

Koleopterologische Rundschau	75	111–149	Wien, Juni 2005
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# On the western Palaearctic species of *Drusilla* LEACH, with special reference to the species of the eastern Mediterranean (Coleoptera: Staphylinidae, Aleocharinae)

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## Abstract

Material of *Drusilla* LEACH, 1819 especially from the eastern Mediterranean and adjacent regions is revised. 14 species are (re-)described and illustrated: *D. erichsoni* (PEYRON) (southeastern France), *D. meridiana* (FAUVEL) (Greece: Pelopónnisos), *D. taygetana* sp.n. (Greece: Pelopónnisos), *D. cretica* sp.n. (Greece: Crete), *D. gracilis* (HOCHHUTH) (Azerbaijan, Iran), *D. endorica* (SAULCY) (Israel), *D. pallidicornis* sp.n. (Turkey: Antakya), *D. denigrata* sp.n. (Turkey: Antakya; Syria), *D. cernens* sp.n. (Turkey: Antakya), *D. limata* sp.n. (Turkey: Antalya), *D. sinuosa* sp.n. (Turkey: Gaziantep, Adana, Kahramanmaraş, Mardin), *D. recta* sp.n. (Turkey: Mersin, Antalya, Konya), *D. besucheti* sp.n. (Lebanon), and *D. persica* sp.n. (NE-Iran). *Drusilla endorica* (SAULCY) is revalidated and two synonymies are established: *D. canaliculata* (FABRICIUS, 1787) = *D. caucasica* (BERNHAEUER, 1903), syn.n.; *D. memnonia* (MÄRKEL, 1845) = *D. tristis* (LUCAS, 1846), syn.n. A lectotype is designated for *D. meridiana* and a neotype is designated for *D. endorica*. *Drusilla canaliculata* is recorded from Iran and Kazakhstan for the first time. The distributions of eleven species are mapped. A key to species and a catalogue are provided for the *Drusilla* species of the western Palaearctic Region.

**Key words:** Coleoptera, Staphylinidae, Aleocharinae, *Drusilla*, Greece, Turkey, Iran, Middle East, new species, new records, new synonymy, taxonomy, lectotype designation, neotype designation, key to species, catalogue.

## Introduction

In the Palaearctic Region, the genus *Drusilla* previously included some 40 species and subspecies. They are assigned to two subgenera, *Drusilla* LEACH, 1819 and *Apteranopsis* JEANNEL, 1960, which had been regarded as a distinct genus until, very recently, it was attributed to *Drusilla* as a subgenus (ASSING 2002). *Apteranopsis* currently includes seven anophthalmous species from Algeria and Tunisia. Of the little more than 30 species and subspecies of the nominal subgenus, nine were recorded from the West Palaearctic west of the Caspian Sea. Only one of these species, *D. canaliculata*, is widespread and also occurs in the eastern Palaearctic Region; all the other taxa have restricted distributions.

The only attempt ever at compiling and distinguishing the Palaearctic representatives of the genus is the synopsis by SCHEERPELTZ (1956), who also provides a key and describes an additional name, later to become a synonym of *D. canaliculata*. However, this synopsis is mainly based on a straightforward interpretation of old descriptions, not on an examination of types and/or a consideration of zoogeographic plausibility. Moreover, the identification of the species exclusively relies on external characters; the primary sexual characters are completely neglected. After SCHEERPELTZ (1956), the only taxonomic changes pertaining to the western Palaearctic representatives of *Drusilla* s.str. were two new synonymies proposed by SCHILOW (1981) and GUSAROV (1995) and the description of an additional species from Algeria by FAGEL (1958).

Little is known regarding the life history of *Drusilla* species. Time and again, an association with ants or myrmecophagy have been suggested in the literature, probably because of a certain external resemblance with ants and because of the numerous myrmecophilous taxa known from other genera of the tribe Lomechusini. However, evidence supporting these hypotheses is practically absent. Some bionomic aspects are discussed by ASSING (1994), who studies and figures the life cycle of *D. canaliculata*.

The present study was initiated mainly by the usually futile attempts at identifying *Drusilla* material from the Mediterranean using the key by SCHEERPELTZ (1956). Moreover, the assumed distributions particularly of two species, *D. meridiana* (FAUVEL) and *D. erichsoni* (PEYRON), lacked zoogeographic plausibility and, finally, a study of recently collected material especially from Greece and southern Turkey revealed the presence of a number of previously unrecognised species.

### Material, measurements, and maps

Types and non-type material deposited in the following collections were examined:

cAss	author's private collection
cEss	private collection J. Esser, Berlin
cFel	private collection B. Feldmann, Münster
cSch	private collection M. Schülke, Berlin
cTro	private collection M. Tronquet, Mollitg-les-Bains
cWun	private collection P. Wunderle, Mönchengladbach
DEI	Deutsches Entomologisches Institut, Müncheberg (L. Behne, L. Zerche)
IRSNB	Institut royal des sciences naturelle de Belgique, Bruxelles (D. Drugmand)
MHNG	Muséum d'histoire naturelle Genève (G. Cuccodoro)
MNHB	Museum für Naturkunde der Humboldt-Universität Berlin (J. Frisch)
NHMW	Naturhistorisches Museum Wien (H. Schillhammer)
SMNS	Staatliches Museum für Naturkunde, Stuttgart (W. Schawaller, K. Wolf-Schwenninger)

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

AL: length of antenna; AW: maximal width of abdomen; EL: length of elytra from apex of scutellum to posterior margin; EW: combined width of elytra; HL: head length from anterior margin of clypeus to posterior margin of head; HW: head width (including eyes); ML: length of aedeagus from apex of ventral process to base; PL: length of pronotum along median line; PW: maximal width of pronotum; TaL: length of metatarsus; TiL: length of metatibia; TL: total length.

The maps were generated using the online generic mapping tool (GMT) of the Geomar website at [www.aquarius.geomar.de/omc](http://www.aquarius.geomar.de/omc).

### On the *Drusilla* species of the western Palaearctic Region

An examination of the material treated in more detail below revealed the presence of a much higher number of species than was previously known. The highest diversity was observed in southern Turkey, the Middle East, and in southern Greece. Except for the widespread and common *D. canaliculata*, all the western Palaearctic representatives apparently have allo- or parapatric distributions. Such a distribution pattern may be the result of interspecific competition, but too little is known about the bionomics of the species to be certain.

There are several reasons why so many species had not been discovered before. First, the taxonomic confusion brought about by descriptions of species based on material from completely different regions and subsequent erroneous interpretations may have deterred previous workers from studying this genus more thoroughly. Second, only little material had become available from the regions with the highest diversity (Turkey, Middle East). Third, the genitalia had been examined only rarely. Fourth, intraspecific variation of both external and sexual

characters is pronounced and has often been underestimated (which is why there are so many synonyms of *D. canaliculata*; see catalogue at the end of the paper). Finally, interspecific character divergence is generally rather low. This not only applies to external characters such as coloration, size-related parameters, and punctuation, but remarkably also to the morphology of the aedeagus, which is usually of high taxonomic significance in the Aleocharinae. No appreciable interspecific variation was observed in the shape and chaetotaxy of the paramere, and the differences, if any, in the shape of the median lobe of the aedeagus are usually confined to the lateral aspect of the apex of the ventral process. Other aedeagal characters such as shape of the crista apicalis or the internal structures were found to be very uniform and of little use for the separation of the species. Interestingly, even the aedeagus of representatives of the subgenus *Apteranopsis*, which are of highly derived (and completely different) external morphology, is highly similar to that of species of the subgenus *Drusilla*; for comparison see the illustrations of the genitalia of *D. lethierryi* (FAUVEL) and *D. theryi* (FAUVEL) in ASSING (2002).

The most important and reliable characters for the identification of western Palaearctic *Drusilla* species are the spermatheca and to some extent also the shape of the sexually dimorphic abdominal tergite VIII in both sexes. Additionally, several species may be distinguished by the coloration of the legs and antennae, occasionally also by the colour of the forebody. For other relevant characters see the descriptions below and the key at the end of the paper.

The main objective of the present paper is to clarify the taxonomy and zoogeography of the species of the eastern Mediterranean and the Caucasus region west of the Caspian Sea. In addition, I use the opportunity to report several records of zoogeographic interest from other regions and to reconsider the taxonomy of a species occurring in southern Italy and North Africa.

### *Drusilla canaliculata* (FABRICIUS) (Fig. 144)

*Astilbus caucasicus* BERNHAUER, 1903: 186; **syn.n.**

TYPE EXAMINED: **Lectotype** ♀, here designated: “Kaukas, Leder / Myrmedonia canaliculata nitidiceps m. inedit / c. Eppelsh. Steind. d. / caucasicus Brh. Type determ. Bernh / Typus / Lectotypus ♀ *Astilbus caucasicus* Bernhauer V. Gusarov des. 1993 / *Drusilla caucasica* (Bernh.) V. I. Gusarov det. 1993 / Lectotypus *Astilbus caucasicus* Bernhauer desig. V. Assing 2004 / *Drusilla canaliculata* (Fabricius) det. V. Assing 2004” (NHMW).

#### ADDITIONAL MATERIAL EXAMINED:

In addition to the material listed here, several thousand specimens from Central Europe and other parts of Europe were examined.

**Macedonia:** 2 exs., 3 km NW Skopje, 17.V.1980, leg. Hieke (MNHB); 2 exs., Skopje env., Matka, 18.V.1980, leg. Hieke (MNHB); 2 exs., Skopje, bank of Vardar river, 26.V.1980, leg. Hieke (MNHB); 2 exs., Rastsche near Skopje, 29.V.1980, leg. Hieke (MNHB); 2 exs., Baba Planina, Kopanki hut, 1500–1800 m, 21.–24.V.1980, leg. Hieke (MNHB).

**Montenegro:** 1 ex., Budva, V.1954, leg. Kuntzen (MNHB).

**Bulgaria:** 2 exs., Stara Planina Etropolecka Planina, Murgana, 42°42'N, 24°03'E, 1630 m, 11.V.2001, leg. Zerche & Behne (DEI, cAss); 1 ex., Stara Planina, Botev, Schaltez S Pleven hut, 42°44'N, 24°53'E, 1705–1730 m, 16.V.2001, leg. Zerche & Behne (DEI); 10 exs., Stara Planina, 8 km S Botev, 1200 m, 7.IX.1977, leg. Hieke & Uhlig (MNHB); 3 exs., Stara Planina, V. Levski near Karlowo, 17.V.1984, leg. Jaeger (MNHB); 1 ex., Vasil Levski, 2.–5.V.1985, leg. Wrase (MNHB); 2 exs., same data, but 17.V.1984 (MNHB, cAss); 1 ex., Stara Planina, Kalofer, 1600–2100 m, 27.VI.1979, leg. Uhlig (MNHB); 5 exs., Stara Planina, Dolno vachrane, 4.V.1985, leg. Wrase (MNHB); 3 exs., SW-Bulgaria, Roshen, 17.–20.V.1981, leg. Wendt (MNHB); 2 exs., Macedonia, Melnik, 14.VII.1983, leg. Wrase & Schüller (MNHB); 6 exs., Melnik, 13.–20.V.1981, leg. Wendt (MNHB); 28 exs., Sandanski, 16.–23.VII.1983, leg. Schülke (MNHB); 2 exs., Sandanski, 13.–24.VII.1985, leg. Schülke (MNHB); 3 exs., Sandanski, 6.–11.V.1984, leg. Jaeger, Wrase (MNHB, cAss); 1 ex., Pomorie, 9.–18.V.1985, leg. Wrase (MNHB); 1 ex., Koscharize, 8.V.1985, leg. Wrase (MNHB); 1 ex., NE-Bulgaria, Silistra/Donau, 16.VIII.1987, leg. Arndt (MNHB); 1 ex., Silistra okr., Karakuz, 18.VIII.1987, leg. Arndt (MNHB); 8 exs., 4 km N Kazanlak, 11.–12.IX.1977, leg. Hieke & Uhlig (MNHB, cAss); 8 exs., Mičurin, 18.IX.1977, leg. Hieke & Uhlig (MNHB, cAss); 1 ex., Pirin, Begovica, 31.V.1983, leg. Behne (cAss); 2 exs., 5 km W Jasna Poljana, bank of Ropotamo

- river, 17.IX.1977, leg. Hieke & Uhlig (MNHB, cAss); 1 ex., Rila, Blagoyevgradska Bistriza, 800 m, 13.VI.1983, leg. Hieke (MNHB); 1 ex., Nešebar, 7.V.1985, leg. Jaeger (MNHB); 1 ex., Vlas near Nešebar, 17.–26.VII.1983, leg. Wrase & Schülke (MNHB); 1 ex., Constanta/Dobroges, 6.VIII.1997, leg. Esser (cAss); 1 ex., Burgas, 19.V.1985, leg. Wrase (MNHB); 4 exs., Rupite near “General Todorow”, 5.V.1984, leg. Hieke (MNHB); 11 exs., same locality, IV.1984, leg. Hieke (MNHB); 3 exs., 10 km W Zemen, 21.–23.VI.1983, leg. Hieke (MNHB); 6 exs., Koshuch, 8 km NE Petrič, 10.–16.VI.1983, leg. Hieke (MNHB, cAss); 4 exs., Strumjani, 30.IV.1985, leg. Wrase (MNHB).
- Greece: Makedhónia:** 2 exs., Pieria, 60 km SW Katerini, Agios Dimitrios, 1200–1400 m, 12.V.1996, leg. Schulz & Vock (cAss); 1 ex., Imathia, 25 km S Náousa, 2 km 2 km N Koumaria, 800–900 m, 10.V.1996, leg. Schulz & Vock (cAss); 3 exs., Imathia, Vértmio, Séli ski resort, 40°32'N, 22°01'E, 1520 m, [date not indicated], leg. Zerche (DEI); 1 ex. [det. Schülke], Kozáni, Pieria, above Katafigi, 1900–2000 m, 9.IV.1998, leg. Schülke (cSch); 1 ex., Nomós Imathía, Vértmio, 7 km SW Véria, 600 m, 2.V.1994, leg. Schmalfluss (SMNS). **Thessalia:** 2 exs., N Larissa, Kato Olympos, 39°55'N, 22°27'E, 900 m, roadside, 6.IV.1998, leg. Assing & Schülke (cAss, cSch). **Fthiotis:** 1 ex., Oros Iti, 38°49', 22°14'E, 1400 m, subalpine pasture, 10.IV.2001, leg. Assing (cAss). **Thrakia:** 1 ex., Nomós Évros, 4 km SE Pendálofos, 200 m, oak forest, 22.IV.1994, leg. Schawaller (cAss). **Pelopónnisos:** 1 ex., Ahaia, Kalogria, 7.–8.V.1999, leg. Angelini (cAss).
- Turkey: Istanbul:** 1 ex., Kilyos [=Kumköy], 8.VII.1969, leg. Besuchet (MHNG). **Bursa:** 1 ex. [det. Schülke], Uludağı, Baraklı, 27.VII.–3.VIII.2000, leg. Smatana (cSch). **Sinop:** 3 exs., S Ayancık, 6.–12.VII.1973, leg. Schubert (NHMW). **Bolu:** 1 ex., E Gerede, 24.V.1989, leg. Schönmann & Schillhammer (NHMW); 1 ex., Ömerler near Bolu, 800 m, 21.V.1976, leg. Besuchet & Löbl (cAss). **Kastamonu:** 2 exs., 30 km N Kastamonu, 25.V.1989, leg. Schönmann & Schillhammer (NHMW); 1 ex., 32 km N Tosya, Karadere, 1400 m, 19.V.1976, leg. Besuchet & Löbl (MHNG); 1 ex., Ilğaz Dağı, 15 km N Tosya, 1600–1700 m, 19.V.1976, leg. Besuchet & Löbl (MHNG). **Gümüşhane:** 1 ex., 30 km NW Gümüşhane, Zigana Geçidi, 2000 m, 3.VII.1989, leg. Schulz (cAss). **Kars:** 4 exs., Sarıkamış, 15.X.1975, leg. Schubert (NHMW); 20 exs., Çıldır Gölü, 1800 m, VI.1977, leg. Schubert (NHMW, cAss); 3 exs., same locality, 7.VI.1989, leg. Schönmann & Schillhammer (NHMW, cAss); 1 ex., 16 km SW Göle, 1600 m, 16.VI.1986, leg. Besuchet, Löbl & Burckhardt (MHNG). **Bitlis:** 2 exs., S Tatvan, 1700–2000 m, 26.–29.VI.1975, leg. Schubert (NHMW); 1 ex., same data, but 1971 (NHMW); 2 exs., Tatvan, VI.1976, leg. Schubert (NHMW, cAss). **Erzurum:** 1 ex., mountain between Tortum and Narman, 2400 m, 4.VI.1986, leg. Besuchet, Löbl & Burckhardt (MHNG). **Konya:** 1 ex. [det. Schülke], Beyşehir Gölü, Hacı Akif island, 10.–12.VI.2003, leg. Smatana (cSch). **Kayseri:** 1 ex., Pazarören–Bünyan, 1490 m, 5.V.1978, leg. Besuchet & Löbl (MHNG). **Adana:** 1 ex., Osmaniye, 1000 m, 1.–8.V.1969, leg. Schubert (cAss).
- Georgia:** 2 exs., Tbilisi, Zheneti, 800 m, 22.VI.1986, leg. Wrase & Schülke (DEI, cAss); 7 exs., Tbilisi, Mzcheta, 23.&30.VI.1986, leg. Wrase & Schülke (DEI, cAss); 7 exs., Tbilisi, Kumisi, 29.VI.–1.VII.1986, leg. Wrase & Schülke (DEI, cAss); 2 exs., Tbilisi, Manglisi, 1350 m, 22.VII.1985, leg. Wrase (DEI); 1 ex., Tbilisi, Tbiliskoje osero, 19.VII.1985, leg. Wrase (DEI); 1 ex., Pasanauri, 1200 m, 18.VI.1988, leg. Gaedike (DEI); 2 exs., Bolnisi, 28.VI.1986, leg. Wrase (DEI, cAss).
- Russia:** 6 exs., Dagestan, Kurush, 2200–2400 m, 3.–6.VII.1991, leg. Martens, Schawaller et al. (SMNS, cAss); 1 ex., Dagestan, Saumur delta, 7.–8.VII.1991, leg. Martens, Schawaller et al. (SMNS); 8 exs., Lake Baikal, B. Golowstnaya, 18.VII.1991, leg. Shilenkov (NHMW, cAss); 2 exs., Lake Baikal, eastern shore, Kurumkan, 1500 m, 14.VIII.1993, leg. Borcherding (cAss); 1 ex. [det. Schülke], Bashkortostan, Maginsk, Pavlovsk reservoir, 27.VI.1989, leg. Schnitter (cSch); 1 ex., Primorskiy Kray, Partizansk, Tigrovoj, 19.–21.VIII.1992, leg. Snižek (NHMW); 1 ex., Primorskiy Kray, Arsenev, V.–VII.1991, leg. Sausa (NHMW); 3 exs., Primorskiy Kray, Ussurijsk, Kajmanovka, 1.–4.VIII.1990, leg. Snižek (cAss); 1 ex., Primorskiy Kray, Sichote-Alin, Lake Blogodatno, 17.–22.VI.1998, leg. Sundukov (cAss); 1 ex., Primorskiy Kray, Lazovski R., Lazi, Latovka valley, 4.–5.IV.1997, leg. Sundukov (cAss); 2 exs., Sakhalin, Aniva district, Zunayiskiy Khrebet, Mt. Tshkevo, 10 km E Novo Alexandrovsk, 600–1000 m, 13.VI.1993, leg. Pütz & Wrase (cAss); 1 ex., Sakhalin, Tymovskiy district, Nabilskiy Khrebet, Mt. Lopatin, 800–1400 m, 16.–19.VII.1993, leg. Pütz & Wrase (cAss); 1 ex., Magadan, ca. 150 km E Magadan, Malkatschan delta, 59°51'N, 154°11'E, 17.VII.1997 (cFel); 2 exs., S-Kamtchatka, Mutnovski volcano, 25.VII.1991, leg. Riedel (cAss).
- Iran:** 1 ex., Māzanderān, S Amol, 36°18'N, 52°21'E, 18.VII.1973, leg. Senglet (MHNG); 1 ex., Māzanderān, Chorteh, 36°49'N, 50°38'E, 1000–1300 m, 8.VII.1973, leg. Senglet (cAss); 1 ex., Guilān, Parih-Sar, 37°37'N, 49°03'E, 2.VII.1973, leg. Senglet (MHNG).
- Kazakhstan:** 2 exs., Zirjanovsk, Putincevo, 1.–2.VIII.1993, leg. Snižek (NHMW, cAss); 1 ♀ [abdomen filled with nematodes and without spermatheca], Alma Ata env., Medea, VII.1988, leg. Denes (NHMW); 6 exs., N Dzhungarskiy Alatau, 5–10 km E Lepsinsk, 1100 m, 13.–17.VI.2001, leg. Schawaller (SMNS, cAss); 1 ex., S Tarbagatay mts., 4 km N Alexeevka, 1000 m, 24.–25.VI.2001, leg. Schawaller (SMNS); 1 ex. [det. Schülke], Serebrovskiy district, Severnoe village, 10.–20.VII.2000, leg. Kiritchenko (cSch).
- Locality not specified:** 1 ex., “Kaukas” (DEI).

