oberthür-Wollaston in Paris to «a forme de *L. grossepunctatus* Woll. voisine de la subsp. *tenuepunctatus* à laquelle je la réunis, provisoirement tout au moins».

Laparocerus excelsus (Wollaston, 1854)

Atlantis excelsus Wollaston 1854, p 378.

Type locality. Lombo dos Peçegueiros, Island of Madeira.

Lectotype: 1♂, Madeira [209] Lombo dos Peçegueiros [Type] [*Atlantis excelsus*/Woll. type]. MNH, London. Paralectotypes: 2 exx, Madeira [209] Lombo dos Peçegueiros; 3 exx [274] Fanal, July 1850; 1 ex, 21 June 1850 [488] Lombo das Vacas; 2 exx, July 1850 [456] Cruzinhas, leg. Wollaston. MNH, London. 16 exx [307] Mountains of Madeira, leg. Wollaston. UMO, Oxford. 1 ex, Madeira, 1850. MNHN, Paris (Coll. Générale-Clerc). 1 ex, Madeira [307], leg. Wollaston. DEI, Müncheberg (Coll. Kraatz).

Remarks. Specimens of Wollaston from Ribeiro de João Delgada, Cruzinhas, and Ribeiro Frio marked as “var. β” are disregarded as paralectotypes.

Laparocerus fernandesi Roudier, 1957

Laparocerus (Canopus) fernandesi Roudier 1957a, p 34, 38, Figure 9 (aedeagus).

Type locality. Granadilla, Tenerife, Canary Islands.

Holotype: 1♂ [6-4-50 Granadilla – /San Isidro (Ten)/J.M^a Fernández] [Type] [*Laparocerus/fernandesi*/n.sp./A. Roudier det.]. MNHN (Coll. Roudier), Paris. Paratypes: 12 exx, same data as lectotype; 3 exx, same locality, 14 May 1953, leg. J. M. Guerra; 10 exx Barranco del Infierno (Adeje), 26 March 1950, C. González leg. MNHN (Coll. Roudier), Paris.

Laparocerus forae (Wollaston, 1854)*

Atlantis forae Wollaston 1854, p 380.

Type locality. Ilheu de Fora, Island of Madeira.

Holotype: 1♂, Ilheu de Fora, 19 March 1840, leg. Wollaston and Armitage. MNH, London.

Remarks. In the Appendix of the same work where *L. forae* is described as a species, Wollaston (1854, p 619) transfers it as a subspecies of *L. schaumii* (Wollaston, 1854), and subsequently he considers it a full synonym (Wollaston 1857, p 115). Lona (1838, p 439) listed the synonym under the name “*Laparocerus Florae*”, an incorrect subsequent spelling without nomenclatural availability.

Laparocerus freyi Uyttenboogaart, 1940

Laparocerus (s. str.) freyi Uyttenboogaart, in Uyttenboogaart and Zumpt 1940, p 675.

Type locality. Pico de Teide, Tenerife, Canary Islands.

Lectotype: 1♂ [Pico de Teide/Tenerife/G. Frey.III.33] [*Laparocerus/freyi* Uyttenboogaart/type] [AM-429]. NMNH (Coll. Uyttenboogaart), Leiden. Paralectotype: 1♀ [Pico de Teide/Tenerife/G. Frey.III.33] [Type] [*Laparocerus/freyi* Uyttenboogaart] NMB (Coll. Frey). Basel.

Laparocerus garretai Uyttenboogaart, 1940

Laparocerus Garretai Uyttenboogaart 1940, p 56.

Type locality. Island of Selvagem Grande.

Holotype: 1♀, summer 1911 [G^{de} Salvage/L. Garreta] [*Laparocerus/dispar* Woll./?] [si non est/*dispar* Woll./*garretai*/Uyttenb./type]. NMNH (Coll. Uyttenboogaart), Leiden.

Laparocerus globosipennis Marseul, 1872*

Laparocerus (Laparocerus) globosipennis Marseul 1872, p 524.

Remarks. This is an invalid replacement name for *Laparocerus globulipennis* Wollaston, 1864, recognized by Winkler (1932, p 1447). Lona (1938, p 437) listed this name as “*L. globulosipennis*”, an incorrect subsequent spelling without nomenclatural availability.

Type material. Its type material is the same as for the replaced species name.

Laparocerus globulipennis Wollaston, 1864

Laparocerus globulipennis Wollaston 1864, p 349.

Type locality. Cubo de La Galga, La Palma, Canary Islands.

Lectotype: 1♀ (green card-line), La Palma [Galga] May 1858, leg. Wollaston [Type] [*Laparocerus/globulipennis*/Woll. type]. NHM, London. Paralectotype: 1♀, same data [Hope Entomological/Collections/Wollaston Coll.] [*Laparocerus/globulipennis* Woll.]. UMO, Oxford.

Remarks. Marseul (1872, p 524) proposed *Laparocerus globosipennis* as a new name for this species, being this an unjustified replacement name. Roudier (1957a, p 26) treated *globulipennis* as a subspecies of *L. inaequalis* Wollaston, 1864.

Laparocerus gomeraecola Marseul, 1872*

Laparocerus Gomeraecola, in Marseul 1872, p 531.

Remarks. This is an unjustified replacement name for *Laparocerus gracilis* Wollaston, 1864, as already recognized in Winkler (1932, p 1448). For more information, see under *gracilis*.

Type material. Its type material is the same as for the replaced species name.

Laparocerus gomerensis Lindberg, 1953

Laparocerus (*Wollastonicerus*) *gomerensis* Lindberg 1953, p 15.

Type locality. Chipude (Alajeró), La Gomera, Canary Islands.

Holotype: 1♀ missing right posterior tarsus [Can. La Gomera/Alajeró - Chipude 1400 m/22.3.50 Lindberg] [*Laparocerus/gomerensis* m./Harald Lindb. det.] [Mus. Zool. H:fors/Spec. typ. No.2618/*Laparoc. gomerensis*/Har. Lindb]. ZMUH (Coll. Lindberg), Helsinki. Paratype: 1♀ [Can. La Gomera/Alajeró - Chipude 1400 m/22.3.50 Lindberg], ZMUH (Coll. Lindberg), Helsinki. A much rubbed specimen, the same as the holotype.

Laparocerus gracilis Wollaston, 1864

Laparocerus gracilis Wollaston 1864, p 356.

Type locality. Lomo de las Nieves (San Sebastián), La Gomera, Canary Islands.

Lectotype: 1♂, La Gomera (red card-line), February 1858, leg. Wollaston [Syntype] [Canary Is./Lanzarote/Wollaston Coll./BM 1864–80]. NHM, London. Paralectotypes: 4 exx, same data, NHM, London. 3 exx, same data, MNHN, Paris (Coll. Oberthühr-Wollaston).

Remarks. Somebody added labels indicating “Lanzarote” and “syntype” to the specimens kept in London. It is a clear error as the card-line colour is red, corresponding to La Gomera. Wollaston (1864) mentions as a collecting locality the slopes of the low mountain-ridge immediately outside (and to the north of) San Sebastian. This locality is known as Lomo de Las Nieves. In the Hope Entomological Collections at Oxford there are three specimens mounted on cards with a black line. This material corresponds to the later captures of the Messrs Crotch and are not syntypes. Marseul (1872, p 531) proposed the unjustified replacement name *Laparocerus gomeraecola* for this species.

Laparocerus grayanus (Wollaston, 1865)

Atlantis (*Canopus*) *Grayana* Wollaston 1865, p 309.

Remarks. The name *grayanus* Wollaston, 1865, is a replacement name for *Atlantis angustula* Wollaston 1863 (non *angustula* Wollaston, 1854), once transferred to the genus *Laparocerus*.

Type material. Its type material is the same as for the replaced species name.

Laparocerus grossepunctatus Wollaston, 1864

Laparocerus grossepunctatus Wollaston 1864, p 344.

Type locality. Vueltas de Taganana, Tenerife, Canary Islands.

Lectotype: 1♂ without posterior right leg. Vueltas de Taganana, May 1859, leg Wollaston (*ex litt.*) [Type] [*Laparocerus/grossepunctatus*/Woll. type]. MNH, London. Paralectotypes: 2 exx, same data. MNH, London. 1♀, same data [Hope Entomological/Collections/Wollaston Coll.] [*Laparocerus/grossepunctatus* Woll.]. UMO, Oxford (Figure 4B).

***Laparocerus grossepunctatus combrecitensis* Roudier, 1957**

Laparocerus grossepunctatus combrecitensis Roudier 1957b, 90.

Remarks. The name *L. grossepunctatus combrecitensis* Roudier, 1957b, is the replacement name for *L. grossepunctatus palmensis* Roudier, 1957a (non *palmensis* Lindberg, 1953).

Type material. Its type material is the same as for the replaced species name.

Laparocerus grossepunctatus longehirtus* Roudier, 1957

Laparocerus (Wollastonicerus) grossepunctatus longehirtus Roudier 1957a, p 21.

Type locality. Monte de los Silos (=Monte del Agua), Tenerife, Canary Islands.

Holotype: 1♀ [Los Silos. Mte del/Agua (Tén). 22.V.54/J.M^a Fernández] [TYPE] [*Lap. grossepunctatus*/subsp. *longehirtus*/Roudier nov./A. Roudier det.]. MNHN (Coll. Roudier), Paris.

Remarks. This taxon is a junior synonym of *L. escalerae* Uyttenboogaart, 1937 (new synonym!).

Laparocerus grossepunctatus palmensis* Roudier, 1957

Laparocerus (Wollastonicerus) grossepunctatus palmensis Roudier 1957a, p 20, Figure 4 (aedeagus).

Type locality. La Cumbrecita, La Palma, Canary Islands.

Holotype: 1♂ [La Cumbrecita. I./Palma. Canarias/J. Mateu coll./25-3-1952] [Holotype] [*Laparocerus/grossepunctatus* Woll./subsp. *palmensis* Roudier/nov./A. Roudier det.]. EEZA (Coll. Atlántica), Almería. Paratypes: 1♂ [La Cumbrecita. I./Palma. Canarias/J. Mateu coll./25-3-1952] [Paratype] [*Laparocerus/grossepunctatus* Woll./subsp. *palmensis* Roudier/nov./A. Roudier det.]. EEZA (Coll. Atlántica), Almería. 1♂, same data; 1♀, May 1952, La Palma, leg. Pécoud. MNHN (Coll. Roudier), Paris.

Remarks. The name *palmensis* Roudier, 1957, entered in homonymy with *Laparocerus palmensis* Lindberg, 1953, and subsequently Roudier (1957b) proposed the substitution name *combrecitensis* for it.

***Laparocerus grossepunctatus tenuepunctatus* Roudier, 1957**

Laparocerus (Wollastonicerus) grossepunctatus tenuepunctatus Roudier 1957a, p 20.

Type locality. La Esperanza, Tenerife, Canary Islands.

Lectotype: 1♀ [14-11-1948 La Esperanza/(Teneriffe). Ecorces de pines/C. G. Padron] [*Laparocerus/grossepunctatus* W./subsp. *tenuepunctatus*/Roudier/(*squamosus* Woll. non Brullé) nom. nov.]. MNHN (Coll. Roudier), Paris. Paralectotypes: 1♀, Icod el Alto, 1♀, 2♂♂, Aguamansa, May 1859, leg. Wollaston (det. *squamosus*), MNH, London. 3 exx, May 1859, Aguamansa, leg. Wollaston [Hope Entomological/Collections/Wollaston Coll.] [*Laparocerus/squamosus* Brullé.]. UMO, Oxford. 1 ex, May 1859, leg. T. V. Wollaston, det. *squamosus* Brullé (Coll. Oberthür-Wollaston); 2 exx, 15 May 1990, Agua Mansa, leg. Ch. Alluaud. (Coll. Atlantides); 1 ex, February 1902, leg. E. Gounelle (Coll. Générale-Ruter); 7 exx, 3 May 1949, La Esperanza, leg. J. M. Fernández (Coll. Roudier). MNHN, Paris.

Remarks. Roudier (1957a) incorrectly presented a replacement name for *L. squamosus* Brullé *sensu* Wollaston, 1864 (non Brullé, 1839) since a replacement name must be proposed for an available name, and a misidentification is not such. This mention would make *L. tenuepunctatus* (nom. nov.) an unavailable name. Nonetheless, Roudier himself highlights the diagnostic characters of *L. tenuepunctatus* and disregards the rest of the characteristics mentioned in the detailed description of the insects by Wollaston (“tout à fait illusoires”). Roudier’s diagnosis can be accepted as an available description and I have designated as lectotype one specimen labelled by Roudier with extreme detail.

***Laparocerus hirtus* Wollaston, 1864**

Laparocerus hirtus Wollaston 1864, p 348.

Type locality. Pinar de Tirajana (San Bartolomé), Gran Canaria, Canary Islands.

Holotype: 1♀, Spring 1858, San Bartolomé, pinewood, leg. Wollaston (*ex litt.*). [Type] [*Laparocerus/hirtus*/Woll. type]. NHM, London.

***Laparocerus inaequalis* Wollaston, 1863**

Laparocerus inaequalis Wollaston 1863, p 220.

Type locality. Vueltas de Taganana, Tenerife, Canary Islands.

Lectotype: 1♂, May 1859, Vueltas Taganana, Tenerife, leg. Wollaston (*ex litt.*), NHM, London. Paralectotypes: 4 exx, same data (one specimen without head and prothorax), 1♀ [Type] [*Laparocerus/inaequalis*/Woll. type]. NHM, London. 6 exx, same data [Hope Entomological/Collections/Wollaston Coll.] [*Laparocerus/inaequalis* Woll.]. UMO, Oxford. 4 exx, same data, MNHN (Coll. Oberthür-Wollaston), Paris.

Remarks. The type series was originally of 34 specimens.

***Laparocerus incomptus* (Wollaston, 1865), bon. spec.**

Lichenophagus (Amyntas) incomptus Wollaston 1865, Appendix p 55.

Type locality. Sabinosa, El Hierro, Canary Islands (UTM 27R 0785255 3073522).