COMMENTS: The original description of *Astilbus caucasicus* BERNHAUER is based on two syntypes, only one of which was examined. In order to stabilise the present interpretation and synonymy of the species, the female syntype in the collections of the NHMW is designated as the lectotype. GUSAROV (unpubl.) studied this specimen and attached a lectotype label, but never published the designation. A comparison with material of *Drusilla canaliculata* revealed that the specimen is well within the range of intraspecific variation of that species, so that *D. caucasica* is regarded as a junior synonym.

DISTRIBUTION AND BIONOMICS: This species apparently has a trans-Palaearctic distribution from the Iberian Peninsula to the Russian Far East (including Kamchatka), but has not been recorded from Japan. It is adventive also in eastern North America (NEWTON et al. 2001). The species is here recorded from Iran and Kazakhstan for the first time. It seems remarkable that, despite the vast range of this species, it is apparently micropterous. So far, no macropterous specimens have become known. In Turkey, the vast majority of records are from the north and the east; records from the southwest and parts of the southeast are absent, a distribution somewhat resembling that of the genus *Leptusa* KRAATZ (Fig. 144). In the western Palaearctic Region, *D. canaliculata* is very common in various types of habitats, especially in unforested biotopes. For more details regarding its life history see ASSING (1994).

### *Drusilla memnonia* (MÄRKEL)

*Myrmedonia tristis* LUCAS, 1846: 99; **syn.n.**

COMMENTS: *Drusilla tristis* (LUCAS) has long been treated as a subspecies of *D. memnonia*, with the nominal subspecies confined to Sicily and *D. m. tristis* occurring in North Africa. According to the literature (FAGEL 1958, SCHEERPELTZ 1956), both subspecies are distinguished by the coloration especially of the basal antennomeres. In addition, FAGEL (1958) points out differences in the shape of the aedeagal apex and of the apical lobe of the paramere. A comparison of material from Tunisia (Teboursouk) and Sicily (various localities), however, revealed no such differences, and the spermatheca, which is of highest significance for the distinction of other Mediterranean *Drusilla* species was found to be identical. Finally, a distribution including – and confined to – both Sicily and North Africa (Tunisia, Algeria) is not uncommon; another similar example among the Staphylinidae is *Leptobium densiventre* (FAUVEL, 1875). Consequently, *Myrmedonia tristis* is here placed in the synonymy of the senior name *D. memnonia*.

### *Drusilla meridiana* (FAUVEL)

(Figs. 1–12, 145)

*Astilbus meridianus* FAUVEL, 1900: 244; partim.

TYPE EXAMINED: **Lectotype** ♂, here designated: “Morea Cumani Brenske / 104 / ♂ / 1. / Erichsoni Peyr.? / meridionalis Fauv. n. sp. / c. Eplplsh. Steind. d. / Lectotypus Astilbus meridianus Fauvel desig. V. Assing 2004 / *Drusilla meridiana* (Fauvel) det. V. Assing 2004” (NHMW). **Paralectotype** ♀: “♀ / 2. / Montpellier / S. Frnkr. Daube / meridionalis Fauvel n. sp. / c. Eplplsh. Steind. d. / meridionalis Fauvel / *Drusilla erichsoni* (Peyron) det. V. Assing 2004” (NHMW).

#### ADDITIONAL MATERIAL EXAMINED:

**Greece: Pelopónnisos:** 1 ex., 35 km N Sparta, 37°14N, 22°26E, 800 m, roadside, in nest of *Tapinoma* sp., 22.III.1997, leg. Assing (cAss); 3 exs., Erimanthos, above Kalendzi, 37°57N, 21°47E, 1500 m, 27.III.1997, leg. Assing (cAss); 1 ex., Erimanthos, Stavrodromi, 400 m, 23.III.1992, leg. Frisch (cWun); 1 ex., Erimanthos, Hani Panopoulou, 600 m, 5.IV.1992, leg. Frisch (MNHB); 1 ex., Tripoli, Manaris, 800 m, 2.IV.1992, leg. Karner (cAss); 11 exs., Killini, Lake Stimpali, 37°51N, 22°28E, 500 m, 3.IV.1992, leg. Frisch (MNHB, cAss, cWun); 1 ex., Killini, S Trikala, 37°56N, 22°24E, 2080m, sifted between snowpatch and rock, 28.IV.1998, leg. Zerche (DEI); 1 ex., Panahaiko, 38°11N, 21°54E, 1325 m, sifted below shrubs, leg. Zerche & Behne (DEI); 1 ex., SW Githio, Passavas, 36°45N, 22°30E, oak forest, 21.IV.1998, leg. Behne (DEI); 2 exs., Chelmos, Xerokambos,

38°01N, 22°12E, 1650 m, Abies forest, 12.IV.1998, leg. Zerche (DEI, cAss); 2 exs., Chelmos, 27.IV.1928, leg. Weirather (NHMW); 2 exs., Chelmos, 28.IV.1999, leg. Angelini (cAss); 1 ex., Kalavrita, leg. Breit (cAss); 1 ex., Kalavrita, 800 m, 3.IV.1971, leg. Löbl & Hauser (MHNG). Locality not specified: 1 ex., "Attica" (NHMW).

REDESCRIPTION: Measurements (in mm) and ratios (range, arithmetic mean; n=22): AL: 1.48–1.75, 1.60; HL: 0.48–0.57, 0.53; HW: 0.48–0.57, 0.53; PW: 0.53–0.63, 0.58; PL: 0.57–0.71, 0.64; EL: 0.38–0.45, 0.41; EW: 0.60–0.77, 0.70; AW: 0.76–0.92, 0.84; TiL: 0.72–0.88, 0.83; TaL: 0.63–0.72, 0.69; ML: 0.50–0.59, 0.54; TL: 3.6–4.9, 4.3; HL/HW: 0.97–1.06, 1.00; PW/HW: 1.05–1.14, 1.09; PL/PW: 1.07–1.14, 1.10; EL/PL: 0.57–0.69, 0.64; EW/PW: 1.14–1.26, 1.20; AW/EW: 1.14–1.28, 1.20; TiL/TaL: 1.13–1.25, 1.21.

Habitus as in Fig. 1. Coloration: body blackish brown; legs yellowish brown, concolorous; antenna brown, with the basal three antennomeres somewhat lighter.

Head approximately as wide as long (see ratio HL/HW and Fig. 2); eyes moderately large and distinctly protruding from lateral outline of head, postocular region usually at least 1.5 times as long as eyes in dorsal view (Figs. 2, 3); dorsal surface without or only with indistinct traces of microsculpture; puncturation fine, but distinct, and rather sparse. Antenna with antennomere III distinctly longer than II and almost twice as long as wide; IV and V approximately as wide as long; VI–X weakly, but increasingly transverse; X about 1.5 times as wide as long; XI almost twice as wide as long and at least as long as the combined length of IX and X (Fig. 4).

Pronotum approximately 1.1 times as long as wide and 1.1 times as wide as head (see ratios PL/PW, PW/HW and Figs. 2, 3); puncturation much denser and coarser than that of head; microsculpture absent.

Elytra distinctly wider than and at suture about 0.65 times as long as pronotum; puncturation very coarse, somewhat irregular, and dense, interstices in most places reduced to narrow ridges; microsculpture absent (Figs. 2, 3). Hind wings reduced. Legs very long and slender (see measurements); metatarsomere I of highly variable length, usually approximately as long as the combined length of II and III.

Abdomen distinctly wider than elytra (see ratio AW/EW and Fig. 1), widest at segment V; puncturation fine, well-defined, and rather sparse, slightly denser on anterior than on posterior tergites; anterior impressions of tergites III–V very deep and with irregular puncturation; tergite VII with a very narrow rudiment of a palisade fringe.

♂: pronotum with extensive oblong impression, which is deeper posteriorly than anteriorly, with often slightly granulose puncturation, and along midline with fine furrow (Fig. 3); posterior margin of tergite VIII broadly concave and serrate (Figs. 5, 6); posterior margin of sternite VIII truncate (Fig. 7); aedeagus as in Figs. 8–9.

♀: pronotum in posterior half with very shallow impression and along midline with fine furrow (Fig. 2); tergite VIII posteriorly with narrower and shallower excavation than in ♂ (Fig. 10); posterior margin of sternite VIII weakly concave in the middle (Fig. 11); spermatheca with capsule of characteristic shape, duct moderately long and almost straight (Fig. 12).

COMMENTS: The original description of *D. meridiana* is based on two specimens, one from the Pelopónnisos ("Morée: Cumani") and one from "Montpellier". Since both belong to different species, a lectotype designation was mandatory. By selecting the Greek syntype as the lectotype it was possible to avoid the introduction of a new name. For more details regarding the confusing history of the interpretation of this name see the discussion in the section on *Drusilla erichsoni*.

COMPARATIVE NOTES: From *Drusilla canaliculata*, this species is readily distinguished especially by darker coloration, smaller body, much sparser puncturation of the forebody, a consequently much more shining integument, and by the different primary and secondary sexual

characters. For distinction from the two other congeners known to occur in Greece, *D. taygetana* and *D. cretica*, see the comparative notes below those species.

**DISTRIBUTION AND BIONOMICS:** The range of this species is apparently confined to the Pelopónnisos, Greece (Fig. 145). Most of the recently collected specimens were found under stones in grassland and on roadsides, on one occasion together with ants of the genus *Tapinoma* FÖRSTER, at altitudes of 400–2080 m.

### *Drusilla erichsoni* (PEYRON)

(Figs. 13–18, 123–125)

*Myrmedonia erichsonis*<sup>1</sup> PEYRON, 1857: 635 f.

#### MATERIAL EXAMINED:

**France:** 1 ex., see paralectotype of *D. meridiana*; 1 ex., Ardèche, SW Coudon, 12 km S Lablachère, 9.IV.1990, leg. Scheuern (cWun); 1 ex. [identified by photograph], Gard, S Le Vigan, Pommiers, 25.III.2001, leg. Gompel (cTro).

**REDESCRIPTION:** Measurements (in mm) and ratios (range, n=2): AL: 1.57–1.61; HL: 0.54–0.56; HW: 0.54–0.57; PW: 0.60–0.63; PL: 0.66–0.68; EL: 0.41–0.45; EW: 0.74–0.79; AW: 0.91–0.94; TiL: 0.82–0.85; TaL: 0.65–0.69; ML: 0.60; TL: 4.5–5.0; HL/HW: 0.97–1.00; PW/HW: 1.11; PL/PW: 1.07–1.09; EL/PL: 0.62–0.67; EW/PW: 1.23–1.24; AW/EW: 1.19–1.22; TiL/TaL: 1.22–1.26.

External morphology as in *D. meridiana*, but distinguished as follows:

Preapical antennomeres distinctly less than 1.5 times as wide as long (Fig. 14). Pronotum slightly less oblong and with much finer and also somewhat denser puncturation. Elytral puncturation more well-defined (Fig. 13).

♂: pronotum with rather extensive, but shallow median impression; posterior margin of tergite VIII moderately concave, laterally distinctly dentate (Figs. 123–124); median lobe of aedeagus as in Fig. 125.

♀: tergite and sternite VIII of similar shape and chaetotaxy as in *D. meridiana* (Figs. 15–17); spermatheca of distinctive morphology (Fig. 18).

**COMPARATIVE NOTES:** From *Drusilla canaliculata*, the only other species of the genus known to occur in France, this species is readily distinguished especially by darker coloration, smaller body, much sparser and coarser puncturation of the forebody, a more shining integument, and by the different primary and secondary sexual characters. From *D. italica*, whose distribution is confined to southern Italy, it is at once separated by smaller size, darker body, the absence of microsculpture, the coarser and sparser puncturation of the forebody, the much shorter and less massive antennae, and by the different sexual characters.

**DISTRIBUTION AND BIONOMICS:** The species has become known only from southeastern France. One of the type specimens was collected “près le port Juvénal, sous les feuilles sèches” (PEYRON 1858).

<sup>1</sup> According to Article 32.2 of the ICZN (1999), the correct original spelling of the name is *D. erichsonis*. To my knowledge, this name has not been in use for at least 110 years, probably more than 130 years. Apparently, FAUVEL (1895) was the first author to change the name to *erichsoni*, an incorrect subsequent spelling (ICZN 1999: Article 33.3). However, since *erichsoni* has been in prevailing - probably even exclusive - usage since 1895 and FAUVEL (1895) explicitly cites the original description by PEYRON (1857), Article 33.3.1 (ICZN 1999) applies, according to which the incorrect subsequent spelling is to be preserved and *erichsoni* is deemed to be the correct original spelling.

COMMENTS: As can be inferred from a footnote (PEYRON 1857), the original description of *Myrmedonia erichsoni* is an extract from a catalogue of the beetles in the surroundings of Tarsus (Turkey: Mersin), which was published only in the following year. The type specimens explicitly mentioned in this description, however, are two syntypes collected by himself and by Mr. Mocquereys “aux environs de Montpellier”. Neither of the two syntypes could be located in the collections of the Muséum National d’Histoire Naturelle in Paris, so they were possibly deposited in Beyrouth (LECOQ, pers. comm. 29.VII.2004). It is unknown whether they still exist. The details given in the catalogue by PEYRON (1858), e.g. regarding the frequency (“assez commune, sous les pierres”), at least partly refer to an undescribed Turkish species. Disregarding the fact that the original description contains no reference whatsoever to specimens from Turkey, FAUVEL (1895) later maintained that “*Astilbus erichsoni* Peyron est une espèce propre à la Caramanie et à la Syrie” and that the Montpellier specimen referred to a different species, which he was planning to describe as *Astilbus meridianus*. He erroneously considered a female from Turkey, apparently a specimen labelled “Tarsous” in his collection, to represent a type specimen. The description of *Astilbus meridianus*, which was published five years later (FAUVEL 1900), is based on two specimens, one from “Montpellier (Daube)” and the other from the Pelopónnisos (“Attique [sic]; Morée: Cumani”). Remarkably, both syntypes were found in the collections of the NHMW and were apparently previously deposited in the Eppelsheim collection, as can be inferred from the labels attached to them. They doubtlessly represent different species. In order to avoid an unnecessary introduction of new names, the male from the Pelopónnisos was selected as the lectotype of *Drusilla meridiana* (see above); the paralectotype is a representative of *D. erichsoni*.

***Drusilla taygetana* sp.n.**

(Figs. 19–25, 145)

TYPES: **Holotype** ♀: “Taygetos Morea Breit / Holotypus ♀ *Drusilla taygetana* sp.n. det. V. Assing 2004” (NHMW).

DESCRIPTION: Measurements (in mm) and ratios (holotype): AL: 1.75; HL: 0.63; HW: 0.63; PW: 0.68; PL: 0.77; EL: 0.48; EW: 0.80; AW: 1.01; TiL: 1.03; TaL: 0.83; TL: 5.1; HL/HW: 1.00; PW/HW: 1.07; PL/PW: 1.13; EL/PL: 0.63; EW/PW: 1.18; AW/EW: 1.26; TiL/TaL: 1.24.

Habitus as in Fig. 19. Coloration similar to that of *D. meridiana*.

Head similar to that of *D. meridiana*, but antennae of clearly different morphology: distinctly longer and more massive; antennomere IV weakly transverse; V distinctly transverse and rather massive; VI–X of similar width, cylindrical, and all about 1.5 times as wide as long (Fig. 21).

Pronotum and elytra as in *D. meridiana*, but pronotal puncturation much finer and denser (Fig. 20). Legs remarkably long and slender; metatibia and metatarsus distinctly longer than in *D. meridiana* (see measurements).

Abdomen as in *D. meridiana*.

♂: unknown.

♀: pronotum as in *D. meridiana*; posterior margin of tergite VIII more deeply and broadly excavate (Fig. 22); sternite VIII of similar shape and chaetotaxy as in *D. meridiana* (Figs. 23, 24) spermatheca, too, of similar general morphology, but duct much longer (Fig. 25).

ETYMOLOGY: The name (Lat., adj.) refers to the fact that the species was discovered in the Taygetos range.

COMPARATIVE NOTES: For distinction from *Drusilla canaliculata* see the comparative notes below *D. meridiana*. From the latter, which, too, occurs in the Pelopónnisos, *D. taygetana* is

readily separated especially by the much more massive antennae, the much finer and denser puncturation of the forebody, and by the distinctly longer spermathecal duct.

**DISTRIBUTION AND BIONOMICS:** The species has become known only from the Taygetos range in the southwest of the Pelopónnisos (southern Greece), where it appears to be endemic (Fig. 145).

***Drusilla cretica* sp.n.**  
(Figs. 26–33, 145)

**TYPES: Holotype** ♂: “24.3.86 WestKreta, Omalos Hochfläche [= plateau], leg. H. Meybohm / Holotypus ♂ *Drusilla cretica* sp.n. det. V. Assing 2004” (cAss).

**DESCRIPTION:** Measurements (in mm) and ratios (holotype): AL: 1.48; HL: 0.51; HW: 0.53; PW: 0.57; PL: 0.63; EL: 0.38; EW: 0.71; AW: 0.83; TiL: 0.82; TaL: 0.68; TL: 4.2; HL/HW: 0.97; PW/HW: 1.09; PL/PW: 1.11; EL/PL: 0.60; EW/PW: 1.24; AW/EW: 1.17; TiL/TaL: 1.20.

Habitus as in Fig. 26. In external morphology highly similar to *D. meridiana*, but distinguished as follows:

Head with shallow, but distinct microsculpture. Antenna of distinctive morphology, more massive, more shining, and with more transverse antennomeres: antennomere IV weakly transverse; V distinctly transverse; VI–VIII more than 1.5 times as wide as long; IX and X about 1.5 times as wide as long (Fig. 28).

Elytra shorter and broader than in average *D. meridiana* (see ratios EL/PL, EW/EL, AW/EW, and Fig. 27).

♂: pronotum, tergite VIII, and sternite VIII as in *D. meridiana* (Figs. 29–31); aedeagus relatively larger and apically of slightly different shape (Figs. 32–33).

♀: unknown.

**ETYMOLOGY:** The name (Lat., adj.) refers to the fact that the species has become known only from Crete.

**COMPARATIVE NOTES:** For distinction from *Drusilla canaliculata* see the comparative notes below *D. meridiana*. From the latter, *D. cretica* is separated especially by the conspicuously different morphology of the antennae.

**DISTRIBUTION AND BIONOMICS:** The species is apparently endemic to Crete (Fig. 145). Ecological or other biological data are not available.

***Drusilla gracilis* (HOCHHUTH)**  
(Figs. 34–44)

*Myrmedonia gracilis* HOCHHUTH, 1849: 24 f.

*Drusilla gracilis*: GUSAROV (1995): invalid lectotype designation.

**MATERIAL EXAMINED:**

**Azerbaijan:** 14 exs., Lenkoran (DEI, NHMW, cAss); 2 exs., Lenkoran, 1897, leg. Korb (DEI); 6 exs., Lerik [“Liryk”], leg. Leder (DEI, NHMW, cAss); 4 exs., Lenkoran, Azfilial, 100 m, 31.V.–1.VI.1996, leg. Schawaller (SMNS, cAss); 2 exs., Yardymly, Avash, 1200–1500 m, 14.–17.VI.1996, leg. Schawaller (SMNS); 13 exs., Talysh, 1897, leg. Korb (DEI, NHMW, cAss).

**Locality not specified:** 1 ex. (NHMW); 1 ex. “Kaukas.” (NHMW).

**REDESCRIPTION:** Measurements (in mm) and ratios (range, arithmetic mean; n=18): AL: 1.75–2.06, 1.84; HL: 0.56–0.66, 0.60; HW: 0.54–0.65, 0.58; PW: 0.59–0.68, 0.62; PL: 0.68–0.79, 0.72; EL: 0.41–0.48, 0.44; EW: 0.72–0.91, 0.78; AW: 0.89–1.07, 0.96; TiL: 0.94–1.07,

0.98; TaL: 0.76–0.91, 0.78; ML: 0.60–0.62, 0.61; TL: 4.0–5.6, 4.7; HL/HW: 1.00–1.05, 1.03; PW/HW: 1.03–1.11, 1.07; PL/PW: 1.12–1.18, 1.15; EL/PL: 0.57–0.65, 0.61; EW/PW: 1.20–1.36, 1.26; AW/EW: 1.18–1.30, 1.23; TiL/TaL: 1.14–1.24, 1.19.

Habitus as in Fig. 34. Coloration: The material listed above was collected about a century ago, so they have probably become considerably paler. The specimens are reddish brown, with abdominal segment VI and the adjacent parts of the neighbouring segments infuscate, the legs and the basal three antennomeres yellowish brown. According to the original description, the species is of darker coloration.

Head weakly oblong (see ratio HL/HW and Figs. 35–36); eyes moderately large, protruding from lateral outline of head, postocular region usually almost twice as long as eyes in dorsal view (Fig. 35); dorsal surface without microsculpture; puncturation fine, but distinct, and rather sparse. Antenna long: antennomere III distinctly longer than II and more than twice as long as wide; IV and V usually weakly oblong; VI and VII about as wide as long; VIII–X weakly transverse; X distinctly less than 1.5 times as wide as long (Fig. 37).

Pronotum approximately 1.15 times as long as wide and slightly wider than head (see ratios PL/PW, PW/HW and Figs. 35–36); puncturation much denser and coarser than that of head; microsculpture absent.

Elytra distinctly wider than and at suture about 0.6 times as long as pronotum; puncturation very coarse, somewhat irregular, dense, and slightly granulose; microsculpture absent (Figs. 35–36). Hind wings reduced. Legs very long and slender (see measurements); metatarsomere I usually approximately as long as the combined length of II and III.

Abdomen distinctly wider than elytra (see ratio AW/EW and Fig. 34), widest at segment V; puncturation fine, well-defined, and rather sparse, slightly denser on anterior than on posterior tergites; anterior impressions of tergites III–V very deep; tergite VII with very narrow rudiment of a palisade fringe.

♂: pronotum rather weakly modified; with rather shallow oblong impression of somewhat variable depth and dimensions, sometimes barely more pronounced than in ♀ (Fig. 35); posterior margin of tergite VIII broadly concave and serrate (Fig. 38); posterior margin of sternite VIII truncate; aedeagus as in Figs. 39–40.

♀: pronotum in posterior half with very shallow impression and along midline with fine furrow (Fig. 36); tergite VIII posteriorly very shallowly concave (Fig. 41); posterior margin of sternite VIII weakly concave in the middle (Fig. 42); spermatheca as in Figs. 43–44.

COMMENTS: The original description of *D. gracilis* is based on three syntypes “aufgefunden von B. Gotsch” (HOCHHUTH 1849). Consequently the specimen designated by GUSAROV (1995) as the lectotype, which was collected by Chaudoir, is no type specimen and the lectotype designation must be considered invalid.

The external similarity of *D. gracilis* and *D. endorica* (SAULCY), as well as the similar general morphology of the aedeagus and the spermatheca, apparently led GUSAROV (1995) to believe that both were conspecific. He placed *D. endorica* in the synonymy of *D. gracilis* and figured the genitalia of specimens from the Middle East, which refer to a different species. A comparative study of material from the (vicinity of) the type locality of *D. gracilis* and other Caucasian localities, as well as of specimens from the Middle East, however, revealed that *D. gracilis* and *D. endorica* are distinct species, the former occurring in the Caucasus region and Transcaucasia, and the latter apparently confined to the Middle East.

COMPARATIVE NOTES: From *Drusilla canaliculata*, which too occurs in the Caucasus region, *D. gracilis* is readily distinguished by lesser size, a distinctly shining forebody, the much

sparser puncturation of the forebody, the relatively longer and more massive antennae, and by the primary and secondary sexual characters. From other West Palaearctic congeners with restricted distributions, none of which has become known from the Caucasus region, it is separated especially by the sexual characters, from most species also by the long and massive antennae with very weakly transverse preapical antennomeres, by larger size, as well as by the slender body.

**DISTRIBUTION AND BIONOMICS:** Due to the previous confusion with *D. endorica*, the literature records require confirmation. The examined specimens were all collected in the eastern Caucasus region and the Talysh mountain range, near the Caspian Sea. Ecological data have not become available.

***Drusilla endorica* (SAULCY), revalidated**  
(Figs. 45–54)

*Myrmedonia endorica* SAULCY, 1864: 432 f.

as synonym of *Drusilla gracilis* (HOCHHUTH): GUSAROV (1995).

**TYPES: Neotype** ♀, here designated: “endorica Saulcy, Caifa [= Haifa], Syria, leg. Schumacher, ded. Simon / endorica Saulcy Ann. Fr. 1864 p. 432 / c. Epplsh. Steind. d. / Neotypus ♀ *Myrmedonia endorica* Saulcy desig. V. Assing 2004 / *Drusilla endorica* (Saulcy) det. V. Assing 2004” (NHMW).

**ADDITIONAL MATERIAL EXAMINED:**

**Israel:** 5 exs., same data as neotype (NHMW, cAss).

**Locality not specified or not identified:** 2 exs., “Palästina, El Kamleh” (NHMW); 1 ex., “Anti Liban”, leg. Bloudan (IRSNB); 2 exs., “Syria” (NHMW).

**REDESCRIPTION:** Measurements (in mm) and ratios (range, arithmetic mean; n=10): AL: 1.57–1.75, 1.67; HL: 0.56–0.60, 0.58; HW: 0.56–0.60, 0.59; PW: 0.60–0.68, 0.64; PL: 0.68–0.74, 0.71; EL: 0.39–0.45, 0.44; EW: 0.83–0.91, 0.87; AW: 0.92–1.07, 0.98; TiL: 0.86–1.00, 0.93; TaL: 0.71–0.80, 0.76; ML: 0.60–0.62, 0.61; TL: 4.1–5.1, 4.4; HL/HW: 0.95–1.03, 0.98; PW/HW: 1.08–1.13, 1.10; PL/PW: 1.07–1.17, 1.11; EL/PL: 0.57–0.64, 0.61; EW/PW: 1.30–1.40, 1.36; AW/EW: 1.07–1.18, 1.13; TiL/TaL: 1.21–1.30, 1.24.

Habitus as in Fig. 45. Coloration: The material listed above was collected about a century ago, so they have probably become considerably lighter. The specimens are brown to dark brown, with the posterior parts of the abdomen infusate, the legs yellowish brown with the femora apically somewhat infusate, and the antennae reddish brown with the basal three antennomeres reddish. According to the original description, the species is of darker coloration.

Head as wide as long or weakly transverse (see ratio HL/HW and Figs. 46–47); eyes moderately large, protruding from lateral outline of head, postocular region usually 1.5 time as long as eyes in dorsal view (Figs. 46–47); dorsal surface without microsculpture; puncturation very fine, but distinct, and rather sparse. Antenna slender, of similar morphology as in *D. gracilis*, but shorter and relatively less massive (see measurements) (Fig. 48).

Pronotum relatively broad and weakly oblong, approximately 1.1 times as long as wide and 1.1 times as wide as head (see ratios PL/PW, PW/HW and Figs. 46–47); puncturation coarser than that of head, but on the whole conspicuously fine; microsculpture absent.

Elytra broad and transverse, distinctly wider than and at suture about 0.6 times as long as pronotum; puncturation coarse and dense, but less so than is usually the case in other western Palaearctic species of the genus, often well defined and not particularly dense; microsculpture absent (Fig. 46). Hind wings reduced.

Abdomen slightly wider than elytra (see ratio AW/EW and Fig. 45), widest at segment V; puncturation fine, well-defined, and rather sparse, slightly denser on anterior than on posterior

tergites; anterior impressions of tergites III–V very deep; tergite VII with a very narrow rudiment of a palisade fringe.

♂: pronotum in posterior half with extensive, but not very deep impression, similar in depth and extension to that of *D. meridiana* (Fig. 46); posterior margin of tergite VIII broadly and relatively weakly concave, serrate, but laterally not distinctly dentate (Figs. 49); posterior margin of sternite VIII truncate; aedeagus as in Fig. 50.

♀: pronotum in posterior half with much smaller and very shallow impression (Fig. 47); tergite VIII posteriorly very shallowly concave, outline indistinctly bisinuate (Fig. 51); posterior margin of sternite VIII weakly concave in the middle (Fig. 52); spermatheca as in Figs. 53–54.

COMMENTS: The interpretation of this species has been subject to confusion. Apparently unaware of the low degree of character divergence and the restricted distributions of many western Palaearctic *Drusilla* species, GUSAROV (1995) synonymised *D. endorica* with *D. gracilis*.

The original description of *Drusilla endorica* is based on an unspecified number of syntypes from “El-Foûleh, non loin d’Endor, sur le champ de bataille du Mont-Thabor”. The type material was looked for, but not found in the Saulcy collection at the Muséum National d’Histoire Naturelle Paris by Nicole Berti, the curator in charge (Lecoq, e-mail dated 29.VII.2004). Consequently, it must be considered lost. In view of the previous misinterpretations and the fact that several highly similar species occur in the Middle East, the stability of the name can be secured only based on a neotype designation. Accordingly, one of the specimens from a series collected near Haifa, Israel, was selected and is here designated as the neotype. It is deposited in the collections of the NHMW.

COMPARATIVE NOTES: From *Drusilla canaliculata*, the species is at once distinguished by the much sparser and finer puncturation of the forebody alone. From *D. gracilis*, with which it was previously confounded, it is separated by the shorter antennae, the less slender head and pronotum, the broader and more transverse elytra, finer and sparser puncturation of the forebody, and by the sexual characters, especially the shallower posterior emargination of the abdominal tergite VIII and by the shape of the spermatheca (particularly the shape of the proximal part of duct). From other congeners occurring in the middle east, *D. endorica* is distinguished especially by the finer and sparser puncturation of the forebody and by the shape of the spermatheca.

DISTRIBUTION AND BIONOMICS: Due to the previous confusion with *D. gracilis* and probably also with other undescribed species occurring in the Middle East, literature records require confirmation. The examined specimens with a specified locality on the label were collected in Israel (Haifa). Ecological data have not become available.

### *Drusilla pallidicornis* sp.n.

(Figs. 64–71, 146)

TYPES: **Holotype** ♀: “Hatay - 2 km N Reyhauhi, 50 km E Hatay, 100 mH, Straßenrand [= road margin], Leg. Schulz, 09.06.93, Türkei / Holotypus ♀ *Drusilla pallidicornis* sp.n. det. V. Assing 2004” (cAss). **Paratype** ♂ [teneral]: same data as holotype (cAss).

DESCRIPTION: Measurements (in mm) and ratios (holotype, paratype): AL: 1.61, 1.73; HL: 0.57, 0.54; HW: 0.56, 0.54; PW: 0.60, 0.60; PL: 0.63, 0.63; EL: 0.39, 0.36; EW: 0.76, 0.74; AW: 0.95, 0.82; TiL: 0.95, 0.94; TaL: 0.77, 0.72; TL: 4.7, 4.1; HL/HW: 1.03, 1.00; PW/HW: 1.08, 1.11; PL/PW: 1.05, 1.05; EL/PL: 0.62, 0.57; EW/PW: 1.25, 1.23; AW/EW: 1.26, 1.10; TiL/TaL: 1.24, 1.29.

Coloration: head dark brown; pronotum brown; elytra, abdominal segments III–V, and abdominal apex reddish brown; abdominal segments VI–VII blackish; legs yellowish brown with

the apices of the femora extensively, but weakly infusate; maxillary palpi dark brown; antennae concolorous, dark yellowish.

Head approximately as wide as long (see ratio HL/HW and Figs. 64–65); eyes relatively small, but protruding from lateral outline of head, postocular region twice as long as eyes in dorsal view or nearly so (Figs. 64–65); dorsal surface with shallow, but distinct microsculpture; puncturation extremely fine and sparse, barely noticeable. Antenna with antennomere III distinctly longer than II and approximately twice as long as wide or nearly so; IV as wide as long or weakly transverse; V only very indistinctly transverse; VI–X weakly transverse, all distinctly less than 1.5 times as wide as long; XI approximately as long as the combined length of IX and X (Fig. 66).