Neotype: 1♂ [El Hierro, Islas Canarias/Sabinosa, Pozo de la Salud, 30 m/23-2-2005, *Rumex lunaria*/# 4127, leg. A. Machado]. [NEOTIPO/*Lichenophagus incomptus*/Wollaston, 1865 (= *Laparocerus*)/des. A. Machado, 2005]. TFMFC (reg. CO-15502), Santa Cruz de Tenerife (Figure 9B).

Remarks. The description of this species was based on a single female sent to Wollaston by M. de Marseul (Paris) as Canarian, but with no reference to the island of origin or the collector. Following the description there is a footnote (1865, p 56): “Since the above was written, I have had some reason to suspect that the type from which my diagnosis of the *L. incomptus* was compiled (but which unfortunately has been returned to Paris, so that I cannot now re-examine it) may possibly have been but a very small and immature (female) specimen of the *Atlantis tibialis*—slightly aberrant, and perhaps obtained in the island of Hierro”. He received subsequently a second specimen from Marseul (see 1865, p 328 footnote), and confirmed his supposition. Wollaston knew *L. tibialis* originally (1864) from Tenerife and La Palma, and later (1865) also from El Hierro, having been collected there by the Messrs Crotch. The synonym has been generally accepted since then, but the case is more complicated. According to molecular data (to be published), the three islands are inhabited by different—although very similar—species. In 2002, the curator Mlle. Hélène Perrin and I were not able to find Wollaston’s holotype in Paris. Thus, I consider it a better solution to establish a neotype from El Hierro. I have abundant specimens from that island and they are indeed of smaller size compared with specimens from Tenerife or La Palma. Moreover, *Lichenophagus incomptus* is the type species by monotypy of *Amyntas* Wollaston, 1865, described originally as subgenus of *Lichenophagus* Wollaston, 1854, and later transferred by Alonso-Zarazaga and Lyal (1999) as valid subgenus of *Laparocerus*.

***Laparocerus inconspectus* Roudier, 1957**

Laparocerus inconspectus Roudier 1957a, p 27.

Type locality. Tiles de Moya, Gran Canaria, Canary Islands.

Holotype: 1♀ [Moya (Gde Canarie)/bois de laurier, sous pierres/mai 1952 Pécoud] [Type]. MNHN (Coll. Roudier), Paris. Ventrites and genitalia on separate card.

***Laparocerus inconstans* (Wollaston), 1854**

Atlantis inconstans Wollaston 1854, p 375.

Type locality. Campo do Baixo, Island of Porto Santo, Madeiran archipelago.

Lectotype: 1♂, December 1948, Campo do Baixo, Porto Santo, leg. Wollaston (*ex litt.*). MNH, London. Specimen pinned-through. Paralectotypes: 4 exx, same data (1♀ labelled “Type”) [*Atlantis inconstans* Woll.]. NHM, London. All specimens pinned-through.

Remarks. The original type series was larger (“plurima specimina detexi”).

***Laparocerus indutus* Wollaston, 1865**

Laparocerus indutus Wollaston 1865, p 325, Appendix p 53.

Type locality. La Gomera, Canary Islands.

Lectotype: 1♂ (on red line-card), La Gomera, Messrs Crotch leg. (*ex litt.*). NHM, London. Paralectotype: 1♂, same data. MNHN (Coll. Oberthür-Wollaston), Paris.

Remarks. According to the description, there must be one more syntype somewhere. Marseul (1872, p 535) proposed the invalid replacement name *Laparocerus tectus*. Roudier (1957a, p 30) treated *indutus* as a subspecies of *L. puncticollis* Wollaston, 1864. The species is very common in the forested parts of the island. The type serie was probably collected in Monte Forte, the classical collecting-ground in the past.

Laparocerus inflatus Wollaston, 1865

Laparocerus inflatus Wollaston 1865, p 321, Appendix p 51.

Type locality. Mountains of La Gomera, Canary Islands.

Holotype: 1♀ (light red card-line), mountains of La Gomera, leg. Messrs Crotch (*ex litt.*) [*L. inflatus*, W.] NHM, London.

Remarks. Marseul (1872, p 526) proposed for this species the invalid replacement name *Laparocerus tumens*. *L. inflatus* lives in the humid laurel-forest: El Cedro, Meriga, Agua de los Llanos, etc. The type serie was probably collected in Monte Forte (=El Cedro), the classical collecting-ground in the past.

Laparocerus instabilis (Wollaston, 1854)

Atlantis instabilis Wollaston 1854, p 377.

Type locality. Campo do Baixo, Island of Porto Santo, Madeiran archipelago.

Lectotypes: 1♂, Campo do Baixo, Porto Santo, leg. Wollaston (*ex litt.*) [Type] [*Atlantis instabilis*/Woll. type]. NHM, London. Paralectotypes: 18 exx some damaged and immature, December 1848, May 1849, Campo do Baixo and North of island, Porto Santo, leg. Wollaston. NHM, London. 8 exx, same data. UMO, Oxford. 19 exx, same data, MNHN (Coll. Générale-Clerc), Paris.

Laparocerus laevis Roudier, 1957

Laparocerus (Wollastonicerus) laevis Roudier 1957a, p 18, Figure 1 (aedeagus).

Type locality. Topito, 850 m (Breña Alta), La Palma, Canary Islands.

Holotype: 1♂, 28 April 1890 [Iles Canaries/Palma/Ch. Alluaud 1890//101] [Palma/Topito/850 m/Lauriers/28.IV.90] [*L./sculptus*/Brullé/Uyttenb. det] [Type] [*Laparocerus/laevis n.sp./Roudier*/A. Roudier det.]. Aedeagus and ventrites on an additional card. MNHN (Coll. Ch. Alluaud), Paris. Paratype: 1♀, same data. MNHN (Coll. Ch. Alluaud), Paris.

Remarks. According to the travel map and notes of Alluaud (1891) the type locality is “sur le versant E. de la chaîne central, dans la zone des lauriers, près du lieu dit Topito”. A locality Topito at 850 m altitude is unknown at present, but probably is located along the old road (15 km) from San Miguel to El Paso, in the municipality of Breña Alta.

***Laparocerus laevis politus* Roudier, 1957**

Laparocerus (Wollastonicerus) laevis politus Roudier 1957a, p 19.

Type locality. La Palma, Canary Islands.

Holotype: 1♀ [La Palma/Canaries]/Mai 1951. Pécoud [Type] [*Laparocerus/laevis*/subsp. *politus* nov./A. Roudier det.]. MNHN (Coll. Roudier), Paris.

***Laparocerus lamellipes* (Wollaston, 1854)**

Atlantis lamellipes Wollaston 1854, p 364, Table 7, Figure 5 (habitus).

Type locality. Fanal, Island of Madeira.

Lectotype: 1♂, 16 July 1850, Madeira [290] Fanal, leg. Wollaston (*ex litt.*) [Type] [*lamellipes*, Woll]. Mounted together with one female paralectotype. NHM, London. Paralectotypes: 1♀ (on the same card as the lectotype), same data; 5♂♂, 5♀♀ “in montibus Madeira” (incl. Fateiras), leg. Wollaston. MNH, London. 3 exx [75]; 1 ex [244]; 8 exx [430]; 3 exx [795], Lombo das Vacas; 1 ex [815]; 1 ex [933], hills above Santa Cruz. UMO, Oxford. 1♂ (Wollaston card) [vielleicht Type]. (Coll. Stierlin); 1♂ [539] [Historisches Exemplar, vielleicht Type]. DEI (Coll. Kraatz), Müncheberg.

Comment. *L. lamellipes* is the type species by original designation of the genus *Atlantis* Wollaston, 1854, transferred as subgenus of *Laparocerus* by Lacordaire (1863, p 200).

***Laparocerus lanatus* (Wollaston, 1854)**

Atlantis lanatus Wollaston 1854, p 372, Table 7, Figure 6 (habitus).

Type locality. Curral das Romérias, Island of Madeira.

Lectotype: 1♀, August 1847, Curral das Romérias, leg. Wollaston. NHM, London. Paralectotypes: 1♂, 1♀ (Figure 3A) same data; 2♂♂, 2♀♀ [1277], Pico da Cruz, 1851, leg. Heer (*ex litt.*). NHM, London. All males, slightly immature. 1♀, near Mte Gorgulho, leg. Wollaston. UMO, Oxford.

Remarks. According to the description (“...rather abundant”) it is highly probable that there are many other syntypes around. However, I have not made paralectotypes out of several very old specimens of *lanatus* preserved in the DEI (Coll. Schaufuss, Coll. Kraatz, Coll. Stierlin, etc.) as there is no clear evidence of being syntypes of Wollaston.

Furthermore, three specimens placed as *L. lanatus* in the collection Oberthür-Wollaston in Paris, are misidentified; they are *L. clavatus* (Wollaston, 1854). In the Zoological Museum of the University of Amsterdam, there is one female (Wollaston mounting card!), erroneously identified as *L. lamellipes*, bearing the species-locality number [241] which in the London list corresponds to *Cercyon quisquiliium*, and in the Oxford list to *Stenus guttula*.

Laparocerus lauripotens (Wollaston, 1854)

Atlantis lauripotens Wollaston 1854, p 369.

Type locality. Curral das Romeiras, Island of Madeira.

Lectotype: 1♀ [575], Curral das Romeiras, autumn 1847 [*Atlantis (noctivagans) lauripotens*, Woll. type]. NHM, London. *Paralectotype:* 1♂ [575], immature and right antenna missing,

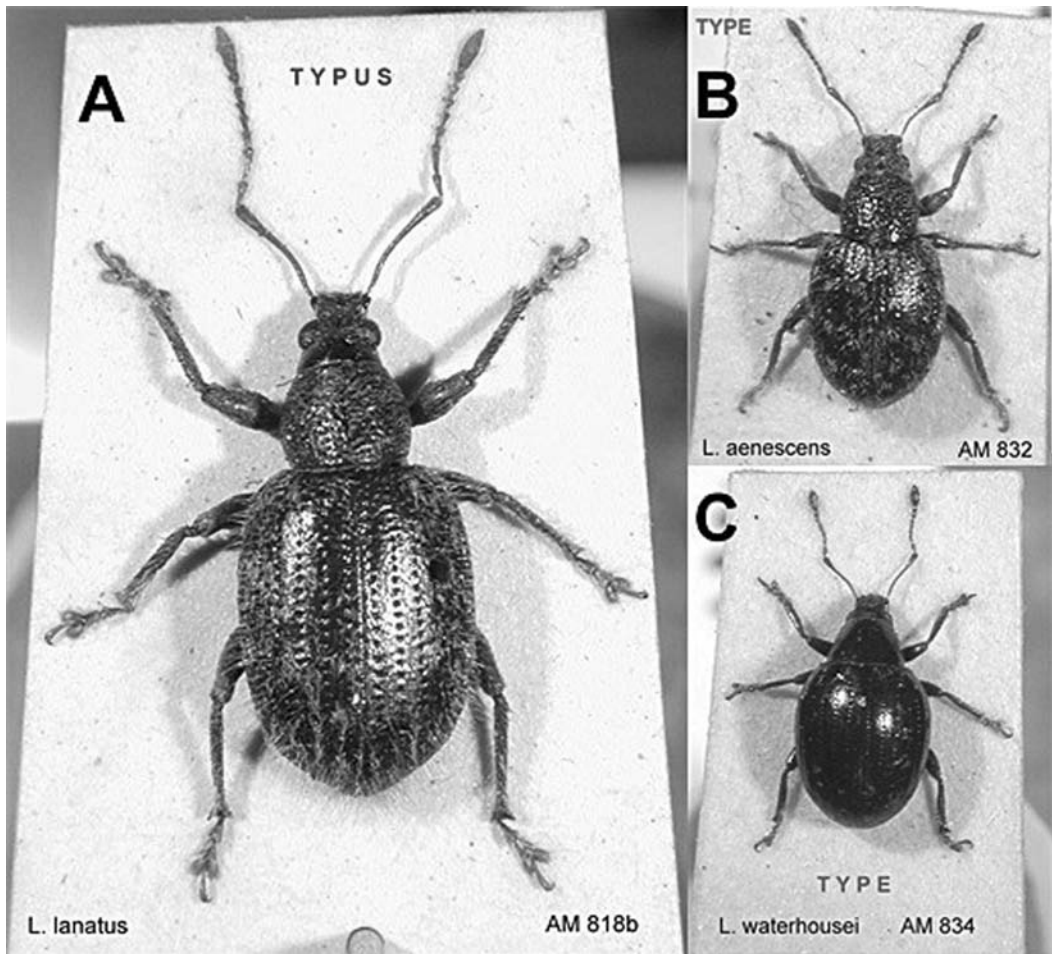


Figure 3. (A) Paralectotype of *Laparocerus lanatus* (Wollaston, 1864); (B) paralectotype of *Laparocerus aenescens* (Wollaston, 1854); (C) paralectotype of *Laparocerus waterhousei* (Wollaston, 1854).

same data 1847 [*Atlantis (noctivagans) lauripotens*, Woll.] [The Madeira b./T.V. Wollaston/Brit. Mus. 1855–7]. NHM, London.

Remarks. Wollaston (1857, p 114) synonymized this species with *A. noctivagans* Wollaston, 1854, but later he recognized *A. lauripotens* as a valid species (Wollaston 1871, p 273). This rehabilitation was probably overlooked by Schmitz (1898, p 154) in his list of the Madeiran coleoptera.

***Laparocerus lepidopterus* Wollaston, 1864**

Laparocerus lepidopterus Wollaston 1864, p 352.

Type locality. El Golfo, El Hierro, Canary Islands.

Lectotype: 1♀ (violet line-card=El Hierro) [El Golfo], leg. Wollaston [Type]. NHM, London. Paralectotypes: 1♀ damaged (white card=Tenerife) [Agua García], leg. Wollaston. NHM, London. 1♀, both antennae and some tarsi missing (green card-line=La Palma), leg. Wollaston [Hope Entomological/Collections/Wollaston Coll.] [*Laparocerus/lepidopterus* Woll.]. UMO, Oxford.