Pronotum conspicuously short, only 1.05 times as long as wide, and 1.1 times as wide as head (see ratios PL/PW, PW/HW and Figs. 64–65); puncturation more distinct and denser than that of head, but still relatively fine and ill-defined; microsculpture shallow.

Elytra more than 1.2 times as wide and at suture about 0.6 times as long as pronotum; puncturation coarser than that of pronotum, but finer and less dense than in most other Eastern Mediterranean congeners, somewhat irregular and indistinctly granulose; microsculpture very shallow (Figs. 64–65). Hind wings reduced. Metatarsomere I usually approximately as long as the combined length of II and III or nearly so.

Abdomen distinctly wider than elytra (see ratio AW/EW), widest at segment V; puncturation fine, well-defined, and sparse; anterior impressions of tergites III–V very deep; tergite VII with very narrow rudiment of a palisade fringe; microsculpture absent.

♂: pronotum in posterior 2/3 with extensive, but shallow oval impression (Fig. 64); elytra with longitudinal impression near lateral margin; posterior margin of tergite VIII broadly and not very deeply concave, laterally not distinctly dentate, not serrate (Fig. 67); posterior margin of sternite VIII truncate; the shape of the teneral aedeagus cannot be fully assessed.

♀: pronotum in mid-line with the usual clear-cut narrow furrow, but without distinct impression (Fig. 65); tergite VIII posteriorly narrowly and shallowly concave, weakly serrate (Fig. 68); posterior margin of sternite VIII truncate, not concave in the middle (Fig. 69); spermatheca of highly distinctive shape, with strongly enlarged capsule (Figs. 70–71).

ETYMOLOGY: The name (Lat., adj.) denotes “with pale antennae” and refers to the concolorously yellowish antennae.

COMPARATIVE NOTES: The species is readily distinguished from *Drusilla canaliculata* by the much sparser puncturation of the forebody, the more pronounced shine, the smaller size, and the completely different sexual characters. From other congeners occurring in the Middle East and in Turkey, it is separated especially by the light coloration of the antennae, by the extremely fine puncturation and the presence of microsculpture on the head, by the remarkably short pronotum, and by the sexual characters, in particular the shape of the spermatheca.

DISTRIBUTION AND BIONOMICS: The species is known only from one locality in Antakya, central southern Anatolia, where the types were collected on the roadside at an altitude of only 100 m. The paratype is teneral.

### *Drusilla denigrata* sp.n.

(Figs. 72–81, 143, 146)

TYPES: **Holotype** ♀: “TR. - Antakya [13], 920 m, 19 km S Antakya, SW Şenköy, *Q. ilex* & laurel, 36°01'48N, 36°07'19E, 5.IV.2004, leg. V. Assing / Holotypus ♀ *Drusilla denigrata* sp.n. det. V. Assing 2004” (cAss).

**Paratypes**: 1 ♂: “TR. - Antakya [1], 920 m, 19 km S Antakya, SW Şenköy, *Q. ilex* & laurel, 36°01'48N, 36°07'19E, 2.IV.2004, leg. V. Assing” (cAss); 1 ♂: same data, but leg. M. Schülke (cSch); 2 ♀♀: “TR. - Antakya [2], 940 m, 22 km S Antakya, SW Şenköy, oak & laurel, 36°00'32N, 36°07'13E, 2.IV.2004, leg. V. Assing” (cAss); 1 ♂, 1 ♀:

“TR Antakya (7), Ziyaret Dag, 440 m, N Yayladagi / 35°55'15N, 36°24'07E (7), 22.4.2004, leg. Brachat & Meybohm” (cAss); 1 ♂: “TR - Antakya, 11, 383 m, Kizildag, NW Teknepinar, sifted, 36°11'16N, 35°58'57E, 28.IV.2002, Meybohm” (cAss); 1 ♀: “Syrien, Slinfah [35°35N, 36°11E], 11.V.2002, leg. Schmid” (NHMW); 1 ♂, 1 ♀: “53 / Myrmecopora endorica Saulcy Syria / coll. Kraatz” (DEI).

DESCRIPTION: Measurements (in mm) and ratios (range, arithmetic mean; n=9): AL: 1.44–1.92, 1.72; HL: 0.56–0.62, 0.59; HW: 0.54–0.62, 0.58; PW: 0.60–0.68, 0.64; PL: 0.66–0.74, 0.70; EL: 0.35–0.44, 0.39; EW: 0.72–0.88, 0.81; AW: 0.92–1.03, 0.99; TiL: 0.88–1.06, 0.98; TaL: 0.72–0.83, 0.77; TL: 4.2–5.7, 4.9; HL/HW: 0.97–1.03, 1.01; PW/HW: 1.08–1.13, 1.10; PL/PW: 1.09–1.12, 1.10; EL/PL: 0.52–0.60, 0.56; EW/PW: 1.22–1.30, 1.26; AW/EW: 1.17–1.27, 1.22; TiL/TaL: 1.21–1.29, 1.26.

Habitus as in Fig. 72. Coloration: body blackish brown to blackish, with the pronotum, elytra, and the anterior abdominal segments usually indistinctly lighter; legs yellowish brown, with the femoral apices extensively, but weakly infusate; maxillary palpi dark brown; antennae gradually darkened towards apex, with the basal antennomeres reddish and the apical antennomeres dark brown.

Head approximately as wide as long (see ratio HL/HW and Figs. 73–74); eyes relatively small, but protruding from lateral outline of head, postocular region more than 1.5 times as long as eyes in dorsal view (Figs. 73–74); dorsal surface without distinct microsculpture; puncturation very fine and sparse. Antenna of rather variable length (see measurements); antennomere III distinctly longer than II and approximately twice as long as wide or nearly so; IV approximately as wide as long; V–X weakly transverse, X slightly less than 1.5 times as wide as long; XI usually shorter than the combined length of IX and X (Fig. 75).

Pronotum moderately oblong, about 1.1 times as long as wide, and 1.1 times as wide as head (see ratios PL/PW, PW/HW and Figs. 73–74); puncturation more distinct and denser than that of head, but still relatively fine; microsculpture absent.

Elytra distinctly transverse, more than 1.2 times as wide, and at suture usually less than 0.6 times as long as pronotum; puncturation coarser than that of pronotum, somewhat irregular; microsculpture absent (Figs. 73–74). Hind wings reduced. Metatarsomere I long, usually longer than the combined length of II and III.

Abdomen distinctly wider than elytra (see ratio AW/EW and Fig. 72), widest at segment V; puncturation fine, well-defined, and sparse; anterior impressions of tergites III–V very deep; tergite VII with very narrow rudiment of a palisade fringe; microsculpture absent.

♂: pronotum usually with distinct and extensive impression of variable depth along midline (Fig. 73); posterior margin of tergite VIII broadly and rather deeply concave, laterally not distinctly dentate, weakly serrate (Fig. 76); posterior margin of sternite VIII truncate; median lobe of aedeagus not very distinctive (Fig. 77).

♀: pronotum in mid-line with the usual clear-cut narrow furrow, but without distinct impression (Fig. 74); tergite VIII posteriorly moderately concave, weakly serrate (Fig. 78); posterior margin of sternite VIII truncate, only very indistinctly concave in the middle (Fig. 79); spermatheca of distinctive shape (Figs. 80–81).

ETYMOLOGY: The name (Lat., adj.) denotes “blackened” and refers to the dark coloration of the species.

COMPARATIVE NOTES: The species is readily distinguished from *Drusilla canaliculata* by the much sparser puncturation of the forebody, the more pronounced shine, the smaller size, and the completely different sexual characters. From other congeners occurring in the Middle East and in Turkey, it is separated especially by the dark colour of the body, the apically infusate femora, and by the sexual characters, especially the shape of the spermatheca.

**DISTRIBUTION AND BIONOMICS:** *Drusilla denigrata* has become known from the Turkish province Antakya (central southern Anatolia) and from northern Syria. Most of the Turkish specimens were sifted from the leaf litter of oak and laurel shrubs at altitudes of 380–940 m. The locality where the holotype and two paratypes were collected is illustrated in Fig. 143.

***Drusilla cernens* sp.n.**

(Figs. 82–87, 146)

**TYPES:** **Holotype** ♀: “Akbes, Syrie / Coll. et det. A. Fauvel, Myrmecopora erichsoni Peyr., R.I.Sc.N.B. 17.479 / Holotypus ♀ *Drusilla cernens* sp.n. det. V. Assing 2004” (IRSNB).

**DESCRIPTION:** Measurements (in mm) and ratios (holotype): AL: 1.57; HL: 0.53; HW: 0.56; PW: 0.60; PL: 0.68; EL: 0.44; EW: 0.82; AW: 0.85; TiL: 0.85; TaL: 0.69; TL: 3.7; HL/HW: 0.95; PW/HW: 1.08; PL/PW: 1.13; EL/PL: 0.64; EW/PW: 1.35; AW/EW: 1.04; TiL/TaL: 1.22.

Highly similar to *D. sinuosa* (see description below). Distinguished as follows:

**Coloration:** Head, pronotum, and abdomen dark brown, with the preapical abdominal segments infuscate; elytra light brown; legs and basal 3 antennomeres yellowish brown; antennomeres IV–XI dark brown.

Head transverse (see ratio HL/HW and Figs. 82–83) and posteriorly almost truncate; eyes large, protruding from lateral outline of head, postocular region less than 1.5 times as long as eyes in dorsal view (Fig. 83). Microsculpture and puncturation as in *D. sinuosa*. Antenna as in Fig. 84.

Pronotum as in *D. sinuosa*. Elytra remarkably large, more than 1.35 times as wide and at suture about 0.65 times as long as pronotum (Fig. 82); otherwise as in *D. sinuosa*. Hind wings reduced. Legs as in *D. sinuosa*.

Abdomen only slightly wider than elytra (see ratio AW/EW), otherwise as in *D. sinuosa*.

♂: unavailable.

♀: pronotum in mid-line without distinct impression, only with the usual furrow (Fig. 83); tergite VIII posteriorly moderately concave and weakly serrate (Fig. 85); posterior margin of sternite VIII moderately concave in the middle (Fig. 86); spermatheca of distinctive shape (Fig. 87).

**ETYMOLOGY:** The name (Lat., present participle of *cernere*) refers to the relatively large eyes.

**COMMENT:** This species is apparently conspecific with the material (at least the illustrated female) from the Middle East interpreted by GUSAROV (1995) as *D. gracilis*.

**COMPARATIVE NOTES:** The species is readily distinguished from *Drusilla canaliculata* by the much sparser puncturation of the forebody, the much more pronounced shine, the smaller size, and the completely different sexual characters. From the geographically close *D. denigrata*, it is separated by a more transverse head with larger eyes, by a more densely punctured pronotum, relatively longer elytra, a narrower abdomen (in relation to elytra), the posteriorly distinctly concave female sternite VIII, and by the shape of the spermatheca, especially the proximal part of the duct. From other congeners occurring in the Middle East and in Turkey, it is separated especially by the large eyes, the long and wide elytra, and by the sexual characters, most of all by the shape of the spermatheca.

**DISTRIBUTION AND BIONOMICS:** The species is known only from “Akbes”, now Akbez in Antakya, central southern Turkey (Fig. 146).

***Drusilla limata* sp.n.**  
(Figs. 88–99, 147)

**TYPES:** **Holotype** ♀: “Antalya - Saklikent, 40 km W Antalya, 1900 - 2100 mH, Kiefernwald, Leg. Schulz, 27.05.93, Türkei / Holotypus ♀ *Drusilla limata* sp.n. det. V. Assing 2004” (cAss). **Paratypes:** 1 ♂: “Turcia, mer. (Antalya), Mt. Beydaglari, 1650 - 1900 m, Saklikent, 17.6.1994, leg. A. Pütz” (cAss); 1 ♀: “TR- Südküste, Str. Antalya-Saklikent, 1300 m, 10.5.2000, Meybohm/Brachat” (cAss); 2 ♂♂, 2 ♀♀: “Turcia, mer., Avsallar b. Incekum, 22 km W Alanya, 9.-23.5.1995, leg. A. Pütz” (cAss).

**DESCRIPTION:** Measurements (in mm) and ratios (range, arithmetic mean; n=7): AL: 1.55–1.77, 1.66; HL: 0.53–0.57, 0.55; HW: 0.54–0.59, 0.56; PW: 0.60–0.63, 0.62; PL: 0.63–0.68, 0.65; EL: 0.36–0.42, 0.40; EW: 0.74–0.82, 0.77; AW: 0.85–1.00, 0.91; TiL: 0.82–0.95, 0.88; TaL: 0.66–0.79, 0.72; ML: 0.59–0.65, 0.61; TL: 4.4–5.4, 4.9; HL/HW: 0.97–1.03, 0.98; PW/HW: 1.08–1.14, 1.10; PL/PW: 1.05–1.07, 1.06; EL/PL: 0.57–0.64, 0.61; EW/PW: 1.19–1.29, 1.24; AW/EW: 1.14–1.22, 1.19; TiL/TaL: 1.20–1.32, 1.23.

Forebody as in Fig. 88. Coloration: body dark brown to blackish, with the pronotum, the elytra, and the anterior abdominal segments slightly lighter; legs yellowish to yellowish brown, femora not distinctly infusate; maxillary palpi dark brown; antennae concolorous, yellowish brown to reddish brown.

Head approximately as wide as long (see ratio HL/HW and Figs. 89–90); eyes moderately small, protruding from lateral outline of head, postocular region slightly more than 1.5 times as long as eyes in dorsal view (Figs. 89–90); dorsal surface with shallow microsculpture; puncturation not particularly fine, but shallow, and moderately sparse. Antenna with antennomere III massive, distinctly longer than II and approximately twice as long as wide; IV–X all weakly transverse, X clearly less than 1.5 times as wide as long; XI slightly shorter than the combined length of IX and X (Fig. 91).

Pronotum weakly oblong, only 1.05 times as long as wide, and almost 1.1 times as wide as head (see ratios PL/PW, PW/HW and Figs. 89–90); puncturation rather dense, finer than that of head, but more distinct; microsculpture absent.

Elytra distinctly transverse, more than 1.2 times as wide, and at suture approximately 0.6 times as long as pronotum; surface somewhat uneven, with more or less distinct oblong impression near lateral margin and slightly bulging near scutellum (Figs. 89–90); puncturation relatively fine and slightly granulose; with or without shallow microsculpture. Hind wings reduced. Metatarsomere I slightly shorter than the combined length of II and III.

Abdomen distinctly wider than elytra (see ratio AW/EW), widest at segment V; puncturation fine, well-defined, and sparse; anterior impressions of tergites III–V very deep; tergite VII with very narrow rudiment of a palisade fringe; microsculpture absent.

♂: pronotum usually with extensive, but rather shallow median impression (Fig. 90); posterior margin of tergite VIII very weakly concave, weakly serrate at most, laterally not distinctly dentate (Figs. 92–93); posterior margin of sternite VIII truncate (Fig. 94); median lobe of aedeagus not very distinctive (Fig. 95).

♀: pronotum with shallow impression (Fig. 89); tergite VIII posteriorly very weakly concave, indistinctly to weakly serrate (Fig. 96); posterior margin of sternite VIII truncate, not concave in the middle (Fig. 97); spermatheca of distinctive shape (Figs. 98–99).

**ETYMOLOGY:** The name (Lat., adj.) denotes “filed, smoothened” and refers to the weakly concave smooth posterior margin of tergite VIII in both sexes.

**COMPARATIVE NOTES:** The species is readily distinguished from *Drusilla canaliculata* by the much sparser puncturation of the forebody, the more pronounced shine, the smaller size, and

the completely different sexual characters. Among other congeners occurring in the Middle East and in Turkey, it is characterised by the morphology of the antenna, the weakly oblong pronotum, the punctuation of the forebody, the presence of weak microsculpture on the head, the uneven surface of the elytra, the relatively short metatarsomere, and by the sexual characters, especially the shape of the posterior margin of tergite VIII in both sexes, and the shape of the spermatheca.

**DISTRIBUTION AND BIONOMICS:** The species is known from two localities in Antalya province: Saklikent, some 40 km to the west of Antalya, where it was collected on three occasions, and the vicinity of Alanya in eastern Antalya (Fig. 147). The type specimens from Saklikent were found at altitudes between 1300 and 2100 m.

***Drusilla sinuosa* sp.n.**  
(Figs. 55–63, 100–111)

**TYPES:** **Holotype** ♀: “TR. - Gaziantep [24], 33 km E Osmaniye, 1520 m, NE Nurdağı Geç., 37°08'19N, 36°07'09E, 8.IV.2004, leg. V. Assing / Holotypus ♀ *Drusilla sinuosa* sp.n. det. V. Assing 2004” (cAss). **Paratypes:** 1 ♂: same data as holotype (cAss); 3 ♂♂, 1 ♀: “Gaziantep [26], 32 km E Osmaniye, 1220 m, NE Nurdağı Geç., 37°07'10N, 36°37'04E, 8.IV.2004, leg. V. Assing” (cAss); 1 ♀: “Gaziantep [25], 32 km E Osmaniye, 1310 m, NE Nurdağı Geç., 37°07'23N, 36°36'59E, 8.IV.2004, leg. V. Assing” (cAss); 2 ♂♂: “TR. - Adana, N Osmaniye, Karatepe Nat. Park, 200 m, 37°17'12N, 36°14'22E, Laurisilva, *Q. suber*, N. 13, 28.12.2000, V. Assing” (cAss); 1 ♂, 1 ♀: “Turquie, Adana, Karatepe, 200 m, 1.V.78, Besuchet Löbl” (MHNG, cAss); 2 ♀♀: “Osmaniye, Asm., 1.5.76, leg. F. Schubert” (NHMW, cAss); 2 ♂♂, 2 ♀♀: “Osmaniye, Asm., 1000 m, 1.-8.5.69, leg. F. Schubert” (NHMW, cAss); 3 ♀♀: “Kahramanmaraş [39], 34 km SW Kahramanmaraş, 37°22'57N, 36°40'42E, 1070 m, oak, shrubs, grass, 12.IV.2004, leg. V. Assing” (cAss); 1 ♀: “Kahramanmaraş, [21], ca. 35 km SW Doluca, 1280 m, 37°22'03N, 36°40'24E, 27.IV.2004, Besuchet” (cAss); 2 ♂♂, 1 ♀: “Mardin, Asm. or., 1700 m, 28/31.5.70, leg. F. Schubert” (NHMW, cAss).