Remarks. Wollaston did not provide a name when he separated the Gran Canaria specimen as “Var. β [an species?]”, with its own diagnosis, even so it cannot be considered as syntype of *L. lepidopterus*. Independently, Marseul (1872, p 535) proposed for *L. lepidopterus* Wollaston, 1864, the unjustified replacement name *Laparocerus bellopterus*.

***Laparocerus lepidopterus depilis* Roudier, 1957**

Laparocerus (Wollastonicerus) lepidopterus depilis Roudier 1957a, p 22.

Type locality. Aguamansa, 800 m, Tenerife, Canary Islands.

Holotype: 1♂, dissected, aedeagus missing [Iles Canaries/Tenerife/Ch. Alluaud 1890] [Agua/Mansa/16.IV.90] [♀] [*L. lepidopterus* Woll./Uytttenb.det] [Type] [*Laparocerus/lepidopterus/subsp. depilis*/Roudier/A. Roudier det]. MNHN, Paris.

***Laparocerus lepidopterus pecoudi* Roudier, 1957**

Laparocerus (Wollastonicerus) lepidopterus pecoudi Roudier 1957a, p 22, Figure 16 (aedeagus).

Type locality. Los Tiles de Moya, Gran Canaria, Canary Islands.

Lectotype: 1♂ [gen. 15] [Moya (G^{de} Canarie)/Bois de laurier, sous pierres/Mars 51. Pécoud] [Type] [*Laparocerus/lepidopterus* W./subsp. *pecoudi* Roudier nov./A. Roudier det.]. MNHN (Coll. Roudier), Paris. Paralectotype: 1♀, Gran Canaria, El Brezal, 21–22 March 1952, J. Mateu leg. EEZA (Coll. Atlántica), Almería.

***Laparocerus lindbergi* Roudier, 1963**

Laparocerus (s. str.) lindbergi Roudier 1963, p 133.

Type locality. Paul da Serra, Island of Madeira.

Holotype: 1♂, much rubbed [Madeira/Paul da Serra/25.IV.59 Lindberg] [Type] [*Laparocerus* (s.str.)/*lindbergi* Roudier n. sp./A: Roudier det. Type]. Aedeagus on additional card. ZMUH (Coll. Lindberg), Helsinki (Figure 2B).

***Laparocerus longiclava* Lindberg, 1953**

Laparocerus longiclava Lindberg 1953, p 15, Figure 14 (aedeagus).

Type locality. Cuesta de Los Pasos, 1200 m (Adeje), Tenerife, Canary Islands.

Holotype: 1♀ [Tenerife, supra Adeje/Questa d. l. Pasos 1200 m/25.2.50 Lindberg] [*Laparocerus longiclava* m./Harald Lindb. det.] [Mus. Zool. H:fors/Spec. typ. No. 2614/*Laparoc. longiclava*/Har. Lindb]. ZMUH (Coll. Lindberg), Helsinki. Paratypes: 6 exx [Tenerife, supra Adeje/Questa d. l. Pasos 1200 m/25.2.50 Lindberg]. ZMUH (Coll. Lindberg), Helsinki. 1 ex, same data (Coll. Ch. Alluaud), 1 ex (Coll. Roudier), MNHN, Paris. 1 ex, same data. NR (Coll. General), Stockholm.

***Laparocerus mateui* Roudier, 1954**

Laparocerus mateui Roudier 1954, p 85, Figure 1 (aedeagus).

Type locality. Bosque del Cedro, La Gomera, Canary Islands.

Holotype: 1♂, La Gomera, Bosque del Cedro, 9/12 April 1952, J. Mateu leg. EEZA (Coll. Atlántica), Almería. Paratype: 1 ex, without head. La Gomera, El Cedro, 23 March 1950, Håkan Lindberg leg. MNHN (Coll. Roudier), Paris.

***Laparocerus mendax* Wollaston, 1854**

Atlantis mendax Wollaston 1854, p 376.

Type locality. Campo do Baixo, Island of Porto Santo, Madeiran archipelago.

Lectotype: 1♂ [537], December 1848, Campo do Baixo, Porto Santo, leg. Wollaston (*ex litt.*). NHM, London. Paralectotypes: 2 exx, same data. NHM, London. 16 exx, Porto Santo, leg. Wollaston. UMO, Oxford.

Remarks. Many of the specimens are rubbed, almost with no dorsal vestiture. There are four more specimens in the Wollaston Collection in London, but not syntypic; they were collected in the summer of 1855 [register 44']

***Laparocerus mendicus* Wollaston, 1864**

Laparocerus mendicus Wollaston 1864, p 355.

Type locality. Monte Ajare (Valverde) and montaña Las Rosas (San Andrés), El Hierro, Canary Islands.

Lectotype: 1♂ (violet card-line). El Hierro, leg. Wollaston [Canary Is./El Hierro/Wollaston Coll./BM 1864–80] [*mendicus* Woll.]. NHM, London. Paralectotypes: 4 exx, El Hierro, leg. Wollaston. NHM, London. 6 exx, same data [Hope Entomological/Collections/Wollaston Coll.] [*Laparocerus/mendicus* Woll.]. UMO, Oxford. 4 exx, same data. MNHN (Coll. Oberthür-Wollaston), Paris.

Remarks. All syntypes were collected by Wollaston in February 1858 on the hills around Valverde (probably “monte Ajare”), as well as on the open grassy cumbre to the south of San Andrés (“montaña Las Rosas”). There is no way to identify from which of these localities a given syntype originated.

***Laparocerus microphthalmus* Lindberg, 1950**

Laparocerus microphthalmus Lindberg 1950, p 16.

Type locality. Pinar de Tamadaba, Gran Canaria, Canary Islands.

Holotype: 1♀, missing anterior left tarsus [Gran Canaria/Tamadaba/30.3.49 Lindberg] [*Laparocerus/microphthalmus m./Harald Lindb. det.*] [Mus. Zool. H:fors/Spec. typ. No.2521/*Laparoc. micro-/phthalmus* Har. Lindb.]. ZMUH (Coll. Lindberg), Helsinki. Paratypes: 1♂, same data, 19 exx [Gran Canaria/Tamadaba 1100 m/13.3.50 Lindberg] ZMUH (Coll. Lindberg), Helsinki (Figure 7B). 4 exx, same data. NHM (General Coll.), London. 1♂ [gen.41], 2 exx [Gran Canaria/Tamadaba 1100 m/17.3.50, Lindberg]. MNHN (Coll. Roudier), Paris.

***Laparocerus morio* Boheman, 1834**

Laparocerus morio Boheman in Schönherr 1834, p 531.

Type locality. Island of Madeira.

Holotype: 1♂ [Type] [Lusitania/Falderman]. NR (Coll. Schönherr), Stockholm. Specimen in perfect condition (Figure 8A).

Remarks. According to the original description, the type of *L. morio* is from “Lusitania, Mus. Dom. Faldermann”. The species is a common insect in Madeira (Wollaston 1854) and the type locality “Lusitania” (=Portugal) must be an error, or perhaps a political generalization. This confusion has been already corrected by Lona (1938). The specimen originated probably from Funchal or its neighbourhood. A second very dirty specimen (♀) of *L. morio* in the Collection Schönherr (SMNH) has a label [Madeira] and is classified as *Eremnus Barthelotti*. This name is published “*Eremnus barthelotti*. Dom. Guérin. Magaz. Zool.” in Schönherr (1842, p 228) as synonym of *L. morio*. Lundblad (1958, p 485 footnote 5) explains that perhaps Guérin had the intention of describing it, but there is no contribution by him in the *Magazine of Zoology*, and *E. barthelotti* should

be just a *nomen in litteris*. That being the case, *Eremnus barthelotti* is not an available name.

***Laparocerus morio cevadae* Roudier, 1961**

Laparocerus (*s.str.*) *morio cevadae* Roudier 1961, p 62, Figure 1 (detail of posterior tibia).

Type locality. Ilheu do Desembarcadouro (=da Cevada), Island of Madeira.

Holotype: 1♂, Ilhot dos Desembarcadouros, 3 April 1959, G. Colas leg. MNHN (Coll. Roudier), Paris. Paratypes: 8♂♂, 3♀♀ same data, MNHN (Coll. Roudier), Paris.

Laparocerus morio vandeli* Roudier, 1958

Laparocerus (*s.str.*) *morio* subsp. *Vandeli* Roudier 1958, p 199, Figure 1 (aedeagus).

Type locality. Ilheu de Chão, Islets of Dezertas, Madeiran archipelago.

Holotype: 1♂ [Chão/11-5-57], G. Colas leg. [Type] [*Laparocerus/morio vandeli*/Roudier/Type/A. Roudier]. MNHN (Coll. Générale), Paris. Paratypes: 12♂♂, 6♀♀, same data as holotype. 1♀, 1952, Ilheu Chão, Ch. Barreto leg. MNHN (Coll. Générale), Paris.

Remarks. This taxon is a junior synonym of *L. chaoensis* Uyttenboogaart, 1940 (nov. syn.).

***Laparocerus navicularis* (Wollaston, 1854)**

Atlantis navicularis Wollaston 1854, p 374.

Type locality. Campo do Baixo, Porto Santo, Madeiran archipelago.

Lectotype: 1♂ [545], Campo do Baixo, December 1848, Porto Santo, Wollaston leg. (*ex litt.*). MNH, London. Paralectotypes: 2♀♀, same data. MNH, London.

Remarks. Wollaston (1854) cannot recall whether the insects were collected at the Campo de Baixo or at a higher elevation, but the mounting card bears the number [545] which corresponds to the sandy hills at the Campo do Baixo.

Laparocerus nitidirostris* Roudier, 1957

Laparocerus nitidirostris Roudier 1957a, p 25.

Type locality. Valverde, El Hierro, Canary Islands.

Holotype: 1♀ [Valverde 23-1-51/M. Sánchez]. MNHN (Coll. Roudier), Paris.

Remarks. The holotype seems to be an immature female of *L. sanchezi* Roudier, 1951, which is a rather variable species. New synonym!

Laparocerus noctivagans (Wollaston, 1854)

Atlantis noctivagans Wollaston 1854, p 367.

Type locality. Fanal, Island of Madeira.

Lectotype: 1♂ [291], Fanal, July 1850, leg. Wollaston (*ex litt.*). MNH, London. Paralectotypes: 1 ex [291], Fanal, July 1850; 14 exx, mountains of Madeira, leg. Wollaston. MNH, London. 5 exx [270]; 1 ex [321]; 2 exx [335] mountains of Madeira, 10 exx [431]; 3 exx [602], Lombo das Vacas; 6 exx [785]; 2 exx [813]; 1 ex [862]. UMO, Oxford. 1 ex, Madeira [602], Lombo das Vacas, leg. Wollaston. [Historisches Exemplar, vielleicht Type]. DEI (Coll. Kraatz), Müncheberg. 1 ex, mountains of Madeira, Wollaston leg. MNHN (Coll. Oberthür-Wollaston), Paris.

Remarks. In the Wollaston Collection in London there are 17 exx which are not syntypic.

Laparocerus obesulus Desbrochers, 1904*

Laparocerus obesulus Desbrochers 1904, p 63.

Type locality. Island of Madeira.

Lectotype: 1♀, with a pinhole. [Ile de/Madère] [*Laparocerus/obesulus* m./n.sp.♀], Correa de Barros leg. MCNP (Coll. Correa de Barros), Porto. Paralectotype: 1♀ (no labels). MCNP (Coll. Correa de Barros), Porto.

Remarks. *L. obesulus* is a junior synonym of *L. morio* Boheman, 1834 (new synonym). Both types are stored together in Box 14-0.IV with other Curculionids (i.e. *Otiorynchus*), in the Collection Correa de Barros. They are in poor condition and remounted on cards. Jansson (1940, p 61) listed the species as *Laparocerus obsoletus* Desbrochers, an incorrect subsequent spelling.

Laparocerus obscurellus Marseul, 1872*

Laparocerus (Laparocerus) obscurellus Marseul 1872, p 529.

Remarks. This is an invalid replacement name for *Laparocerus obscurus* Wollaston, 1865, as already recognized in Winkler (1932, p 1448).

Type material. Its type material is the same as for the replaced species name.

Laparocerus obscurus Wollaston, 1864

Laparocerus obscurus Wollaston 1864, p 355.

Type locality. Santa Cruz, Tenerife, Canary Islands.

Holotype: 1♂ [Type] [Canary Is./Teneriffe/Wollaston Coll./BM 1864–80] [*obscurus*, Woll.]. MHN, London.

Remarks. Wollaston (1864) does not recall the precise locality where he captured the single type of this species, either the vicinity of Orotava or of Santa Cruz. The insect is identical in habitus, shape of eyes, and proportion of desmomereres with specimens from the coastal region close to Santa Cruz, presently a large city. Marseul (1872, p 529) proposed the unjustified replacement name *Laparocerus obscurellus*.

***Laparocerus obsitus* Wollaston, 1864**

Laparocerus obsitus Wollaston 1864, p 361.

Type locality. El Monte, San Mateo-Roque Saucillo, and Pinar de Tirajana, Gran Canaria, Canary Islands.

Lectotype: 1♂ (dark blue card-line), Gran Canaria, Spring 1858, leg. Wollaston [Type] [*Laparocerus/obsitus*/Woll. type]. NHM, London. Paralectotypes: 6 exx, Spring 1858, El Monte, San Mateo-Roque Saucillo, Pinar de Tirajana, leg. Wollaston (*ex litt.*). NHM, London. 9 exx, same data [Hope Entomological/Collections/Wollaston Coll.] [*Laparocerus/obsitus* Woll.]. UMO, Oxford. 4 exx, same data. MNHN (Coll. Oberthür-Wollaston), Paris.

Remarks. Since this species shows important variations within the island of Gran Canaria, I am selecting as lectotype one specimen coincident in habitus with specimens collected by me in El Monte, one of the three localities mentioned in Wollaston's original description of *obsitus*. Marseul (1872, p 534) proposed the replacement name *Laparocerus persitus*, which is unjustified.

***Laparocerus obtriangularis* Wollaston, 1864**

Laparocerus obtriangularis Wollaston 1864, p 351.

Type locality. Agua Mansa, Tenerife, Canary Islands.

Holotype: 1♀, Tenerife, Agua Mansa, leg. Wollaston (*ex litt.*). [Type] [*obtriangularis*, Woll.]. NHM, London.

***Laparocerus occidentalis* Wollaston, 1864**

Laparocerus occidentalis Wollaston 1864, p 350.

Type locality. Ladera de El Golfo, El Hierro, Canary Islands.

Holotype: 1♀, February 1858, leg. Wollaston [El Golfo] [Type] [Canary Is./El Hierro/Wollaston Coll./BM 1864–80] [*Laparocerus/occidentalis*/type Woll.]. NHM, London.

Remarks. The type locality is probably in the Eastern slopes of El Golfo Valley, along the old track of Jinama.

Laparocerus palmensis Lindberg, 1953

Laparocerus palmensis Lindberg 1953, p 16.

Type locality. Montaña Tenisca, Los Llanos de Aridane, La Palma, Canary Islands.

Holotype: 1♂ [Can. Palma, Los Llanos/12-11-1950] [Fernández] [Mus. Zool. H:fors/Spec. typ. No.2620/*Laparoc. palmensis*/Har. Lindb.] ZMUH (Coll. Lindberg), Helsinki. Paratypes: 3 exx [Can. Palma, Los Llanos/12-11-1950] [Fernández]. ZMUH (Coll. Lindberg), Helsinki.

Remarks. Lindberg based his description on four specimens only, deposited in the Zoological Museum in Helsinki. According to the Canarian collector's travel report (Fernández 1951), he collected a series of 40 exx in the Montaña Tenisca, in Los Llanos. I have found many of these specimens in several institutions: 7 exx TFMC, Santa Cruz de Tenerife; 2 exx MNCN (Coll. González) Madrid, and 8 exx MNHN (Coll. Roudier), Paris. All specimens of the series, including the formal types, are equally immature (totally yellowish). One further yellowish specimen, but labelled "Tenerife, Bco. Tahodio, 20/1/1951" is in the Museum of Santa Cruz de Tenerife, and three more in Paris (Coll. Roudier); probably a labelling error.

Laparocerus persitus Marseul, 1872*

Laparocerus (Laparocerus) persitus Marseul 1872, p 534.

Remarks. This is an invalid replacement name for *Laparocerus obsitus* Wollaston, 1865, as already recognized in Winkler (1932, p 1448).

Type material. Its type material is the same as for the replaced species name.

Laparocerus piceus Boheman, 1834**

Laparocerus piceus Boheman in Schönherr 1834, p 531.

Type locality. Island of Madeira.

Holotype: 1♀ much rubbed [Lusitania/Falderman]. NR (Coll. Schönherr), Stockholm.

Remarks. The species was described by Boheman based on a single female labelled as from Lusitania (=Portugal); however, Gyllenhal is often cited as author. I have seen specimens of *L. azoricus* Drouet labelled as *L. piceus* in several collections (Coll. Stierlin, Osella, Poncy, etc.). Furthermore, Marseul (1872, p 548) placed the species with a question-mark as synonym of *L. vespertinus* (Wollaston, 1854) and it is recorded identically in Winkler (1932, p 1448), even though *L. piceus* Boheman, 1834 would have priority over *L. vespertinus* (Wollaston, 1854), as posteriorly recognized by Schmitz (1898, p 154) in his list of Madeiran coleoptera. It has been registered in several catalogues (Jacquelin du Val 1855; Lacordaire 1863; Lona 1938, etc.) as from Portugal, and only Lundblad (1958, p 485) assumes that the locality label "Lusitania" must be an error as in the case of *L. morio*, equally described by Boheman on a specimen provided by Falderman. Consequently, I

assume the island of Madeira as the locality where the type really originated. The holotype of *L. piceus* is kept in Stockholm. It is a rubbed female specimen that resembles *L. noctivagans* (Wollaston, 1854), but could equally be assigned to *L. lauripotens* (Wollaston, 1854). Females of this group of *Laparocerus* (*L. vespertinus*, included) are not always easy to separate. Therefore I propose to consider *L. piceus*, a *nomen dubium*.

***Laparocerus propinquus* Lindberg, 1953**

Laparocerus propinquus Lindberg 1953, p 14, Figure 12 (aedeagus).

Type locality. Pinar de Tamadaba, Gran Canaria, Canary Islands.

Holotype: 1♀, missing right anterior tarsus [Gran Canaria/Tamadaba 1100 m/13.3.50 Lindberg] [*Laparocerus/propinquus* m./Harald Lindb. det] [Mus. Zool. H:fors/Spec. typ. No. 2616/*Laparoc. propinquus*/Har. Lindb.]. ZMUH (Coll. Lindberg), Helsinki. Ventrites on additional separate card. Paratypes: 1♀ [Gran Canaria/Tamadaba 1100 m/13.3.50 Lindberg]. ZMUH (Coll. Lindberg), Helsinki. 1 ex, same data. MNHN (Coll. Roudier), Paris.

***Laparocerus puncticollis* Wollaston, 1864**

Laparocerus puncticollis Wollaston 1864, p 362.

Type locality. Ladera de El Golfo, El Hierro, Canary Islands.

Lectotype: 1♂, 16 February 1858, Ladera de El Golfo, 300 m, leg. Wollaston (*ex litt.*) [Syntype] [Canary Is./El Hierro/Wollaston Coll./BM 1864–80] [*puncticollis* Woll.]. NHM, London. Paralectotypes: 2 exx, same data. MNH, London. 2 exx, same data [Hope Entomological/Collections/Wollaston Coll.] [*Laparocerus/puncticollis* Woll.]. UMO, Oxford.

***Laparocerus rasmus* Wollaston, 1864**

Laparocerus rasmus Wollaston 1864, p 354.

Type locality. *supra* Haría, Lanzarote, Canary Islands.

Lectotype: 1♂ (dark red card-line) slightly immature [Haría] [Type], January 1858, leg. Wollaston and Gray (*ex litt.*) [*Laparocerus/rasmus*/Woll. type], NHM, London. Paralectotypes: 3 exx (one, very immature). Lanzarote: s. Haría, leg. Wollaston and Gray, January 1858, March 1859+Monte Famara, leg. Lowe. NHM, London. 2♂♂, 2♀♀, same data (January 1858) [Hope Entomological/Collections/Wollaston Coll.] [*Laparocerus/rasmus* Woll.]. UMO, Oxford. 1 ex, same data. MNHN (Coll. Oberthür-Wollaston), Paris.

Remarks. Wollaston separated the single specimen from Fuerteventura as *Laparocerus rasmus* var. *β* and is to be excluded from the type series of *rasmus*.

***Laparocerus rugosicollis* Uyttenboogaart, 1937**

Laparocerus (Laparocerus) rugosicollis Uyttenboogaart 1937, p 98, 103.

Type locality. Pinar de Icod, Tenerife, Canary Islands.

Holotype: 1♂ missing left anterior tarsus, M. M. Escalera leg. [P. Icod/IV. 1921] [*Laparocerus/rugosicollis*/Uytenboogaart/Type] [M.N.C.N./Madrid] MNCN (Canarian Coll.), Madrid (Figure 5A).

***Laparocerus ruteri* Roudier, 1957**

Laparocerus (Canopus) ruteri Roudier 1957a, p 33, 36, Figure 13 (aedeagus).

Type locality. Punta del Hidalgo, Tenerife, Canary Islands.

Holotype: 1♂ [Canaries/Ile de Tenerife/Punta del Hidalgo/Cabrera 4-1902] [Type] [*Laparocerus/Ruteri*/nov./A. Roudier det.]. MNHN (Coll. Ruter), Paris. Paratype: 1♀, same data. MNHN (Coll. Roudier), Paris.

***Laparocerus sanchezi* Roudier, 1957**

Laparocerus sanchezi Roudier 1957a, p 24, Figure 7 (aedeagus).

Type locality. Monte Ajare, El Hierro, Canary Islands.

Holotype: 1♂ (gen. 23) [I. Hierro/M. Ajare/14.xi-1952/M. Sanchez] [Type] [*Laparocerus/Sanchezi*/nov. sp./A. Roudier det.]. MNHN (Coll. Roudier), Paris.

***Laparocerus scapularis* Wollaston, 1864**

Laparocerus scapularis Wollaston 1864, p 347.

Type locality. Las Cañadas, Tenerife, Canary Islands.

Lectotype: 1♀ [C]=Las Cañadas. Wollaston or Crotch leg. [Type] [*scapularis*, Woll]. NHM, London. Paralectotypes: 3♀♀, Las Cañadas, Cumbre Tenerife, Wollaston or Crotch leg. (*ex litt.*). NHM, London. 6 exx, same data [Hope Entomological/Collections/Wollaston Coll.] [*Laparocerus/scapularis* Woll.]. UMO, Oxford. 2 exx, same data, MNHN (Coll. Oberthür-Wollaston), Paris.

Remarks. Marseul (1872, p 521) proposed for this species the unjustified replacement name *Laparocerus wollastoni*.

***Laparocerus schaumii* (Wollaston, 1854)**

Atlantis schaumii Wollaston 1854, p 379.

Type locality. Pico do Castelo, Island of Porto Santo, Madeiran archipelago.

Lectotype: 1♂ (blue card-line) [736] Porto Santo, Pico do Castelo, leg. Wollaston [Type] [*Atlantis schaumii*/Woll. type]. MNH, London. Paralectotypes: 8 exx, same data, May

1848, April 1849. MNH, London. 17 exx, Porto Santo, leg. Wollaston. UMO, Oxford. 4 exx, 3 May 1848, same locality. MNHN (Coll. Oberthür-Wollaston), Paris. 1 ex (blue card-line) [128]. DEI (Coll. Kraatz), Müncheberg.

Remarks. The additional series of eight specimens of *L. schaumii*, det. Wollaston from Ponta de Sao Lourenço, in Madeira proper (NHM), is not mentioned in the original description and cannot be regarded as syntypic.

Laparocerus sculptus (Brullé, 1839)

Otiorynchus sculptus Brullé 1839, p 71.

Type locality. La Palma, Canary Islands.

Holotype: 1♀, 3-1841 [*sculptus*] [3.41] [Type] [Museum Paris/Canaries/Webb et Berthelot/3-41]. MNHN (Coll. Générale), Paris. Specimen glued on card at present, but with two holes of pins on the elytra.

Remarks. Brullé (1839) did not mention the island of origin of the holotype, but Wollaston (1864, p 341) collected the species in Cubo de La Galga, and Cumbre above Buenavista, in the island of La Palma. *L. sculptus* is the type species of the subgenus *Machadotrox* Alonso-Zarazaga and Lyal, 1999 by original designation. This subgenus was established to fill the gap left by *Wollastonia* Uyttenboogaart, 1936 (non Heer, 1852, nec Horn, 1873) and its replacement name *Wollastonicerus* Uyttenboogaart, 1937, both unavailable because of the absence of a type designation.

Laparocerus seminitens Lindberg, 1950

Laparocerus seminitens Lindberg 1950, p 17.

Type locality. San Miguel, Tenerife, Canary Islands.

Lectotype: 1♂, left posterior tarsus missing [Tenerife/San Miguel/26.1.49 Lindberg] [*Laparocereus/seminitens m./Harald Lindb. det*] [Mus. Zool. H:fors/Spec. typ. No. 2524/*Laparocerus semi-/nitens* Har. Lindb.] ZMUH (Coll. Lindberg), Helsinki. Paralectotypes: 5 exx, partially mutilated [gen.38], same data. ZMUH (Coll. Lindberg), Helsinki. 1♂, laterally dented, same data. MNHN (Coll. Roudier), Paris. 1 ex, same data NR (Coll. General), Stockholm.

Laparocerus separandus Lindberg, 1953

Laparocerus separandus Lindberg 1953, p 14, Figure 10 (aedeagus).

Type locality. Cruz de Tejeda, Gran Canaria, Canary Islands.

Holotype: 1♂, missing right anterior leg and left posterior tarsus [Gran Canaria/Cruz de Tejeda 1450 m/6.3.50 Lindberg] [*Laparocereus/wollastoni m./Harald Lindb. det*] [Mus. Zool. H:fors/Spec. typ. No. 2614/*Laparocerus/separandus m.*]. ZMUH (Coll. Lindberg),

Helsinki. Aedeagus on additional card. Paratypes: 5 exx, same data. ZMUH (Coll. Lindberg), Helsinki.

Remarks. Roudier (1957a, p 22) treated *separandus* as a subspecies of *lepidopterus* Wollaston, 1864.

Laparocerus seniculus* Wollaston, 1864

Laparocerus seniculus Wollaston 1864, p 353.

Type locality. La Isleta (Las Palmas), Gran Canaria, Canary Islands.