**DESCRIPTION:** Measurements (in mm) and ratios (range, arithmetic mean; n=24): AL: 1.57–1.73, 1.65; HL: 0.53–0.59, 0.56; HW: 0.54–0.62, 0.58; PW: 0.59–0.68, 0.63; PL: 0.66–0.74, 0.69; EL: 0.38–0.45, 0.41; EW: 0.74–0.89, 0.80; AW: 0.88–0.98, 0.93; TiL: 0.85–0.98, 0.90; TaL: 0.69–0.77, 0.72; ML: 0.59–0.65, 0.62; TL: 3.9–5.3, 4.7; HL/HW: 0.92–1.00, 0.98; PW/HW: 1.05–1.15, 1.10; PL/PW: 1.07–1.15, 1.10; EL/PL: 0.57–0.65, 0.60; EW/PW: 1.19–1.36, 1.26; AW/EW: 1.05–1.27, 1.17; TiL/TaL: 1.14–1.33, 1.24.

Habitus as in Fig. 100. Coloration: body blackish, with the pronotum, the elytra, and often the anterior abdominal segments slightly lighter; legs dark yellowish, femora not distinctly infusate; maxillary palpi dark brown; antennae dark brown, with the anterior 3–5 antennomeres reddish.

Head approximately as wide as long or weakly transverse (see ratio HL/HW and Figs. 55–56, 101–102); eyes of moderate size; postocular region slightly more than 1.5 times as long as eyes in dorsal view (Figs. 55–56, 101–102); dorsal surface without microsculpture; punctuation moderately fine and moderately sparse. Antenna with antennomere III approximately twice as long as wide; IV usually about as wide as long; V–X rather weakly transverse, VII–X usually about 1.5 times as wide as long; XI slightly shorter than the combined length of IX and X (Figs. 57, 104).

Pronotum moderately oblong, approximately 1.1 times as long as wide, and on average about 1.1 times as wide as head (see ratios PL/PW, PW/HW and Figs. 55–56, 101–103); punctuation much denser and more distinct than that of head; microsculpture absent.

Elytra distinctly transverse, at least about 1.2 times as wide, and at suture approximately 0.6 times as long as pronotum; surface even, without impressions (Figs. 55–56, 101–102); punctuation coarse, dense, evenly distributed, and rather well-defined. Hind wings reduced. Metatarsomere I at least as long as the combined length of II and III.

Abdomen slightly to distinctly wider than elytra (see ratio AW/EW), widest at segment V; puncturation rather variable; tergite VII with very narrow rudiment of a palisade fringe; microsculpture absent.

♂: pronotum with extensive and usually rather deep median impression and with somewhat granulate puncturation (Figs. 55, 102–103); posterior margin of tergite VIII serrate, broadly concave, laterally dentate (Figs. 58, 105); posterior margin of sternite VIII truncate; median lobe of aedeagus with sinuate ventral process in lateral view (Figs. 59–60, 106–107).

♀: pronotum with shallow impression (Fig. 56, 101), puncturation finer and not granulate; tergite VIII of similar shape as in male, but somewhat more narrowly concave posteriorly (Figs. 61, 108); posterior margin of sternite VIII very weakly concave in the middle (Figs. 62, 109); spermatheca with moderately enlarged capsule (Figs. 63, 110–111).

ETYMOLOGY: The name (Lat., adj.: curved) refers to the sinuate shape of the ventral process of the aedeagus.

COMPARATIVE NOTES: The species is readily distinguished from *Drusilla canaliculata* by the much sparser puncturation of the forebody, the more pronounced shine, the smaller size, and the completely different sexual characters. The geographically closest congeners are *D. limata*, *D. recta*, and *D. denigrata*. From all of them, *D. sinuosa* is distinguished by the shape of the aedeagus and the spermatheca. In addition, it is separated from *D. limata* by much denser and coarser puncturation of the forebody (especially pronotum), the apically infusate antennae, the even surface of the elytra, the more oblong pronotum, and by the distinctly concave posterior margin of tergite VIII in both sexes, from *D. recta* also by much lighter and concolorous legs, by the apically infusate antennae, and by the even surface of the elytra, and finally from *D. denigrata* by the lighter and concolorous legs and by the denser puncturation of the pronotum.

DISTRIBUTION AND BIONOMICS: The species has been collected in several localities in Adana, Kahramanmaraş, Gaziantep, and Mardin in central southern Anatolia (Fig. 147). The type specimens were partly found under stones, partly sifted from the roots of grass herbs, and from the leaf litter of shrubs and laurisilva at a wide range of altitudes (200–1700 m).

***Drusilla recta* sp.n.**  
(Figs. 112–122, 147)

TYPES: **Holotype** ♀: “TR Mersin (38), road to Güzeloluk, S Aydinlar, 1380 m / 36°44'34N, 34°8'E (38), 4.5.2004, leg. Brachat & Meybohm / Holotypus ♀ *Drusilla recta* sp.n. det. V. Assing 2004” (cAss). **Paratypes**: 3 ♂♂, 3 ♀♀: same data as holotype (cAss); 1 ♂, 7 ♀♀: same data, but leg. C. Besuchet (cAss); 1 ♂: “E32°55', N36°12', Türkei nördl. Anamur, Anamur Umg. 350 m, Meybohm, 7.5.2000” (cAss); 1 ♂, 1 ♀: “N36°8', E32°46', Türkei Umg. Anamur, Kösekbasi, 150 m, Meybohm, 18.5.2000” (cAss); 1 ♀: “N36°12' E32°25', Türkei, Umg. Anamur, Gazipasa 13 km sö., 180 m, Meybohm 16.5.2000 (cAss); 1 ♂: “TR - Südküste, Str. Alanya/Anamur, 13 km o Gazipasa, 180 m, 16.5.2000, Meybohm/Brachat” (cAss); 1 ♀: “Silifke, Asm., 28.4.-5.65, leg. F. Schubert” (NHMW); 1 ♀: “Turkey: Anatolia mer., Mersin: Arsanli 15 km NW Erdemli, 11.-19.V.1994, leg. Hauck” (cSch); 1 ♀: “Türkei, Prov. Icel, 1000 m (Erdemli NW), Aydinlar SW, 25.7.1998, leg. Winkelmann” (cSch); 1 ♀: “Turquie Konya, Sertavul Geçidi, 1500-1600 m, 28.IV.78, Besuchet Löbl” (MHNG).

DESCRIPTION: Measurements (in mm) and ratios (range, arithmetic mean; n=23): AL: 1.59–1.92, 1.77; HL: 0.54–0.60, 0.57; HW: 0.53–0.59, 0.56; PW: 0.56–0.65, 0.61; PL: 0.62–0.74, 0.68; EL: 0.33–0.42, 0.39; EW: 0.69–0.83, 0.78; AW: 0.83–1.03, 0.97; TiL: 0.88–1.06, 0.97; TaL: 0.71–0.83, 0.77; ML: 0.60–0.63, 0.62; TL: 4.2–5.6, 4.8; HL/HW: 0.97–1.06, 1.02; PW/HW: 1.05–1.13, 1.09; PL/PW: 1.07–1.15, 1.11; EL/PL: 0.54–0.63, 0.58; EW/PW: 1.22–1.33, 1.27; AW/EW: 1.17–1.36, 1.25; TiL/TaL: 1.20–1.30, 1.25.

Habitus as in Fig. 112. Coloration variable; usual coloration: head and posterior half of abdomen blackish brown; pronotum, elytra, and anterior abdominal segments indistinctly lighter, dark

brown; legs yellowish brown, with the apical parts of the femora more or less distinctly infuscate; maxillary palpi dark brown; antennae reddish, often antennomere I somewhat infuscate.

Head approximately as wide as long (see ratio HL/HW and Fig. 113); eyes of moderate size; postocular region slightly more than 1.5 times as long as eyes in dorsal view (Figs. 113); dorsal surface without or with very shallow microsculpture; puncturation very fine and sparse. Antenna with antennomere III approximately twice as long as wide; IV and V about as wide as long or weakly transverse; VI–X rather weakly transverse, X at most 1.5 times as wide as long; XI as long as the combined length of IX and X or slightly shorter (Fig. 114).

Pronotum moderately oblong, approximately 1.1 times as long as wide, and on average about 1.1 times as wide as head (see ratios PL/PW, PW/HW and Fig. 113); puncturation fine, but much denser and more distinct than that of head; microsculpture absent or, rarely, very shallow.

Elytra distinctly transverse, usually distinctly more than 1.2 times as wide, and at suture on average less than 0.6 times as long as pronotum; surface often with weak oblong impression near lateral margin (Fig. 113); puncturation coarse, dense, evenly distributed, and rather well-defined. Hind wings reduced. Metatarsomere I approximately as long as the combined length of II and III.

Abdomen distinctly wider than elytra (see ratio AW/EW), widest at segment V; puncturation very fine and sparse; tergite VII with very narrow rudiment of a palisade fringe; microsculpture absent.

♂: pronotum with usually extensive median impression of variable depth; posterior margin of tergite VIII weakly serrate, broadly and rather deeply concave (Figs. 115–116); posterior margin of sternite VIII truncate; median lobe of aedeagus with straight ventral process in lateral view (Fig. 117).

♀: pronotum with shallow impression; tergite VIII posteriorly somewhat more shallowly and more narrowly concave than in ♂ (Fig. 118); posterior margin of sternite VIII more or less truncate, not distinctly concave in the middle (Figs. 119); spermatheca of rather variable shape (Figs. 120–121).

ETYMOLOGY: The name (Lat., adj.: straight) refers to the shape of the ventral process of the aedeagus in lateral view.

COMPARATIVE NOTES: The species is readily distinguished from *Drusilla canaliculata* by the much sparser puncturation of the forebody, the more pronounced shine, the smaller size, and the completely different sexual characters. The geographically closest congeners are *D. limata*, *D. sinuosa*, and *D. denigrata*. From all of them, *D. recta* is reliably distinguished by the shape of the aedeagus and the spermatheca. In addition, it is separated from *D. limata* by the more oblong pronotum and by the distinctly concave posterior margin of tergite VIII in both sexes, from *D. sinuosa* by the concolorous reddish coloration of the antennae, the infuscate legs, and by the broader posterior excavation of the female tergite VIII, and finally from *D. denigrata* by the non-infuscate apical antennomeres.

DISTRIBUTION AND BIONOMICS: The species has been collected in various localities in Mersin and adjacent parts of Antalya and Konya (Fig. 147). The types were found at a wide range of altitudes, from 150 to about 2000 m. The ovaries of a dissected female collected at the end of April contained a mature egg. The spermatheca of one female is teratologically malformed (Fig. 122).

***Drusilla besucheti* sp.n.**  
(Figs. 126–131, 147)

TYPES: **Holotype** ♀: “Liban, 31.III.75, Cèdres de Barouk [33°39N, 35°40E], 1800 m, Besuchet / Holotypus ♀ *Drusilla besucheti* sp.n. det. V. Assing 2004” (MHNG). **Paratypes**: 1 ♀: “Liban 2.IV.75, Les Cèdres près Becharré [34°11N, 35°46E], 1950–2000 m, Besuchet” (cAss); 1 ♀: “Liban” (IRSNB).

DESCRIPTION: Measurements (in mm) and ratios (range; n=3): AL: 1.65–1.73; HL: 0.57–0.59; HW: 0.57–0.60; PW: 0.62–0.63; PL: 0.69–0.71; EL: 0.36–0.38; EW: 0.80–0.85; AW: 0.95–1.10; TiL: 0.88, 0.95; TaL: 0.71–0.77; TL: 4.2–4.9; HL/HW: 0.98–1.00; PW/HW: 1.05–1.08; PL/PW: 1.11–1.12; EL/PL: 0.51–0.55; EW/PW: 1.29–1.37; AW/EW: 1.19–1.33; TiL/TaL: 1.23–1.24.

Habitus as in Fig. 126. In external features highly similar to *D. recta* (Figs. 127–128), but distinguished as follows:

Coloration lighter, head, pronotum, elytra, and anterior segments of abdomen reddish; legs reddish yellow, with the apices of the femora only indistinctly infusate. Pronotum with more distinct puncturation. Elytra on average more transverse and relatively shorter. Abdomen relatively wider than in average *D. recta*.

♂: unknown.

♀: tergite VIII of posteriorly very broadly and shallowly concave (Figs. 129); posterior margin of sternite VIII very weakly concave in the middle; spermatheca with shorter and proximally more strongly dilated duct (Figs. 130–131).

ETYMOLOGY: The species is dedicated to Claude Besuchet, Genève, who discovered the types.

COMPARATIVE NOTES: The species is distinguished from other congeners occurring in the vicinity of the type localities especially by the light coloration, by strongly transverse elytra, the large abdomen, the very broadly and shallowly concave posterior margin of the female tergite VIII, and by the shape of the spermatheca.

DISTRIBUTION AND BIONOMICS: *Drusilla besucheti* was collected in three localities in Lebanon (Fig. 147). Additional ecological data are not available.

***Drusilla anceps* sp.n.**  
(Figs. 132–137)

TYPES: **Holotype** ♀: “Türkei\_20, Prov. Mersin, Sertavul Gecidi, 1600 mH, 07.05.1997, leg. A. Schulz, K. Vock, M. Sanetra / Holotypus ♀ *Drusilla anceps* sp.n. det. V. Assing 2004” (cAss). **Paratype** ♂: same data as holotype (cAss).

DESCRIPTION: Measurements (in mm) and ratios (holotype, paratype): AL: 1.52, 1.77; HL: 0.53, 0.57; HW: 0.51, 0.57; PW: 0.54, 0.63; PL: 0.60, 0.69; EL: 0.35, 0.41; EW: 0.69, 0.80; AW: 0.88, 0.94; TiL: 0.82, 0.95; TaL: - , 0.76; ML: - , 0.66; TL: 4.2, 5.2; HL/HW: 1.03, 1.00; PW/HW: 1.06, 1.11; PL/PW: 1.11, 1.10; EL/PL: 0.58, 0.59; EW/PW: 1.28, 1.26; AW/EW: 1.26, 1.17; TiL/TaL: - , 1.22.

On the whole, highly similar to *D. limata* (Figs. 132–133), distinguished as follows:

Coloration: antenna infusate, dark brown with slightly lighter basal antennomeres; femora more extensively darkened. Head without microsculpture. Elytra without impressions and with coarser puncturation.

♂: pronotum with extensive and shallow median impression (Fig. 132); posterior margin of tergite VIII weakly serrate, broadly and weakly concave (Fig. 134); median lobe of aedeagus as in Fig. 135.

♀: pronotum with shallow impression; tergite VIII shallowly concave (Fig. 136); posterior margin of sternite VIII truncate, not concave in the middle; duct of spermatheca relatively short, in the middle not abruptly narrowed (Fig. 137).

ETYMOLOGY: The name (Lat., adj.: doubtful) refers to the long time needed to conclude and decide that the types listed above in fact represent a distinct species.

COMPARATIVE NOTES: For distinction from *D. canaliculata* see the comparative notes below the preceding species. From other species occurring in southern Turkey, it is separated by the shape of the spermatheca and by the following characters combination: antennae and femora infusate, head without microsculpture, elytra without impressions, posterior excavation of tergite VIII very shallow in both sexes.

DISTRIBUTION AND BIONOMICS: The species is known only from one locality in northwestern Mersin, near the border to Konya, in central southern Anatolia, where the types were found at an altitude of 1600 m.

### *Drusilla persica* sp.n.

(Figs. 138–142)

TYPE: **Holotype** ♀: “Iran Mazanderan, Tang-e-Râh, 37°23'N, 55°50'E, A. Senglet, 13.7.74 / Holotypus ♀ *Drusilla persica* sp.n. det. V. Assing 2004” (MHNG).

DESCRIPTION: Measurements (in mm) and ratios (holotype): AL: 1.69; HL: 0.56; HW: 0.56; PW: 0.60; PL: 0.68; EL: 0.39; EW: 0.77; AW: 0.98; TiL: 0.89; TL: 4.4; HL/HW: 1.00; PW/HW: 1.08 PL/PW: 1.13; EL/PL: 0.58; EW/PW: 1.28; AW/EW: 1.27.

Similar to *D. gracilis* (Fig. 138). Coloration: head and abdomen dark brown; pronotum and elytra brown; legs yellowish, femora apically not infusate; antennae reddish.

Head shape, eye size, and antennae (Fig. 140) as in *D. gracilis*; puncturation much sparser than in *D. gracilis* (Fig. 139). Pronotum of similar shape as in *D. gracilis*, but with distinctly sparser puncturation and with more shine (Fig. 139). Elytra of similar proportions as in *D. gracilis*, but without lateral impressions or depression, with distinctly sparser puncturation, and with more shine (Fig. 139). Legs shorter (see measurements; no overlap). Abdomen rather wide in relation to elytra (Fig. 138); puncturation sparser than in *D. gracilis*.

♂: unknown.

♀: pronotum with shallow impression (Fig. 139); tergite VIII posteriorly distinctly concave and serrate (Fig. 141); posterior margin of sternite VIII weakly concave; spermatheca small, capsule not enlarged, duct weakly dilated proximally (Fig. 142).

ETYMOLOGY: The name (Lat., adj.) is derived from Persia.

COMPARATIVE NOTES: From *D. gracilis*, whose presence in Iran is confined to the northwest, the new species is best distinguished by the distinctly sparser puncturation of the whole body, the more strongly concave posterior margin of the female tergite VIII, and by the smaller spermatheca with a proximally weakly enlarged duct. From *D. canaliculata*, which, too, occurs in Iran, it is readily separated by the smaller size and by the much sparser puncturation. From all other western Palaearctic congeners, *D. persica* differs especially in the female sexual characters.

DISTRIBUTION AND BIONOMICS: The species is known only from one locality in northeastern Iran; bionomic data are not available.

### Catalogue of the western Palaearctic species of *Drusilla*

The eastern limit of the region considered in the catalogue and in the following key are the Caucasus, Iran, and the Middle East; the species confined to Middle Asia are not included.

Species	Distribution
<b>Subgenus <i>Drusilla</i></b> (type species: <i>D. canaliculata</i> (FABRICIUS))	
<i>Drusilla anceps</i> <b>sp.n.</b>	Turkey: W-Mersin
<i>Drusilla besucheti</i> <b>sp.n.</b>	Lebanon
<i>Drusilla canaliculata</i> (FABRICIUS, 1787) <i>armeniaca</i> (CAMERON, 1939) <i>impressa</i> (ROSSI, 1790) <i>puncticollis</i> (MOTSCHULSKY, 1845) <i>leonii</i> (PORTA, 1907) <i>mandli</i> (BERNHAEUER, 1899) <i>sibirica</i> (SCHEERPELTZ, 1956) <i>caucasica</i> (BERNHAEUER, 1903); <b>syn.n.</b>	Palaearctic Region, introduced in Nearctic Region
<i>Drusilla cernens</i> <b>sp.n.</b>	Turkey: Antakya
<i>Drusilla cretica</i> <b>sp.n.</b>	Greece: Crete
<i>Drusilla denigrata</i> <b>sp.n.</b>	Turkey: Antakya; northern Syria
<i>Drusilla endorica</i> (SAULCY, 1864), <b>revalidated</b>	Middle East: Israel
<i>Drusilla erichsoni</i> (PEYRON, 1857)	Southeastern France
<i>Drusilla gracilis</i> (HOCHHUTH, 1849)	Eastern Caucasus region
<i>Drusilla italica</i> (BERNHAEUER, 1903)	Southern Italy
<i>Drusilla kabyliaana</i> (FAGEL, 1958)	Algeria
<i>Drusilla limata</i> <b>sp.n.</b>	Turkey: Antalya
<i>Drusilla memnonia</i> (MÄRKEL, 1845) <i>tristis</i> (LUCAS, 1846); <b>syn.n.</b>	Italy: Sicily; Tunisia, Algeria
<i>Drusilla meridiana</i> (FAUVEL, 1900)	Greece: Pelopónnisos
<i>Drusilla pallidicornis</i> <b>sp.n.</b>	Turkey: Antakya
<i>Drusilla persica</i> <b>sp.n.</b>	NE-Iran
<i>Drusilla recta</i> <b>sp.n.</b>	Turkey: Mersin, eastern Antalya, Konya
<i>Drusilla sinuosa</i> <b>sp.n.</b>	Turkey: Adana, Kahramanmaraş, Gaziantep, Mardin
<i>Drusilla taygetana</i> <b>sp.n.</b>	Greece: Pelopónnisos
<b>Subgenus <i>Apteranopsis</i> JEANNEL</b> (type species: <i>D. lethierryi</i> (FAUVEL))	
<i>Drusilla convexifrons</i> (FAIRMAIRE, 1873)	Algeria: "Alger"
<i>Drusilla foreli</i> (WASMANN, 1890)	Tunisia
<i>Drusilla hipponensis</i> (FAUVEL, 1898)	Algeria: Bône
<i>Drusilla lethierryi</i> (FAUVEL, 1898)	Algeria
<i>Drusilla raffravi</i> (FAIRMAIRE, 1870)	Algeria: "Boghari"
<i>Drusilla theryi</i> (FAUVEL, 1898)	Algeria
<i>Drusilla villosa</i> (PEYERIMHOFF, 1909)	Algeria

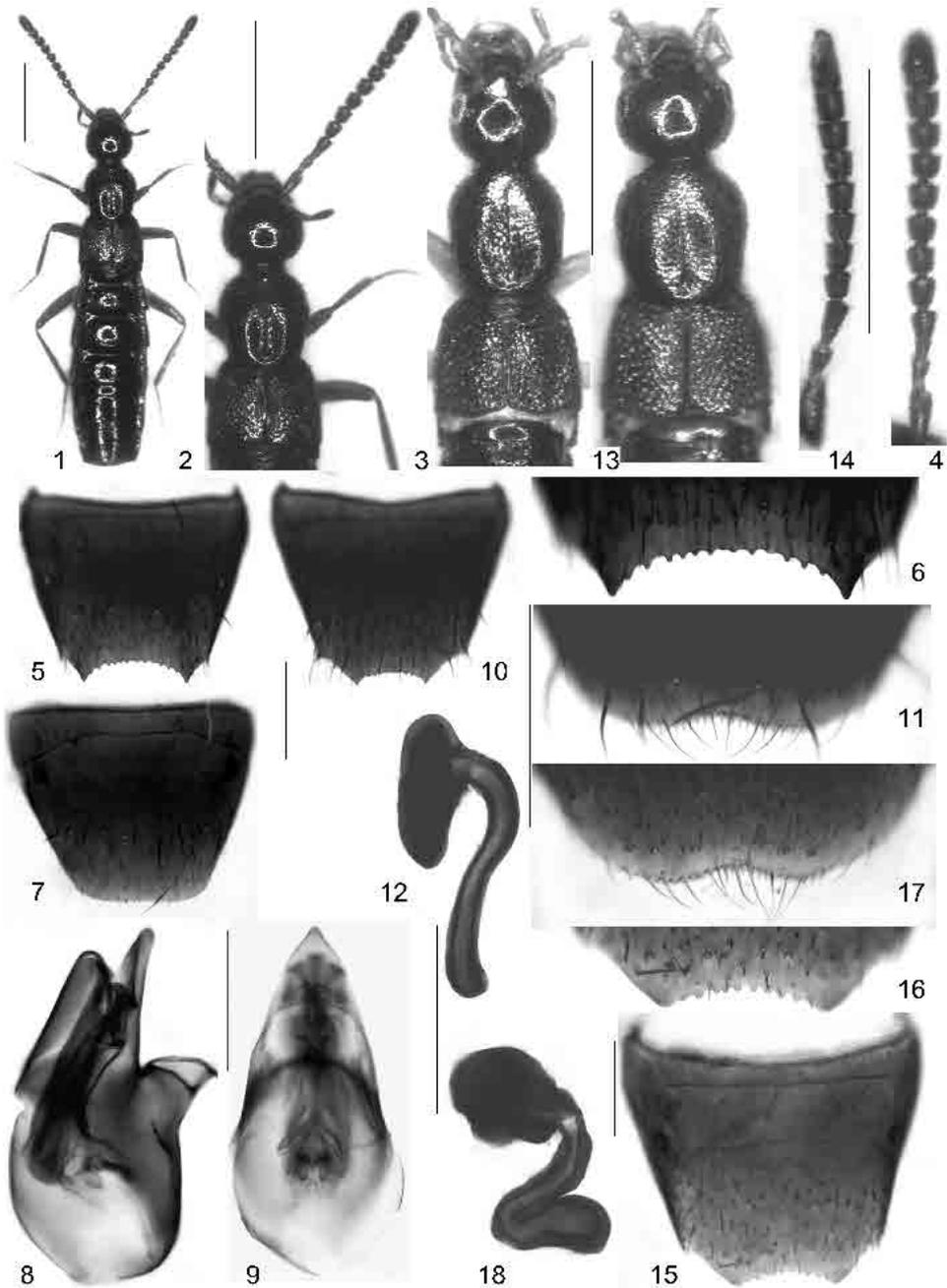
### Key to the western Palaearctic species of *Drusilla*

The characters indicated for the separation of the species of the subgenus *Apteranopsis* JEANNEL mainly rely on the key by JEANNEL (1960). In view of the morphological similarity of the *Drusilla* species and since, except for *D. canaliculata*, the distributions of almost all the species

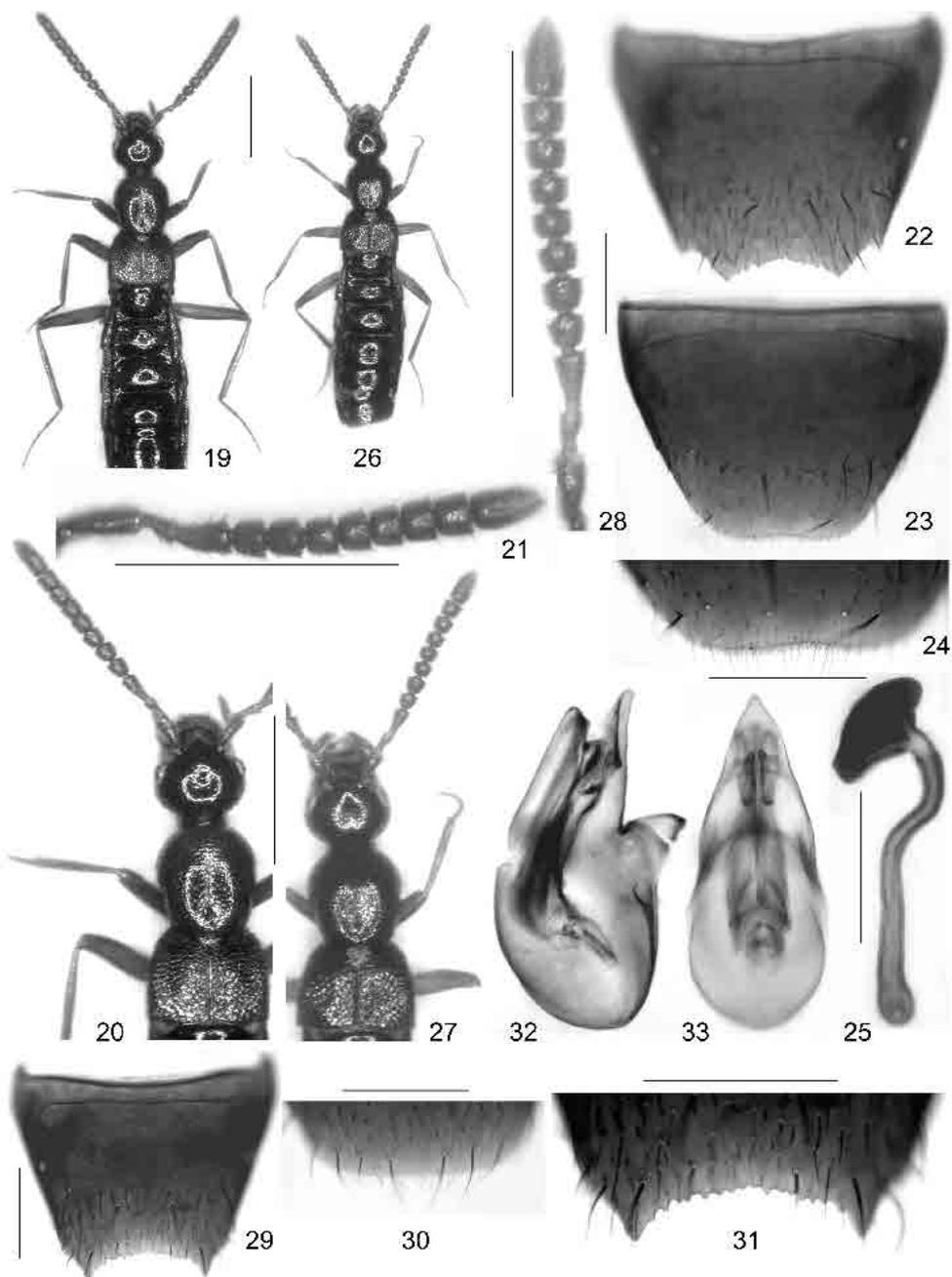
are strictly allo- or parapatric, the following key also relies on zoogeographic data, thus facilitating identification considerably.

- 1 Eyes completely reduced. Known distribution confined to Algeria and Tunisia. .... 2
- Eyes not reduced, composed of numerous ommatidia, and distinctly bulging..... 8
- 2 Smaller, about 2.5 mm. Punctuation of forebody very fine. Pronotum not oblong..... 3
- Larger species, > 3.0 mm. Punctuation of forebody less fine. Pronotum longer than wide..... 4
- 3 Head anteriorly largely depressed. Pronotum shorter and depressed. .... *villosa*
- Head without depression. Pronotum less short and slightly convex..... *raffrayi*
- 4 Forebody with fine and dense punctuation..... 5
- Forebody with coarse and rugose punctuation. .... 6
- 5 Smaller species, 3.6 mm. Punctuation of forebody finer. Pronotum less convex, median impression more pronounced..... *convexifrons*
- Larger species, 4.5 mm. Punctuation of forebody less fine. Pronotum more convex and with shallower median impression. .... *lethierryi*
- 6 Body of normal proportions. Elytra not longer than their combined width. Head very small. .... 7
- Body elongated and very slender. Elytra longer than their combined width..... *foreli*
- 7 Smaller species, approximately 3.6 mm. Pronotum weakly narrowed posteriad and with shallower median impression. Elytra broader..... *theryi*
- Larger species, approximately 4.0 mm. Pronotum more distinctly tapering posteriad and with more pronounced median impression. Elytra less broad ..... *hipponensis*
- 8 Pronotum with distinct microreticulation and almost matt. Distribution confined to southern Italy..... *italica*
- Pronotum at most with traces of microsculpture, in most species completely without microsculpture. .... 9
- 9 Pronotum with extremely dense punctuation, interstices distinctly narrower than punctures. Pronotum, elytra, and anterior abdominal segments usually (!) reddish. Larger species, PW usually >0.7 mm and PL usually >0.8 mm. ♂: pronotum with pronounced (deep and extensive) impression. Widespread species, Palaearctic and Nearctic Regions..... *canaliculata*
- Pronotum with sparser punctuation. Coloration in most species distinctly darker. Smaller species; PW <0.7 mm; PL <0.8 mm. ♂: pronotum with much shallower and less extensive impression. Species with restricted distributions..... 10
- 10 Small and dark species confined to southeastern France. External and sexual characters as in Figs. 13–18 and 123–125..... *erichsoni*
- Species absent from southeastern France. .... 11
- 11 Species from North Africa and Sicily..... 12
- Distribution different. .... 13
- 12 Femora completely or almost completely blackish, bases at most only slightly lighter. Italy: Sicily, Tunisia, Algeria..... *memnonia*
- Femora extensively yellowish to light brown, with the apices blackish. Algeria: Kabylie. *kabyliana*
- 13 Species from Greece..... 14
- Distribution different. .... 16
- 14 Species from the Pelopónnisos. Antennae with less transverse central antennomeres (Figs. 4, 21)..... 15
- Distribution confined to Crete. Antennae with strongly transverse antennomeres V–X (Fig. 28). Other external and sexual characters as in Figs. 26–33..... *cretica*