Lectotype: 1♀, without head, leg. Wollaston, La Isleta [L.P.Isl.] [Type] [*seniculus*, Woll.]. NHM, London. Paralectotype: 1♀, without head and prothorax, same data

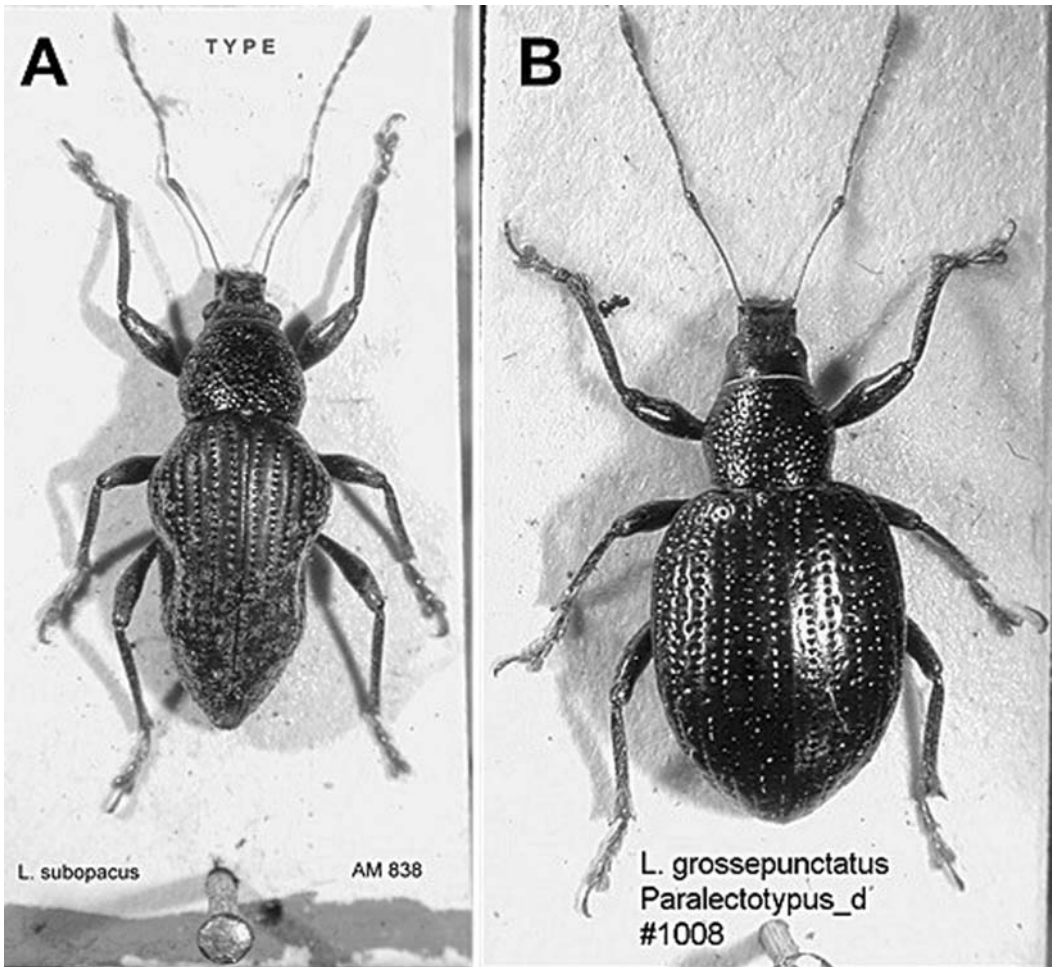


Figure 4. (A) Lectotype of *Laparocerus subopacus* Wollaston, 1865; (B) paralectotype of *Laparocerus grossepunctatus* Wollaston, 1864.

[Hope Entomological/Collections/Wollaston Coll.] [*Laparocerus/seniculus* Woll.]. UMO, Oxford.

Remarks. Roudier (1957, p 24) treated *seniculus* Wollaston, 1864, as a junior synonym of *squamosus* (Brullé, 1839).

Laparocerus simplex (Brullé), 1839*

Otiorynchus simplex Brullé 1839, p 71.

Type locality. Tenerife, Canary Islands.

Lectotype: 1♀ [*simplex/Br*] [Type] [Museum Paris/Canaries/Webb et Berthelot/3-41]. MNHN (Coll. Générale), Paris. Specimen pinned through and a blue circular label just below the insect. Paralectotype: 1♀ [*simplex/Br*] [3.41] [Paratype] [Museum Paris/Canaries/Webb et Berthelot/3-41]. MNHN (Coll. Générale), Paris.

Remarks. Wollaston (1864, p 338) treated *Laparocerus simplex* (Brullé, 1839) as a junior synonym of *Laparocerus tetricus* (Boheman, 1834).

Laparocerus squamosus (Brullé, 1839)

Otiorynchus squamosus Brullé 1839, p 71.

Type locality. Gran Canaria (northern side), Canary Islands.

Lectotype: 1♂, without head and prothorax, and only three legs. Ventriles and aedeagus glued on the same mounting card (by A. Roudier). Webb and Berthelot leg. (*ex litt.*). MNHN (Coll. Générale), Paris. Paralectotypes: 3♀♀, much rubbed; some tarsi missing; two of them with ventrites on additional card. The specimens were originally pinned (pinhole on elytra). Webb and Berthelot leg. MNHN (Coll. Générale), Paris.

Remarks. Brullé (1839) did not mention the island of origin. The species inhabits Gran Canaria, as observed by Roudier (1957a). From the list of carabid species reported by Brullé, one can infer that in the case of Gran Canaria the insects were collected probably during two excursions; one in the vicinity of Las Palmas, and another more to the interior (Tafira, Santa Brígida?), both in the northern side of the island (cf. Machado 1992, p 266 footnote).

Laparocerus subnebulosus (Wollaston, 1854)

Atlantis subnebulosa Wollaston 1864, p 337.

Type locality. El Monte, Gran Canaria, Canary Islands.

Holotype: 1♀, slightly immature. Gran Canaria [E.M. or L.P.] El Monte or La Isleta, Spring 1858, leg. Wollaston (*ex litt.*) [Type] [*Atlantis/subnebulosa*/Woll. type]. NHM, London.

Remarks. Wollaston was not sure about the type locality, either La Isleta or El Monte. Knowing the ecology of the species, El Monte seems to me more plausible, while La Isleta lies just too low. Wollaston (1865, p 337) established the subgenus *Canopus* for four species of Canarian *Atlantis*, *A. subnebulosa* being the first on the list. I fix this species as the type for *Canopus* Wollaston, even though the name is already occupied by *Canopus* Fabricius, 1803, *Canopus* Montfort, 1808, *Canopus* Rafinesque, 1840, *Canopus* Walker, 1855, and *Canopus* Felder, 1861. Alonso-Zarazaga and Lyal (1999) resurrected the name *Amyntas* Wollaston, 1865 for the Canarian subgenus (see *Laparocerus incomptus*).

***Laparocerus subopacus* Wollaston, 1865**

Laparocerus subopacus Wollaston 1865, p 322, Appendix p 52.

Type locality. Monte Forte (=El Cedro), La Gomera, Canary Islands.

Lectotype: 1♂ (red card-line), La Gomera, Monte Forte, Messrs Crotch leg. (*ex litt.*). [Type] [*subopacus*, W.]. NHM, London (Figure 4A). Paralectotypes: not yet localized. Perhaps in the third Wollaston Collection (mainly material from the Messrs Crotch), deposited in the California Academy of Sciences (see Kavanaugh 1979).

Remarks. In the description, Wollaston did not mention the remarkable lateral dents of the abdomen (see Figure 4A). He may have considered them a deformation, but it is the natural habitus of the insect. In Junk and Schenkling's catalogue (Lona 1938) there are two entries for this species: first as *Laparocerus (Laparocerus) opacus* (p 348)—an incorrect subsequent spelling—and second, as *L. subopacus* (p 349).

***Laparocerus sulcirostris* Wollaston, 1864**

Laparocerus sulcirostris Wollaston 1864, p 359.

Type locality. *supra* San Mateo, Gran Canaria, Canary Islands.

Holotype: 1♂, Spring 1858, mountains above San Mateo, leg. Wollaston [S. Mateo] [Type] [*sulcirostris*, Woll.]. MNH, London.

Remarks. Marseul (1872, p 537) proposed the substitution name *Laparocerus canalirostris*, which is an unjustified replacement name. Lona (1938, p 439) places both names, *sulcirostris* and *canalirostris*, as synonyms of *L. subopacus* Wollaston, 1865. This is an obvious error.

***Laparocerus susicus* (Escalera, 1914)**

Cyclobarus susicus Escalera 1914, p 424.

Type locality. Agadir, Morocco.

Lectotype: 1♂ [Marruecos/Añadir/Escalera] [MNCN Madrid], MNCN (Coll. Escalera), Madrid. Paralectotype: 1♂ [Marruecos/Agadir/Escalera] [Cotype/Escalera] [*Cyclobarus*/

susicus Esc.] [*Laparocerus susicus* Esc.] [Muséum Paris/1980/Coll. G. Ruter]. MNHN (Coll. Ruter), Paris. Excluded paralectotype: 1♀ [Agadir/(Maroc)/Escalera] [“Agadir”] [*Cyclobarus/susicus*/Escal. 1914] [Cotype] [Museum Paris/1968/Col. A. Hoffmann]. MNHN (Coll. Hoffmann), Paris. It is a female of *Cyclobarus mskalicus* Escalera, 1914.

Remarks. According to Escalera (1914), the original description of *susicus* was based at least on two specimens (“length. 5–7 mm”) from Agadir, and deposited in the MNCN, Madrid. In the Collection Escalera there are two specimens (damaged by *Anthrenus*) of *Laparocerus* from Mogador collected in 1906, a different locality, hence not syntypes, and one male specimen in good conditions, with a printed locality label reading “Agadir”, but no further identification label. This specimen was located misplaced in the Collection with other curculionids. Moreover, some of Escalera’s specimens went to Paris, apparently in the years 1968 and 1980. In the Museum National d’Histoire Naturelle there are two specimens labelled as “cotypes” of *Cyclobarus susicus*, both from Agadir, but with different sets of labels and mounted on different types of cards. One of the syntypes (Figure 6A), kept in Coll. Ruter (Muséum Paris, 1980), is a male of a *Laparocerus* and was studied by Ruter, who consequently transferred the species to that genus and provided a line drawing of its habitus (Ruter 1945). The second syntype (Figure 6B), kept in Coll. Hoffmann (Muséum Paris, 1968) is a *Cyclobarus*. It seems that Escalera described *susicus* based on specimens pertaining to different species and genera. The textual description applies exactly to the *Laparocerus*, but the only syntype that bears at least one handwritten label of Escalera [“Agadir”] is the *Cyclobarus* (Figure 6B, second label from top). To designate this latter specimen as the name-bearing type (lectotype) would have rather cumbersome implications: firstly, a redescription of *susicus* would be necessary; secondly, *Cyclobarus susicus* would enter in synonymy with *Cyclobarus mskalicus* Escalera, 1914 (J. Pelletier, personal communication); thirdly, a new name would be needed for the *Laparocerus* species, despite the fact that it has been described as *Cyclomaurus tessellatus* Hustache, 1932 (as *Laparocerus* it enters in secondary homonymy with *Laparocerus tessellatus* (Brullé, 1839)). A more practical solution for stability is to exclude the *Cyclobarus* specimen, and to designate the *Laparocerus* male from Agadir kept in Madrid as lectotype of *susicus* Escalera, 1914.

Laparocerus tectus* Marseul, 1872

Laparocerus (*Laparocerus*) *tectus* Marseul 1872, p 535.

Remarks. This is an invalid replacement name for *Laparocerus indutus* Wollaston, 1865, as already recognized in Winkler (1932, p 1448).

Type material. Its type material is the same as for the replaced species name.

***Laparocerus tenellus* Wollaston, 1864**

Laparocerus tenellus Wollaston 1864, p 362.

Type locality. Los Organos (Agua Mansa), Tenerife, Canary Islands.

Lectotype: 1♂, without right antennal flagellum and right hind leg. Spring 1858, Organo Rocks, Agua Mansa, leg. Wollaston (*ex litt.*) [Type] [*Laparocerus/tenellus*/Woll. type].

NHM, London. Paralectotype: 1♀, without left posterior tibia; same data [Hope Entomological/Collections/Wollaston Coll.] [*Laparocerus/tenellus* Woll.]. UMO, Oxford.

Laparocerus tessellatus (Brullé, 1839)

Omius tessellatus Brullé 1839, p 72, Plate I Figure 15 (published 1840).

Type locality. Chinobre (Anaga), Tenerife, Canary Islands (UTM 28R 038495 315950).

Neotype: 1♂ [Tenerife, Islas Canarias/Anaga: Pista a Chinobre, 700 m./19-2-2000 partôut/ # 179, leg. A. Machado] [NEOTYPUS/*Omius tessellatus*/Brullé 1839/des. A. Machado, 2005]. TFMG (reg. CO-15503), Santa Cruz de Tenerife (Figure 9A).

Remarks. Only the identification label of *Omius tessellatus* and the hole of a pin are in the box containing the material of Webb and Berthelot from the Canaries, deposited in the

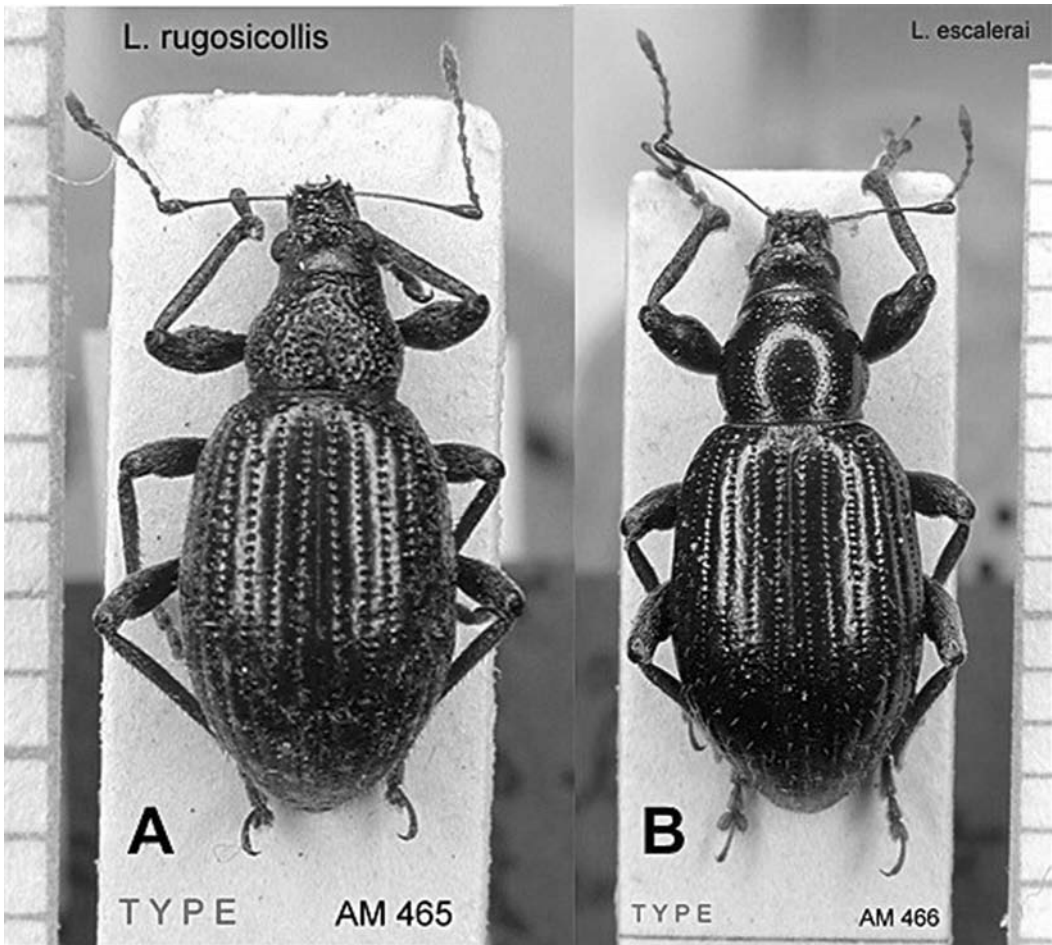


Figure 5. (A) Holotype of *Laparocerus rugosicollis* Uyttenboogaart, 1937; (B) holotype of *Laparocerus escalerae* Uyttenboogaart, 1937.