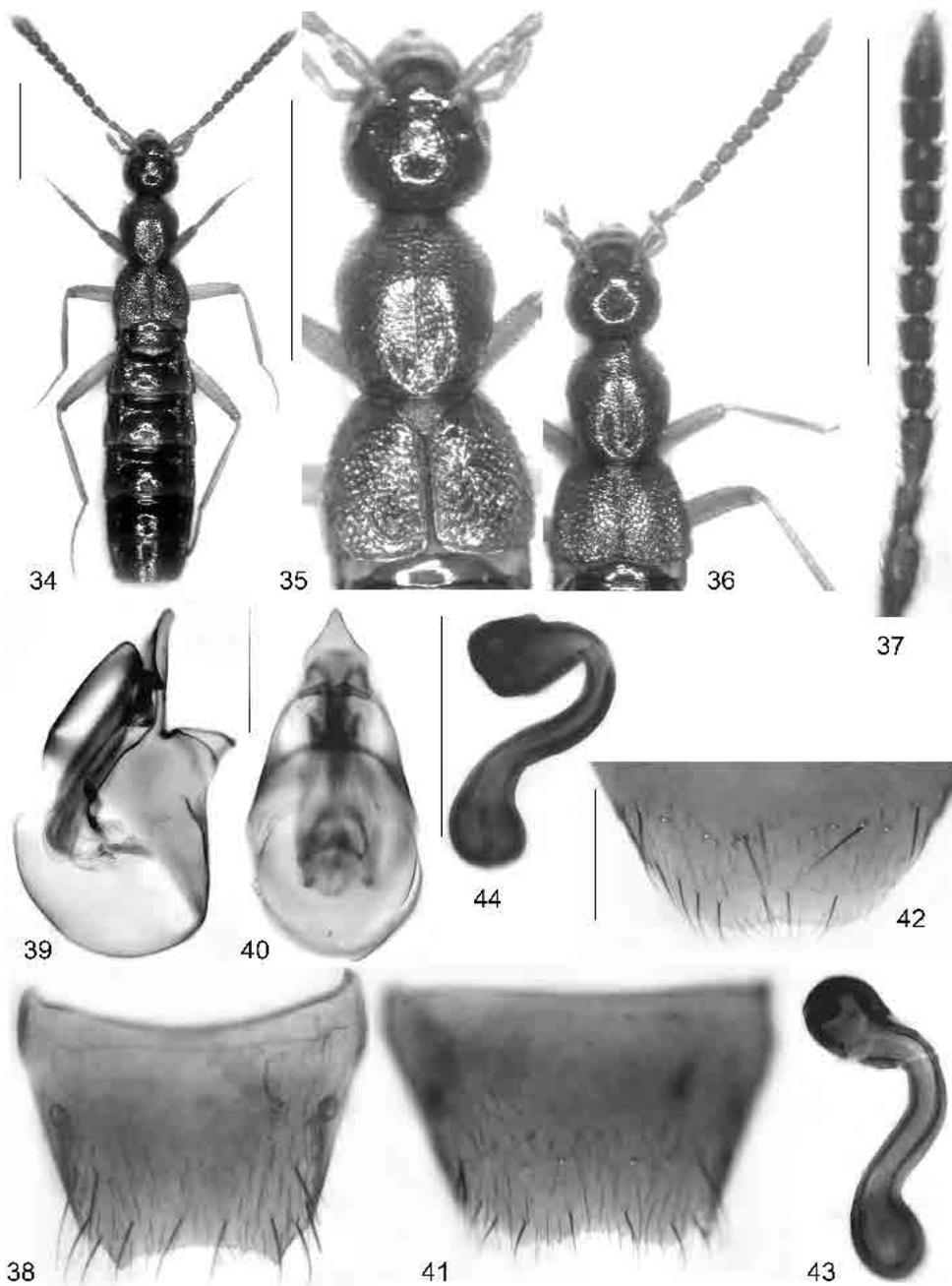
- 15 Antennae more massive (Fig. 21). Forebody with finer and denser puncturation (Fig. 20). Spermatheca with longer duct (Fig. 25). Known only from Taygetos range. .... *taygetana*
- Antennae less massive (Fig. 4). Forebody with less fine and sparser puncturation (Figs. 2, 3). Spermatheca with shorter duct (Fig. 12)..... *meridiana*
- 16 Relatively light-coloured species from Caucasus region and Iran..... 17
- Species from Turkey and Middle East..... 18
- 17 On average larger species; forebody with very dense puncturation (Figs. 35–36). Legs longer. Female tergite VIII posteriorly weakly concave (Fig. 41). Spermatheca larger, duct distinctly enlarged proximally (Figs. 43–44). Eastern Caucasus region, NW-Iran..... *gracilis*
- Smaller; forebody with sparser puncturation and more shining (Fig. 139). Legs shorter. Female tergite VIII posteriorly distinctly concave (Fig. 141). Spermatheca small, duct only weakly enlarged proximally (Fig. 142). NE-Iran. .... *persica*
- 18 Elytra relatively long, at suture approximately 0.65 times as long as pronotum (Fig. 82); spermatheca as in Fig. 87..... *cernens*
- Elytra at suture at most about 0.60 times as long as pronotum. Spermatheca of different shape.... 19
- 19 Species from the Middle East (Lebanon, Israel)..... 20
- Species from southern Turkey and northern Syria. .... 21
- 20 Puncturation of forebody fine; head with extremely fine puncturation. Spermatheca as in Figs. 53–54. Israel. .... *endorica*
- Puncturation of forebody fine, but distinct; that of head visible also at lower (30 x) magnifications; pronotum and elytra reddish to reddish brown. Spermatheca as in Figs. 130–131. Lebanon. .... *besucheti*
- 21 Antennae apically darkened; elytra rarely with impressions. .... 22
- Antennae concolorous yellowish or reddish, sometimes with antennomere I darker. Elytra usually with impressions. .... 24
- 22 Legs with apically more or less extensively infusate femora. .... 23
- Legs concolorous yellowish to yellowish brown. External and sexual characters as in Figs. 55–63, 100–111. Turkey, central southern Anatolia: Adana, Kahramanmaraş, Gaziantep, Mardin. .... *sinuosa*
- 23 Posterior margin of tergite VIII in both sexes weakly concave (Figs. 134, 136). ♂: median lobe of aedeagus apically straight in lateral view (Fig. 135). ♀: spermatheca as in Fig. 137. Eastern Mersin. .... *anceps*
- Posterior margin of tergite VIII in both sexes more distinctly concave (Figs. 76, 80). ♂: median lobe of aedeagus apically sinuate in lateral view (Fig. 77). ♀: spermatheca as in Figs. 80–81. Turkey: Antakya; northern Syria. .... *denigrata*
- 24 Species from Antakya. Antennomere I not infusate. Spermatheca highly distinctive (Figs. 70–71)..... *pallidicornis*
- Distribution different. Antennomere I often infusate. Spermatheca of completely different shape. .... 24
- 25 Posterior margin of tergite VIII very weakly concave (Figs. 92, 93, 96). Median lobe of aedeagus as in Fig. 95. Spermatheca with duct abruptly constricted in the middle. Antalya... *limata*
- Posterior margin of tergite VIII more distinctly concave (Figs. 115, 116, 118). Median lobe of aedeagus as in Fig. 117. Spermatheca as in Figs. 120–121. Turkey, central southern Anatolia: Mersin, eastern Antalya, Konya. .... *recta*



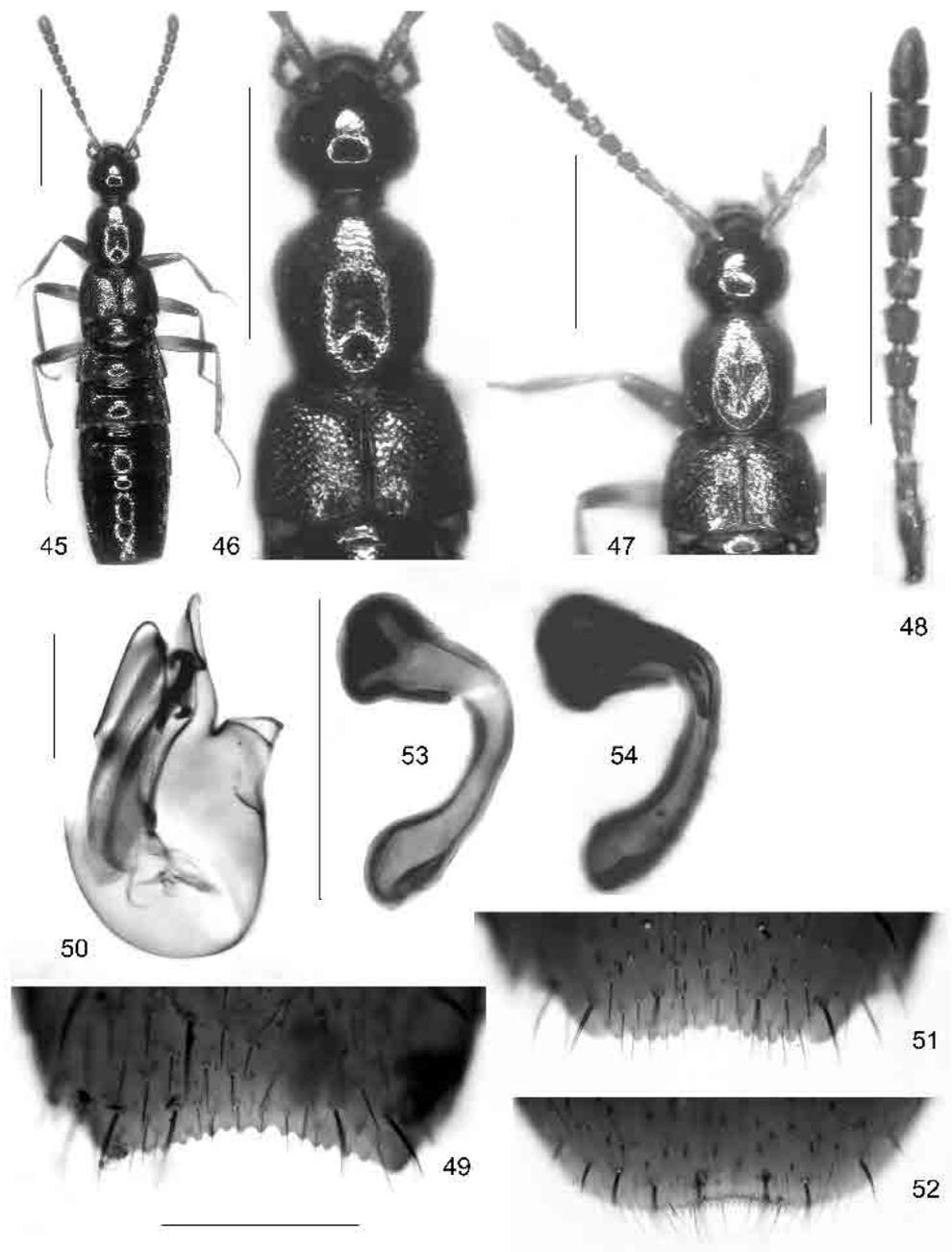
Figs. 1–18: *Drusilla meridiana* (1–12) and *D. erichsoni* (13–18). 1) habitus; 2, 3, 13) forebody; 4, 14) antenna; 5) ♂ tergite VIII; 6) posterior margin of ♂ tergite VIII; 7) ♂ sternite VIII; 8, 9) median lobe of aedeagus in lateral and in ventral view; 10, 15) ♀ tergite VIII; 11, 17) posterior margin of ♀ sternite VIII; 12, 18) spermatheca; 16) posterior margin of ♀ tergite VIII. Scale bars: 1–4, 13–14: 1.0 mm; 5–12, 15–18: 0.2 mm.



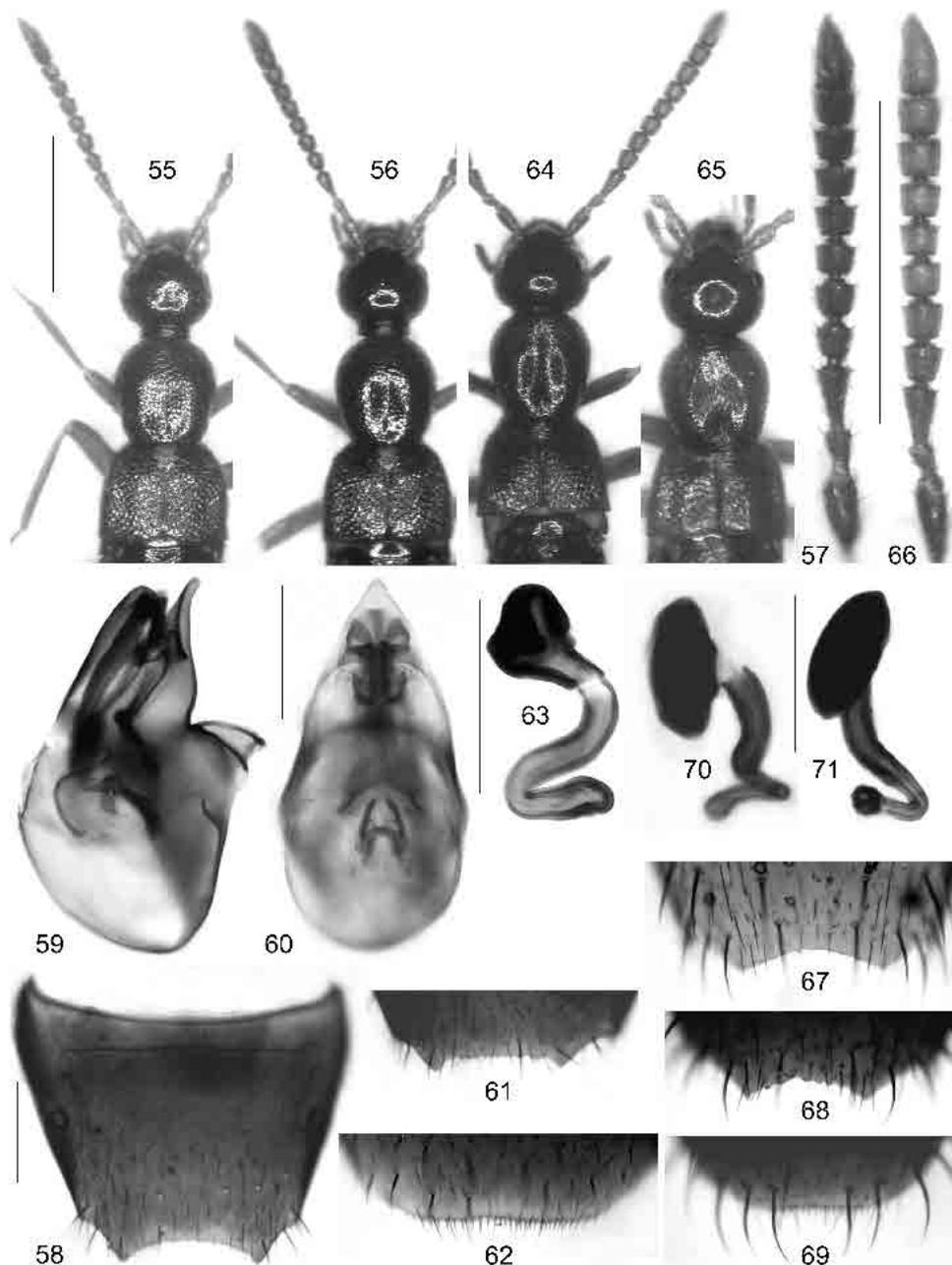
Figs. 19–33: *Drusilla taygetana* (19–25) and *D. cretica* (26–33). 19, 26) habitus; 20, 27), forebody; 21, 28) antenna; 22) ♀ tergite VIII; 23) ♀ sternite VIII; 24) posterior margin of ♀ sternite VIII; 25) spermatheca; 29: ♂ tergite VIII; 30) ♂ sternite VIII; 31) posterior margin of ♂ sternite VIII; 32–33) median lobe of aedeagus in lateral and in ventral view. Scale bars: 19–21, 26–28: 1.0 mm; 22–25, 29–33: 0.2 mm.



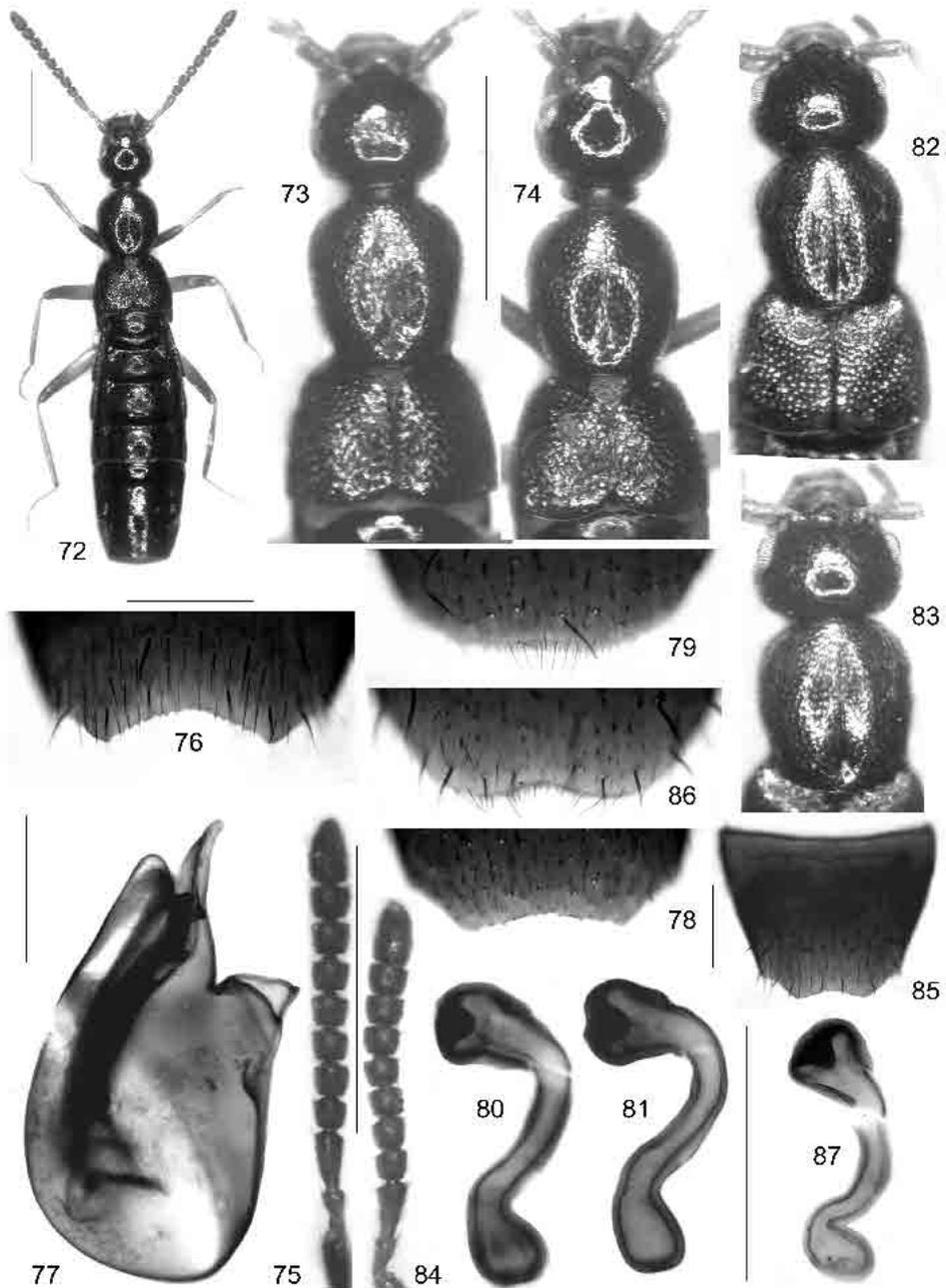
Figs. 34–44: *Drusilla gracilis*. 34) ♀ habitus; 35) ♂ forebody; 36) ♀ forebody; 37) antenna; 38) ♂ tergite VIII; 39, 40) median lobe of aedeagus in lateral and in ventral view; 41) ♀ tergite VIII; 42) posterior half of ♀ sternite VIII; 43, 44) spermathecae. Scale bars: 34–37: 1.0 mm; 38–44: 0.2 mm.