Coll. Générale at the Museum National d'Histoire Naturelle, at Paris. The curator Mlle Hélène Perrin and I were not able to find it in other collections. The type is apparently lost. Brullé (1839) did not mention an island of origin, but Wollaston (1864, p 360) associated Brullé's brief description to populations from Tenerife, El Hierro, and La Palma (Wollaston does not mention the type of Brullé, and he studied the coleoptera of Webb and Berthelot at Paris (perhaps already lost?). This interpretation of *L. tessellatus* has been accepted up to the present date. However, unpublished molecular data reveal that each island has a differentiated population, and, to a lesser extent, the same happens within Tenerife. Therefore it is highly necessary to fix the concept of this taxon by establishing a neotype. From the set of Teneriffan carabid species provided by Webb and Berthelot, it can be deduced that they all were collected in the mountains of Anaga, probably Monte Aguirre, just above the capital Santa Cruz de Tenerife (Machado 1992, p 266). I have selected a specimen from the interior of Anaga (Chinobre) as the neotype. The punctuation of the pronotum is much weaker and superficial, and the elytra more globose (particularly in the females).

Laparocerus tessellatus* (Hustache, 1932)

Cyclomaurus tessellatus Hustache 1932, p 43.

Type locality. Aglou-Tiznit, Sous, SW Morocco.

Holotype: 1 ex [Tiznit/(Maroc) Antoine/Sous XII-30] [*Cyclomaurus/tessellatus*/Coll. Hoffmann]. MNHN, (Coll. Hofmann), Paris. The original identification label was probably removed by Hoffman. *Paratypes:* 3 exx [Tiznit/(Maroc) Antoine/Sous XII-30] [Paratype] [Muséum Paris/Coll. Antoine]; 1 ex, same labels plus [*Cyclomaurus/tessellatus* m./Hustache det.]; 4 exx [Sous Aglou Maroc (Antoine)]. MNHN (Coll. Antoine), Paris. 1 ex [Aglou Sous XII (Maroc) Antoine]. MNHN (Coll. Hoffman), Paris.

Remarks. Kocher (1961, p 56) does not see differences between this species and specimens of *L. susicus* from the same region (Foum-Assaka) in SW Morocco. This synonymy has been confirmed by my colleague Jean Pelletier (personal communication) who compared the type with specimens of *Laparocerus susicus* I sent to him (nov. syn.). Moreover, *Laparocerus tessellatus* (Hustache, 1932) is a secondary homonymy of *Laparocerus tessellatus* (Brullé, 1839), but there is no need of a replacement name.

***Laparocerus tetricus* (Boheman, 1834)**

Eremnus tetricus Boheman in Schönherr 1834, p 542.

Type locality. Tenerife, Canary Islands.

Lectotype: 1♂ [Otiorrhynchus/ex Prof. Teneriff./V. Winthem] pinned under “*Eremnus tetricus*”. NR (Coll. Schönherr), Stockholm. Prothorax has been glued back (Figure 8B). *Paralectotypes:* 1♂ [Tenériffe] [Paratype] [833]; 1 ex [494] [*tetricus*/Schönh./Canar.], both pinned under “Type/*Laparocerus tetriculus* Schhr. 942”. NR (Coll. Chevrolat), Stockholm.

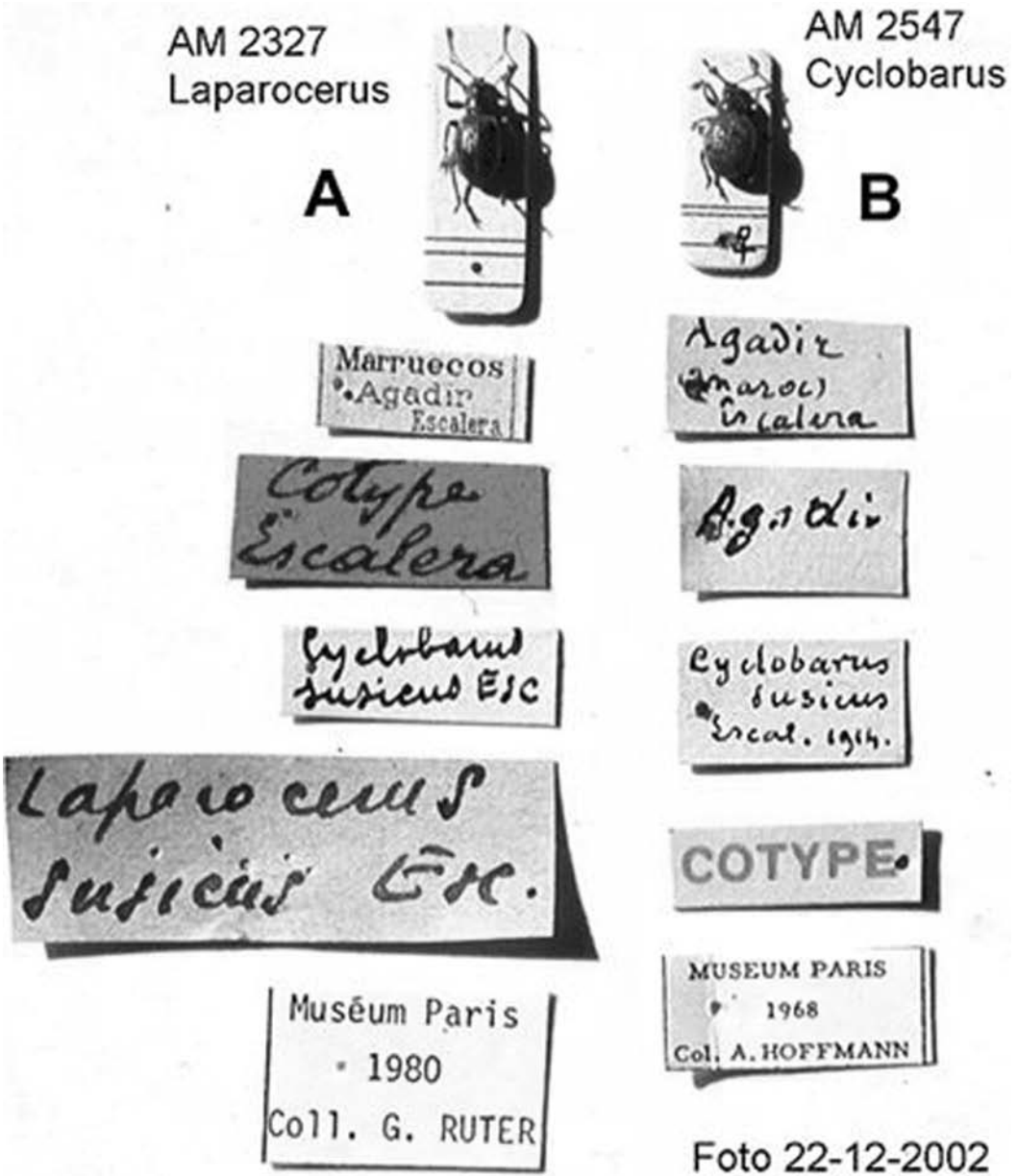


Figure 6. Type series of *Cyclobarus susicus* Escalera, 1914. (A) Paralectotype, with labels; (B) excluded paralectotype, with labels. Second label from the top is in Escalera's handwriting.

Remarks. The numbers attached to the paralectotypes may relate to localities in Tenerife, but if that is the case, no further information is available. The species is common in lower eastern localities of the island, like Santa Cruz, Güímar, or Candelaria.

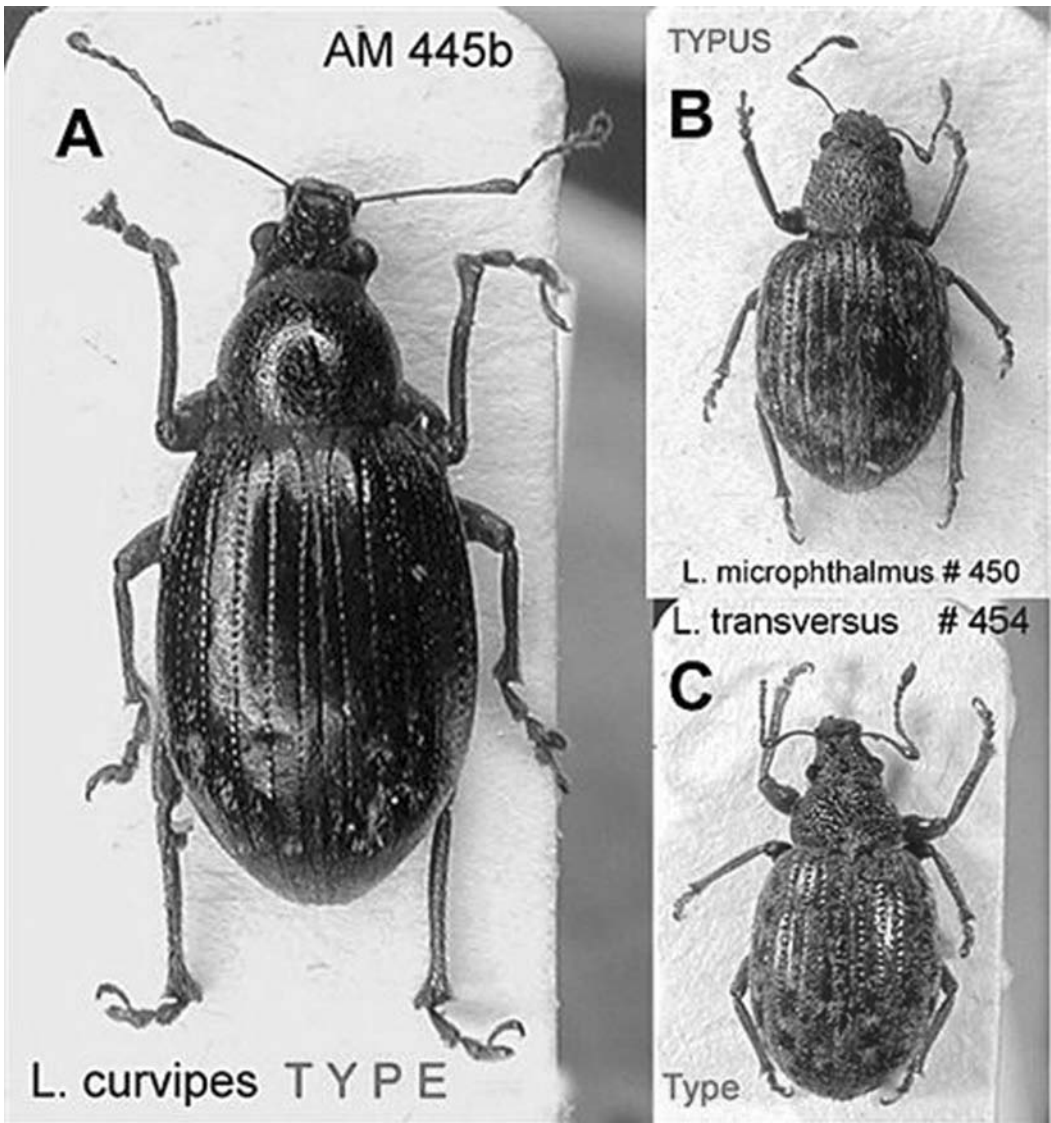


Figure 7. (A) Paratype of *Laparocerus curvipes* Lindberg, 1950; (B) paratype of *Laparocerus microphthalmus* Lindberg, 1950; (C) paratype of *Laparocerus transversus* Lindberg, 1950.

Laparocerus tibialis (Wollaston, 1864)

Atlantis tibialis Wollaston 1864, p 338.

Type locality. Puerto de la Cruz, Tenerife, Canary Islands.

Lectotype: 1♂, Tenerife, Puerto of Orotava (=Puerto de la Cruz), leg. Wollaston (*ex litt.*). [Type] [*tibialis*, Woll.]. MNH, London. Paralectotypes: 1♂, 1♀ (one immature), Tenerife, same locality; 1 ex (green card-line), La Palma, *supra* Santa Cruz, leg. Wollaston (*ex litt.*). MNH, London.

Remarks. Having recognized that *Lichenophagus incomptus* Wollaston, 1865 is a good *Laparocerus* species, the reference of *L. tibialis* as the valid name of the type species of the subgenus *Amyntas* Wollaston, 1864 (see Alonso-Zarazaga and Lyal 1999) is no more suitable.

***Laparocerus transversus* Lindberg, 1950**

Laparocerus transversus Lindberg 1950, p 16.

Type locality. Monte de Los Silos (=del Agua), Tenerife, Canary Islands.

Holotype: 1♀, missing right antennae, anterior leg, and intermediate tarsus [Tenerife/Monte Agua/26.2.49 Lindberg] [*Laparocerus/transversus* m./Harald Lindb. det] [Mus. Zool. H:fors/Spec. typ. No. 2522/*Laparocerus trans-/versus* Har. Lindb.]. ZMUH (Coll. Lindberg), Helsinki. Paratypes: 1 ex [Tenerife. supra Adeje/Questa d.l. Pasos 1200 m/25.2.50 Lindberg]. ZMUH (Coll. Lindberg), Helsinki (Figure 7C). 1 ex, same data. MNHN (Coll. Atlantides), Paris. 1 ex, same data. NHM (General Coll.), London. 1 ex, same data. NR (Coll. General), Stockholm. 2 exx [Tenerife. Valle de/Masca pars super. 1000 m/21.2.50 Lindberg]. ZMUH (Coll. Lindberg), Helsinki. 1♂ [gen. 37], 1♀, same data. MNHN (Coll. Roudier), Paris. 1 ex [Tenerife Valle/Santiago 1000 m/21-2-50 Lindberg]. NHM (General Coll.), London. 1 ex, same data. NR (Coll. General), Stockholm.

***Laparocerus transversus buenavistae* Roudier, 1957**

Laparocerus transversus buenavistae Roudier 1957a, p 29, 31, Figure 8 (aedeagus).

Type locality. Buenavista, Tenerife, Canary Islands.

Holotype: 1♂ [gen. 26] [Buenavista/14-4-50/C. González] [Sous pierres] [Buenavista] [Type] [*Laparocerus/transversus* H.Lind./subsp. *buenavistae* nov./A. Roudier det]. MNHN (Coll. Générale), Paris.

Remarks. The holotype is deposited in Paris and not in the Coll. C. González (Madrid) as published by Roudier (1957a).

Laparocerus tumens* Marseul, 1872

Laparocerus (Laparocerus) tumens Marseul 1872, p 526.

Remarks. This is an invalid replacement name for *Laparocerus inflatus* Wollaston, 1865, as already recognized in Winkler (1932, p 1447).

Type material. Its type material is the same as for the replaced species name.

***Laparocerus undatus* Wollaston, 1864**

Laparocerus undatus Wollaston 1864, p 342.

Type locality. Vueltas de Taganana, Tenerife, Canary Islands.

Lectotype: 1♀, May 1859, mountains above Taganana, leg. Wollaston (*ex litt.*). [Tm./dm] [Type] [*undatus*, Woll.]. MNH, London. Paratypes: 1♀ [Tag.], same data. MNH, London. 1♀, same data [Hope Entomological/Collections/Wollaston Coll.] [*Laparocerus/aethiops* Woll.]. UMO, Oxford.

Remarks. The original type series was composed of four females.

Laparocerus undulatus Wollaston, 1862

Laparocerus undulatus Wollaston 1862, p 289.

Type locality. Fanal, Island of Madeira.

Holotype: 1♂ lacking right intermediate leg, Madeira, Fanal, leg. Wollaston (*ex litt.*) [Type] [*undulatus*, W.]. The insect has a pinhole through the right elytron.

Laparocerus uyttendoogaarti Zumpt, 1940

Laparocerus (Canopus) uyttendoogaarti Zumpt, in Uyttendoogaart and Zumpt 1940, p 677.

Type locality. Mountains of Anaga, Tenerife, Canary Islands.

Holotype: 1♂ [Type] [genitalia] [♂] [Anaga Gebirge/Tenerife/G. Frey III. 33.] [Type] [*Laparocerus*/F. Zumpt det. 38/*uyttendoogaarti m.*]. NMB (Coll. Frey), Basel. Paratypes: 1♀ [Alotype]+9 exx [Paratype], same data. NMB (Coll. Frey), Basel. 1♀ [Tenerife/San Andrés/28.2.28//273] [Kotype] [*Laparocerus*/F. Zumpt det. 1928/*uyttendoogaarti m.*]. NMNHN (Coll. Uyttendoogaart), Leiden.

Remarks. According to Zumpt (Uyttendoogaart and Zumpt 1940), the type series was formed by 12 exx from the Anaga Mountains and 4 exx from San Andrés. Five paratypes have not been located.

Laparocerus velatus Marseul, 1872*

Laparocerus (Laparocerus) velatus Marseul 1872, p 532.

Remarks. This is an invalid replacement name for *Laparocerus vestitus* Wollaston, 1865, as already recognized in Winkler (1932, p 1448).

Type material. Its type material is the same as for the replaced species name.

Laparocerus ventrosus (Wollaston, 1854)

Omius ventrosus Wollaston 1854, p 382.

Type locality. Pico da Silva, Island of Madeira.

Lectotype: ♂, Madeira [644] Pico da Silva, leg. Wollaston. [Typus] [*Omius ventrosus*/Woll. type]. MNH, London. Paralectotypes: 12 exx, November 1848 to April 1849, Madeira:

Pico da Silva, Pouso-Fonte das Moças, Pico dos Arieros, *supra* Alegria, *supra* San Roque (*ex litt.*), leg. Wollaston. MNH, London. 1 ex [105], leg. Wollaston. UMO, Oxford. 1 ex [Dohrn] [Madera.] [typus] [Coll. Mannerh.] [*Omiast/ventrosus*/Wollaston]. ZMUH (Coll. Lindberg), Helsinki. 5 exx (Coll. Oberthür-Wollaston), 2 exx (Coll. Générale-Clerc), Madeira, leg. Wollaston. MNHN, Paris.

Laparocerus vespertinus (Wollaston, 1854)

Atlantis vespertinus Wollaston 1854, p 371, Table 7, Figure 4 (habitus).

Type locality. The mountain ridge Fonte das Moças–Pico do Arieiro–Pico da Lagoa, Island of Madeira.

Lectotype: 1♂, Madeira, Fonte das Moças–Pico do Arieiro–Pico da Lagoa, leg. Wollaston (*ex litt.*). [Type] [*Atlantis/vespertinus*/Woll. type]. MNH, London. Paralectotypes: 7♂♂, 9♀♀, same data. MNH, London. 1 ex [182]; 1 ex [814]; 2 exx [786], 7 exx [247], San Antonio da Serra. UMO, Oxford. 1 ex, same data. MNHN (Coll. Oberthür-Wollaston), Paris. 1 ex [247] (Coll. Kraatz), 1 ex (Coll. Stierlin), leg. Wollaston. DEI, Müncheberg.

Laparocerus vestitus Wollaston, 1864

Laparocerus vestitus Wollaston 1864, p 358.

Type locality. Puerto de la Cruz, Tenerife, Canary Islands.

Lectotype: 1♂ [O] Puerto Orotava=Puerto de La Cruz, leg. Wollaston [Type] [*Laparocerus/vestitus*/Woll. type]. MNH, London. Paralectotypes: 6 exx, same data. MNH, London. 6 exx, same data [Hope Entomological/Collections/Wollaston Coll.] [*Laparocerus/vestitus* Woll.]. UMO, Oxford. 2 exx, same data. MNHN (Coll. Oberthür-Wollaston), Paris.

Remarks. Marseul (1872, p 532) proposed for this species the unjustified substitution name *Laparocerus velatus*.

Laparocerus vestitus affinis Wollaston, 1864

Laparocerus vestitus var. *β affinis* Wollaston 1864, p 358.

Type locality. Santa Cruz, Tenerife, Canary Islands.

Lectotype: 1 ex [β], Tenerife, Santa Cruz, leg. Wollaston (*ex litt.*). MNH, London. Paralectotype: 4 exx, same data. MNH, London. 6 exx [β], several immature, same data [Hope Entomological/Collections/Wollaston Coll.] [*Laparocerus/vestitus* Woll.]. UMO, Oxford. 2 exx [β], same data. MNHN (Coll. Oberthür-Wollaston), Paris.

Laparocerus vicinus Lindberg, 1953

Laparocerus vicinus Lindberg 1953, p 15, Figure 13 (aedeagus).

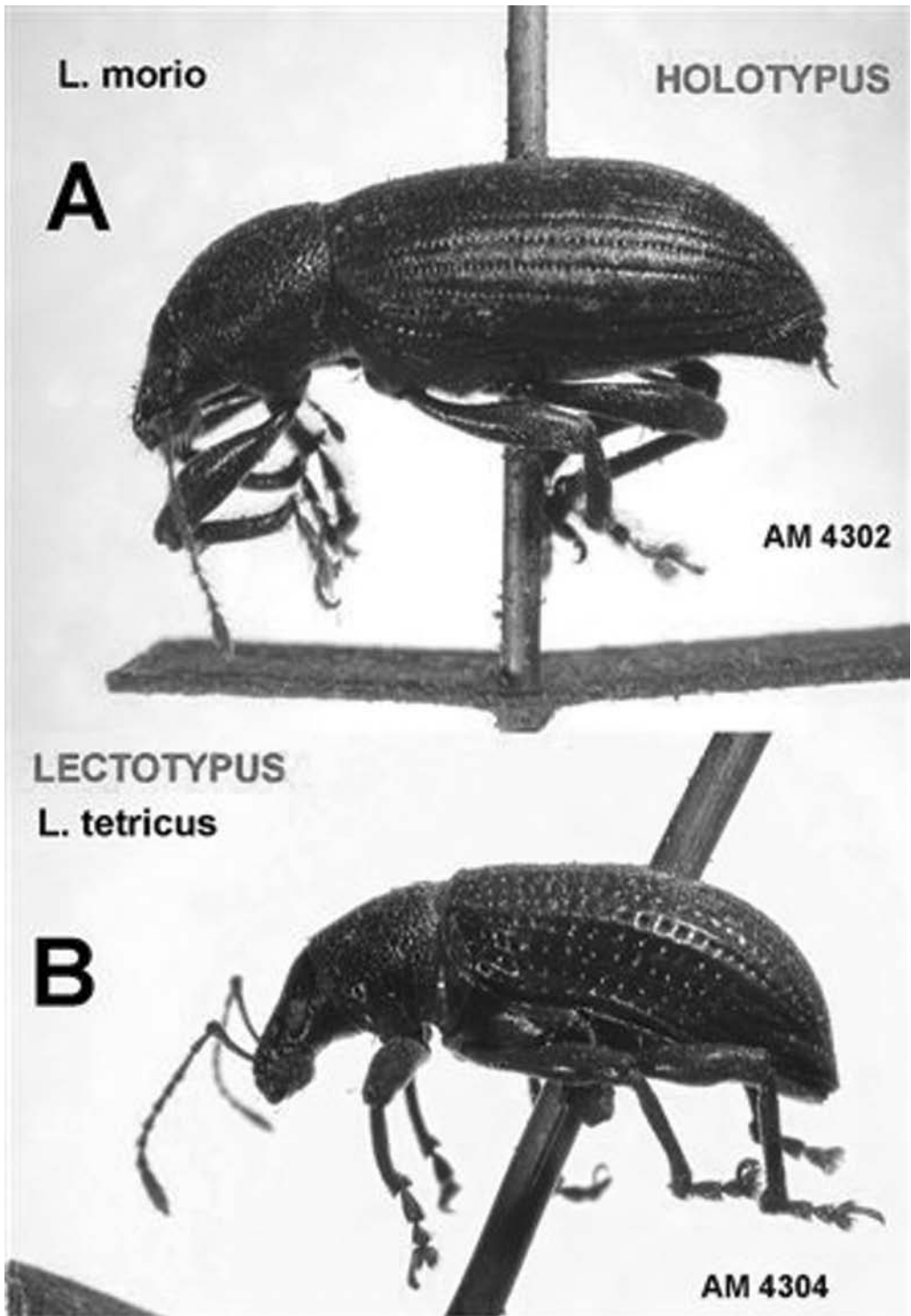


Figure 8. (A) Holotype of *Laparocerus morio* Boheman, 1834; (B) lectotype of *Laparocerus tetricus* (Boheman, 1834).

L. tessellatus

A



NEOTYPUS
AM 169

L. incomptus

B



NEOTYPUS
AM 4127

Figure 9. (A) Neotype of *Omias tessellatus* Brullé, 1839; (B) neotype of *Lichenophagus incomptus* Wollaston, 1865.

Type locality. Cruz de Tejeda, Gran Canaria, Canary Islands.

Holotype: 1♂ missing left anterior tibia and right intermediate tarsus [Gran Canaria/Cruz de Tejeda 1450 m/12.3.50 Lindberg] [♂] [*Laparocereus/vicinus* m./Harald Lindb. det] [Mus. Zool. H:fors/Spec. typ. No.2617/*Laparoc. vicinus*/Har. Lindb.]. Abdomen and aedeagus on additional card. ZMUH (Coll. Lindberg), Helsinki. Paratypes: 2 exx [Gran Canaria/Cruz de Tejeda 1450 m/6.3.50 Lindberg], 5 exx, same data except 8 March 1950. ZMUH (Coll. Lindberg), Helsinki. 1 ex [Gran Canaria/Cruz de Tejeda 1450 m/8.3.50 Lindberg]. MNHN (Coll. Roudier), Paris. 1 ex, same data, NHM (General Coll.), London.

Laparocerus waterhousei (Wollaston, 1854)

Omius Waterhousei Wollaston 1854, p 384, Table 7, Figure 8 (habitus).

Type locality. Cruzinhas, Island of Madeira.

Lectotype: 1 ex [457]=Madeira, Cruzinhas, leg. Wollaston. MNH, London (Figure 3C). Paralectotypes: 4 exx [457] Cruzinhas; 3 exx [733] Curral das Freiras; 2 exx [486], 21 June 1850, Lombo das Vacas, leg. Wollaston. MNH, London. 4 exx [448]; 5 exx [583]; 4 exx [767], leg. Wollaston. UMO, Oxford. 1 ex [Dohrn] [*Madeira.*] [Typus] [Coll. Mannerh.] [*Omius/Waterhousei/Wollaston*]. ZMUH (Coll. Lindberg), Helsinki. 3 exx, Curral das Freiras, leg. Wollaston. MNHN (Coll. Oberthür-Wollaston), Paris.

Remarks. Other localities of the type series mentioned by Wollaston (1854) are: Alegria-São Roque, Fanal and Feijã de Córte. However, the specimens from Dezerta Grande were separated as var. β and are not syntypes (9 exx in MNH, London; 3 exx in MNHN, Paris).

Laparocerus wollastoni Heer, 1857**

Laparocerus Wollastoni Heer 1857, p 14, Plate 2, Figure 3 (elytra).

Type locality. St Jorge (late Pliocene), Island of Madeira.

Holotype: 1 ex, only elytra (fossil), St Jorge, Madeira, leg. Ch. Lyell and G. Hartung (*ex litt.*), location unknown.

Remarks. This species was described as a fossil in the context of a study of fossil plants from Madeira. The plant fossil collection of Heer from Madeira is housed in the Geological Collection of the *Eidgenössische Technische Hochschule* in Zurich. The original fossil leaves depicted in the same plate where *L. wollastoni* is illustrated, were located by Dr Milena Pika-Biolzi in a drawer labelled “St. Jorge in Madeira”. Nonetheless, she confirmed to me (personal communication) that the elytra are unfortunately not present in that drawer and cannot be found elsewhere in their collections. One has to assume that its whereabouts are presently unknown. With the figure and short description of the elytra provided by Heer, there is not much to conclude. The size, shape, and minor details provided (rugosity, etc.) point to a male *L. morio* or *L. chaoensis*. Heer (1857) explicitly wrote that *L. wollastoni* is close to *L. morio*, but should be separated from this species. However, we do not know to which extent Heer knew the other species of Madeiran *Laparocerus*. Only if the holotype appears or further fossil specimens from St Jorge become available, could one clarify the concept of *L. wollastoni* Heer. For the time being, it has to be considered a *nomen dubium*.

Laparocerus wollastoni Marseul, 1872*

Laparocerus (Laparocerus) wollastoni Marseul 1872, p 521.

Remarks. This is an invalid replacement name for *Laparocerus scapularis* Wollaston, 1864, as already recognized in Winkler (1932, p 1447). It is also homonymous with *wollastoni* Heer, 1857, which has precedence.

Type material. Its type material is the same as for the replaced species name.

Laparocerus zarazagai García and Oromí, 1997

Laparocerus zarazagai García and Oromí 1997, p 154, Figures 1, 2 (habitus, aedeagus).

Type locality. Montaña Tagoja, La Palma, Canary Islands.

Holotype: 1♂ [La Palma/Mña. Tagoja/20-2-1993/Rafael G.B.] [Holotipo/*Laparocerus zarazagai* n. sp. García and Oromí]. ULL, La Laguna. Paratypes: 1♂, 7 February 1991; 1♂, 18 May 1991; 1♂, 28 December 1992; 1♀, 25 August 1993; 1♀, 18 March 1994, Montaña Tagoja, leg. R. García. RGB, Santa Cruz de la Palma. 1♂, 20 February 1993; 1♂, 18 March 1994, Montaña Tagoja, leg. García. 1♀, 1 May 1989, Cumbre Nueva, leg. A. L. Medina. ULL, La Laguna. 1♂, 20 February 1993, Montaña Tagoja, leg. R. García. TFMC, Santa Cruz de Tenerife. 1♀, 18 March 1995, Montaña Tagoja, leg. R. García. AMC, La Laguna.

Results

The present revision accounts for 131 available *Laparocerus* names (species and subspecies), of which 105 are valid (including *L. incomptus* (Wollaston, 1864), bon. spec.). The total number of invalid names is 24, with the following breakdown: two cases of primary homonymy, two of secondary homonymy, 11 cases of objective synonymy, 11 of subjective synonymy (seven established here). All cases of objective synonymy originated in unjustified replacement names due to Marseul (1872), who considered homonymy to happen within the same tribe, and not just within the same genus. Only two cases—*Laparocerus piceus* Boheman, 1834 and *Laparocerus wollastoni* Heer, 1857—were not possible to solve, and are proposed as *nomina dubia*. As both names have not been applied to any taxon since their description long before 1899, there is no risk for universality and stability of nomenclature.

A total of 52 lectotypes have been designated as well as neotypes for *Omius tessellatus* Brullé, 1839 and *Lichenophagus incomptus* Wollaston, 1864. These two taxa and *L. wollastoni* Heer, 1857 are the only cases where the original type material has not been located and is presumably lost.

List of valid names

It is important to insist that the species or subspecies status of the valid taxa has not yet been revised. The list that follows reflects the current status, including treatments commented in the main text (the few cases are here underlined>).

abditus Roudier, 1963
aenescens (Wollaston, 1854)
aethiops Wollaston, 1864
alluaudi Uyttenboogaart, 1940
angustulus (Wollaston, 1857)

azoricus Drouet, 1859
bacalladoi Machado, 2005
bellus Roudier, 1957
bolivari Uyttenboogaart, 1937
brunneus Lindberg, 1953

- calcatrix* (Wollaston, 1854)
canariensis Boheman, 1842
clavatus (Wollaston, 1854)
colasi Roudier, 1958
compactus Wollaston, 1864
crassifrons Wollaston, 1863
crassirostris Wollaston, 1864
crassus Roudier, 1957
curvipes Lindberg, 1950
curvipes *spanoli* Roudier, 1954
dacilae García, 1998
debilis Wollaston, 1865
dispar Wollaston, 1864
dissimilis Lindberg, 1950
distortus (Wollaston, 1854)
eliasenae (Uytenboogaart, 1929)
ellipticus Wollaston, 1863
excavatus Wollaston, 1863
excavatus lugubris Wollaston 1864
excelsus (Wollaston, 1854)
fernandezii Roudier, 1957
freyi Uytenboogaart, 1940
garretai Uytenboogaart, 1940
gomerensis Lindberg, 1953
gracilis Wollaston, 1864
grayanus (Wollaston, 1865)
grossepunctatus Wollaston, 1864
grossepunctatus combrecitensis Roudier, 1957
grossepunctatus escaleraii Uytenboogaart, 1937
grossepunctatus tenuispunctatus Roudier, 1957
hirtus Wollaston, 1864
inaequalis Wollaston, 1863
inaequalis globulipennis Wollaston, 1864
incomptus (Wollaston, 1865) bon. sp.
inconspectus Roudier, 1957
inconstans (Wollaston, 1854)
inflatus Wollaston, 1865
instabilis (Wollaston, 1854)
laevis Roudier, 1957
laevis politus Roudier, 1957
lamellipes (Wollaston, 1854)
lanatus (Wollaston, 1854)
lauripotens (Wollaston, 1854)
lepidopterus Wollaston, 1864
lepidopterus depilis Roudier, 1957
lepidopterus pecoudi Roudier, 1957
lepidopterus separandus Lindberg, 1953
lindbergi Roudier, 1963
longiclava Lindberg, 1953
mateui Roudier, 1954
mendax (Wollaston, 1854)
mendicus Wollaston, 1864
morio Boheman, 1834
morio cevadae Roudier, 1961
morio chaoensis Uytenboogaart, 1940
navicularis (Wollaston, 1854)
noctivagans (Wollaston, 1854)
obscurus Wollaston, 1864
obsitus Wollaston, 1864
obsitus microphthalmus Lindberg, 1950
obtriangularis Wollaston, 1864
occidentalis Wollaston, 1864
palmensis Lindberg, 1953
propinquus Lindberg, 1953
puncticollis Wollaston, 1864
puncticollis indutus Wollaston, 1865
rasmus Wollaston, 1864
rugosicollis Uytenboogaart, 1937
ruteri Roudier, 1957
sanchezi Roudier, 1957
scapularis Wollaston, 1864
schaumii (Wollaston, 1854)
sculptus (Brullé, 1839)
seminitens Lindberg, 1950
squamosus (Brullé, 1839)
subnebulosus (Wollaston, 1864)
subopacus Wollaston, 1865
sulcirostris Wollaston, 1864
susicus (Escalera, 1914)
tenellus Wollaston, 1864
tessellatus (Brullé, 1839)
tetricus (Boheman, 1834)
tibialis (Wollaston, 1864)
transversus Lindberg, 1950
transversus buenavistae Roudier, 1957
undatus Wollaston, 1864
undulatus Wollaston, 1862
uytenboogaarti Zumpt, 1940
ventrosus (Wollaston, 1854)
vespertinus (Wollaston, 1854)
vestitus Wollaston, 1864
vestitus affinis Wollaston, 1864
vicinus Lindberg, 1953
waterhousei (Wollaston, 1854)
zarazagai García and Oromí, 1997

List of invalid names

angustulus (Wollaston, 1863), non Wollaston, 1857. Secondary homonymy.
australis (Wollaston, 1854)=*lauripotens* (Wollaston, 1854). Subjective synonymy.
bellopterus Marseul, 1872=*lepidopterus* Wollaston, 1865. Objective synonymy.
calcator Marseul, 1872=*calcatrrix* (Wollaston, 1854). Objective synonymy.
canalirostris Marseul, 1872=*sulcirostris* Wollaston, 1865. Objective synonymy.
cymbula Roudier, 1957=*eliasenae* Uyttenboogaart, 1929. Subjective synonymy (n. syn).
doramasensis Uyttenboogaart, 1929=*hirtus* Wollaston, 1854. Subjective synonymy (n. syn).
forae (Wollaston, 1854)=*schaumii* (Wollaston, 1854). Subjective synonymy.
globosipennis Marseul, 1872=*globulipennis* Wollaston, 1864. Objective synonymy.
gomeracola Marseul, 1872=*gracilis* Wollaston 1864. Objective synonymy.
longehirtus Roudier, 1957=*escalerae* Uyttenboogaart, 1937. Subjective synonymy (n. syn).
palmensis Roudier, 1957, non *palmensis* Lindberg, 1953. Primary homonymy.
nitidirostris Roudier, 1957=*sanchezi* Roudier, 1957. Subjective synonymy (n. syn).
obesulus Desbrochers, 1904=*morio* Boheman, 1834. Subjective synonymy (n. syn).
obscurellus Marseul, 1872=*obscurus* Wollaston, 1865. Objective synonymy.
persitus Marseul, 1872=*obsitus* Wollaston, 1865. Objective synonymy.
seniculus Wollaston, 1864=*squamosus* (Brullé, 1839). Subjective synonymy.
simplex (Brullé, 1839)=*tetricus* (Boheman, 1834). Subjective synonymy.
tectus Marseul, 1872=*indutus* Wollaston, 1865. Objective synonymy.
tessellatus (Hustache, 1932) (non Brullé, 1839)=*susicus* (Escalera, 1914). Subjective synonymy (n. syn) and secondary homonymy.
tumens Marseul, 1872=*inflatus* Wollaston, 1865. Objective synonymy.
vandeli Roudier, 1958=*chaoensis* Uyttenboogaart, 1940. Subjective synonymy (n. syn).
velatus Marseul, 1872=*vestitus* Wollaston, 1865. Objective synonymy.
wollastoni Marseul, 1872 (non Heer, 1857)=*scapularis* Wollaston, 1864. Objective synonymy and primary homonymy.

List of dubious species

piceus Boheman, 1834. *Nomen dubium*.
wollastoni Heer, 1857. *Nomen dubium*.

List of type species of subgenera of Laparocerus

The type species of subgenera at present assigned to *Laparocerus* are here listed. Those subgenera marked with an asterisk (*) are invalid due to homonymy. The names *Wollastonia* Uyttenboogaart, 1936 and *Wollastonicerus* Uyttenboogaart, 1937 are not listed as they never received a type-species designation, and are not available (see Alonso-Zarazaga and Lyal 1999).

Laparocerus azoricus Drouet, 1859 of *Drouetius* Méquignon, 1942.

Laparocerus canariensis Boheman, 1843 of *Amphora** Wollaston 1864 (non Cumberland, 1826).

Laparocerus canariensis Boheman, 1843 of *Guanchotrox* Alonso-Zarazaga and Lyal, 1999.

Cyphoscelis distorta Wollaston, 1854 of *Cyphoscelis* Wollaston, 1854.

Laparocerus cymbula Roudier, 1957 (= *eliasenae* Uyttenboogaart, 1940) of *Pecoudius* Roudier, 1957.

Lichenophagus incomptus (Wollaston, 1865) of *Amyntas* Wollaston, 1865.

Atlantis lamellipes Wollaston, 1854 of *Atlantis* Wollaston, 1854.

Laparocerus morio Boheman, 1834 of *Laparocerus* Schönherr, 1834.

Otiorhynchus sculptus Brullé, 1839 of *Machadotrox* Alonso-Zarazaga and Lyal, 1999.

Atlantis subnebulosa Wollaston, 1864, of *Canopus** Wollaston, 1864 (non Fabricius, 1803).

In future contributions I will present the full revision of all the valid taxa here listed, several new taxa, and the higher systematics of *Laparocerus*, which will change considerably from the present scheme.

Acknowledgements

For the loan of type material and/or access to the collections *in situ*, the following persons are gratefully acknowledged: Ben Brugge (ZMUA, Amsterdam), Bert Viklund (SMNH, Stockholm), Carolina Martín (MNCN, Madrid), Darren J. Mann (UMO, Oxford), Eva Sprecher (NMB, Basel), Hans Silfverberg (ZMUH, Helsinki), H el ene Perrin (MNHN, Paris), J. van Tol, J. van Krieken, and B. van Bekkum-Assari (NMHNN, Leiden), Lorenzo Garc ia (EEZA, Almer ia), Luthz Behne (DEI, M uncheberg), Luz ia Sousa (MCNP, Porto), Milena Pika-Biolzi (Eidgenosische Technische Hochschule, Zurich), P. Leblanc (MHNT, Troyes), and Sharon Shute and Max Barclay (NHM, London). J. M. Grosso-Silva (Porto) helped to locate the type of *Laparocerus obesulus* Desbrochers in Porto, and Jean Pelletier (Monnaie) assisted with clarifying the status of *Cyclomaurus tessellatus*. A special thank to Miguel  ngel Alonso-Zarazaga (Madrid) who helped to trace some recalcitrant type material and for many fruitful comments, nomenclatural advice, and critical review of the manuscript. This contribution benefited from the travel support received through the Fundaci n Biodiversidad (Madrid) which is subsidizing the molecular part of this study.

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