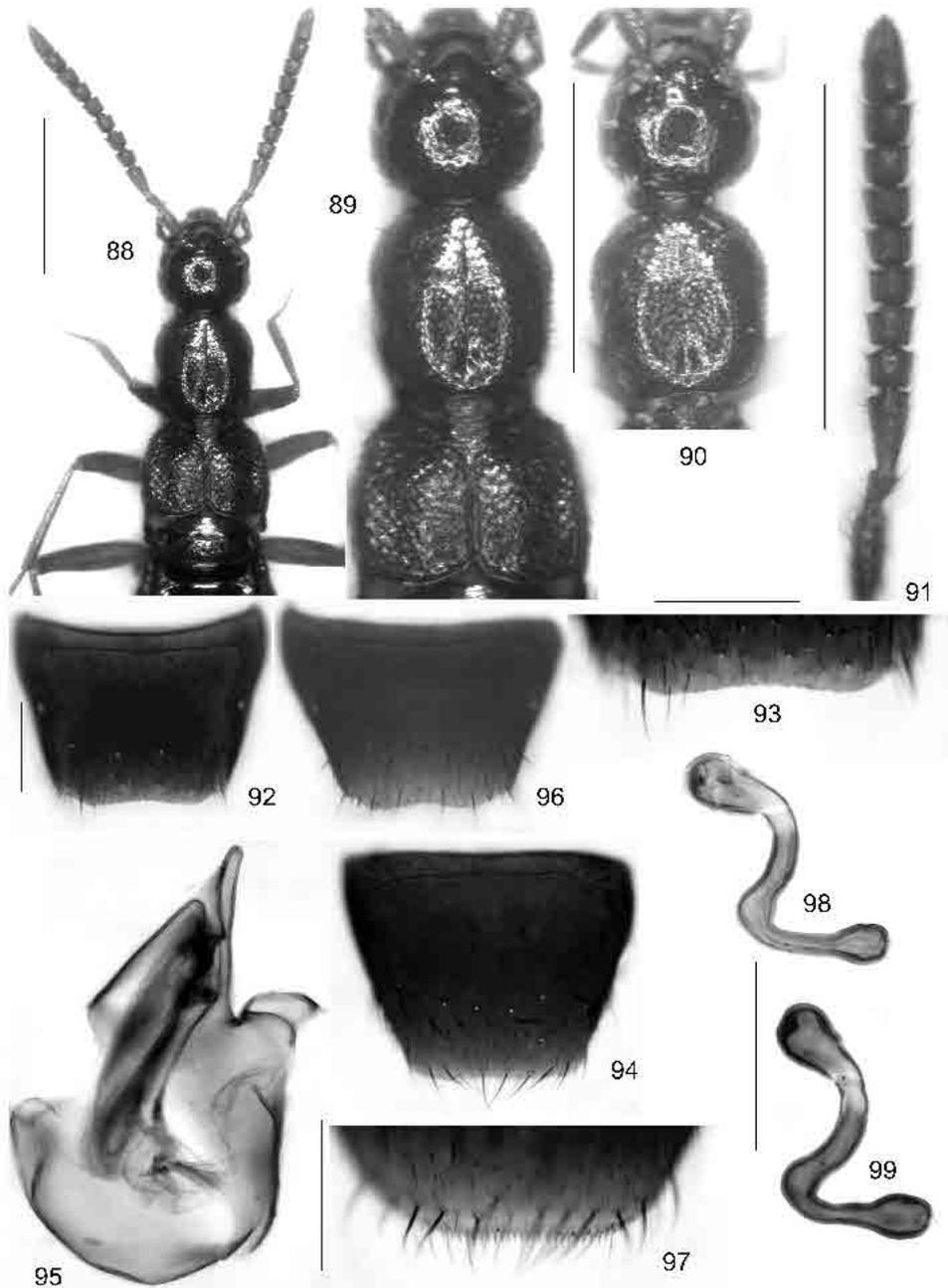
Figs. 45–54: *Drusilla endorica*. 45) ♀ habitus; 46) ♀ forebody; 47) ♂ forebody; 48) antenna; 49) posterior part of ♂ tergite VIII; 50) median lobe of aedeagus in lateral view; 51) posterior part of ♀ tergite VIII; 52) posterior part of ♀ sternite VIII; 53, 54) spermathecae. Scale bars: 45–48: 1.0 mm; 49–54: 0.2 mm.



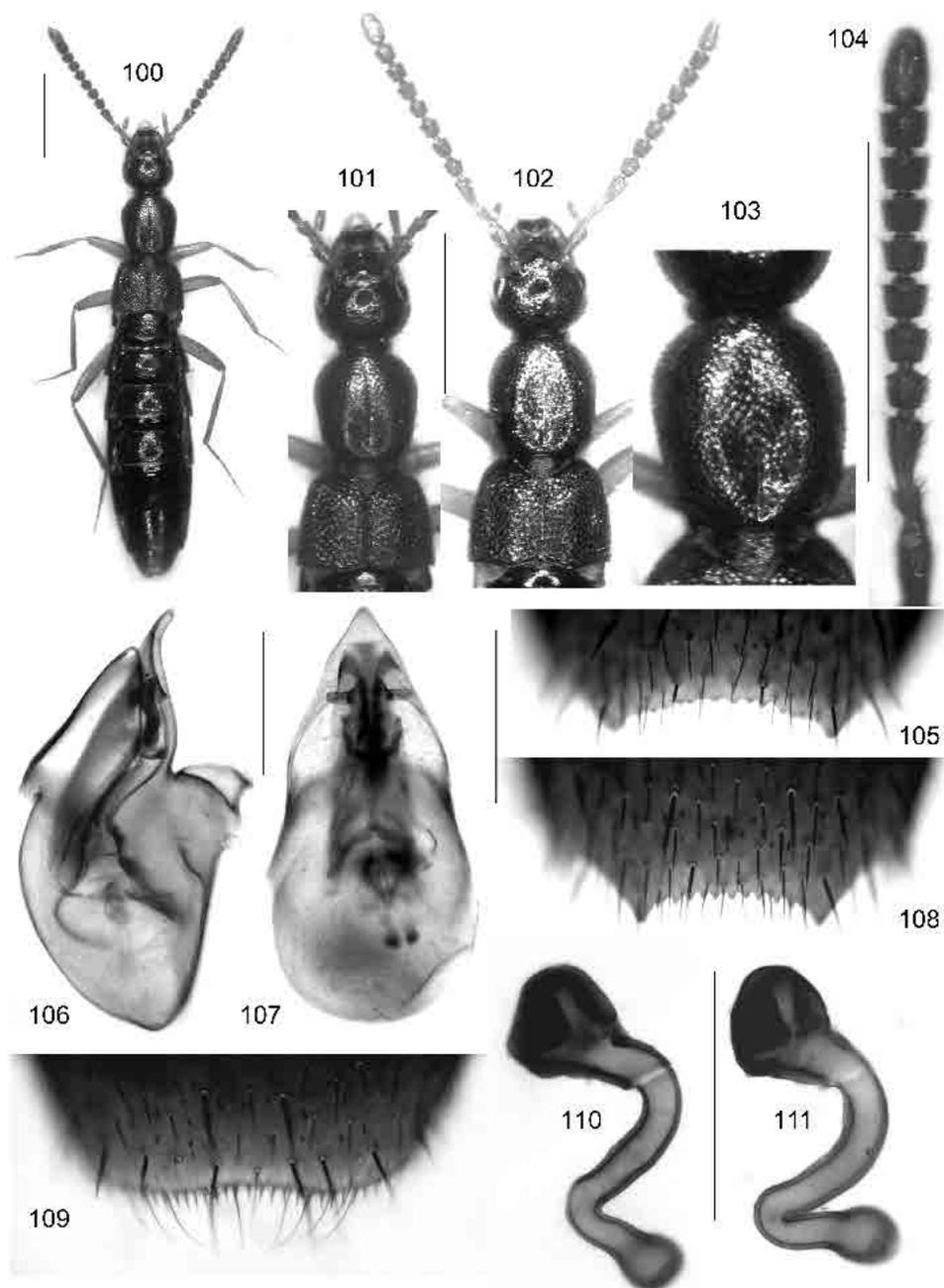
Figs. 55–71: *Drusilla sinuosa* (Mardin) (55–63) and *D. pallidicornis* (64–71). 55, 64), ♂ forebody; 56, 65), ♀ forebody; 57, 66) antenna; 58) ♂ tergite VIII; 59, 60) median lobe of aedeagus in lateral and in ventral view; 61, 68) posterior part of ♀ tergite VIII; 62, 69) posterior part of ♀ sternite VIII; 63, 70, 71) spermatheca; 67) posterior part of ♂ tergite VIII. Scale bars: 55–57, 64–66: 1.0 mm; 58–63, 67–71: 0.2 mm.



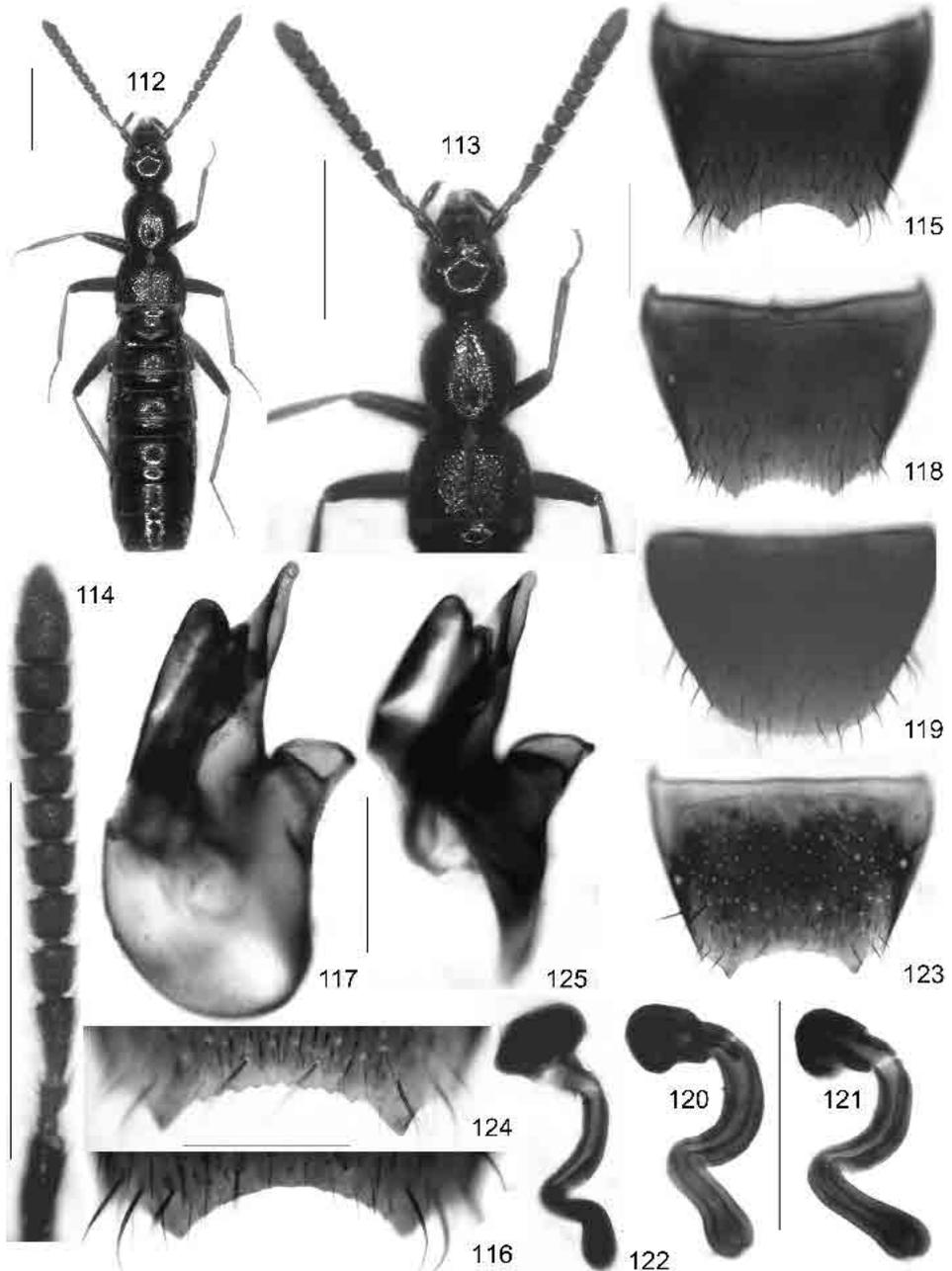
Figs. 72–87: *Drusilla denigrata* (72–81) and *D. cernens* (82–87). 72) habitus; 73),  $\sigma$  forebody; 74, 82, 83),  $\varphi$  forebody; 75, 84) antenna; 76) posterior part of  $\sigma$  tergite VIII; 77) median lobe of aedeagus in lateral view; 78) posterior part of  $\varphi$  tergite VIII; 79, 86) posterior part of  $\varphi$  sternite VIII; 80, 81, 87) spermatheca; 85:  $\varphi$  tergite VIII. Scale bars: 72–75, 82–84: 1.0 mm; 76–81, 85–97: 0.2 mm.



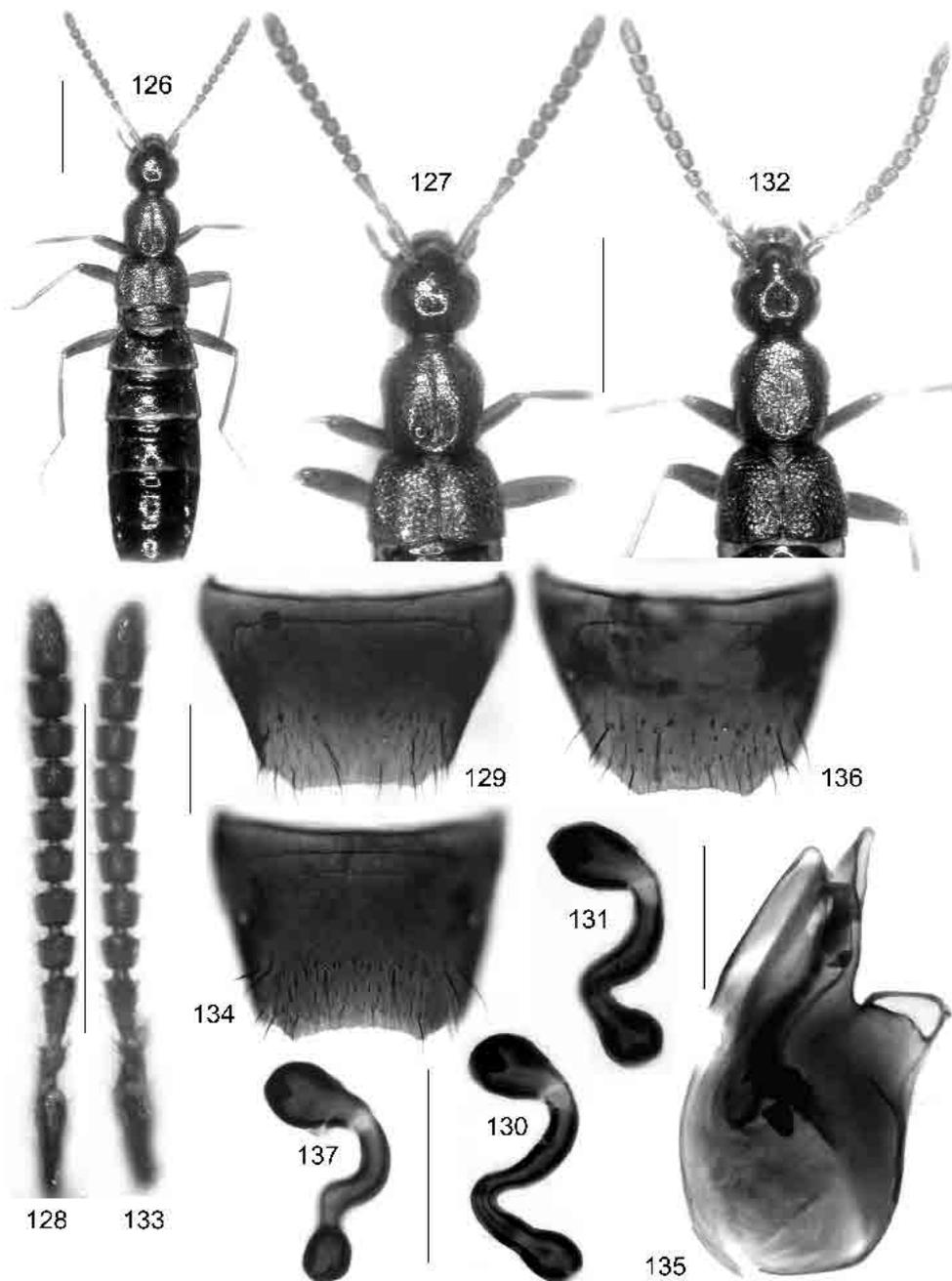
Figs. 88–99: *Drusilla limata*. 88, 89) ♀ forebody; 90) ♂ forebody; 91) antenna; 92) ♂ tergite VIII; 93) posterior part of ♂ tergite VIII; 94) ♂ sternite VIII; 95) median lobe of aedeagus in lateral view; 96) ♀ tergite VIII; 97) posterior part of ♀ sternite VIII; 98, 99) spermatheca. Scale bars: 88–91: 1.0 mm; 92–99: 0.2 mm.



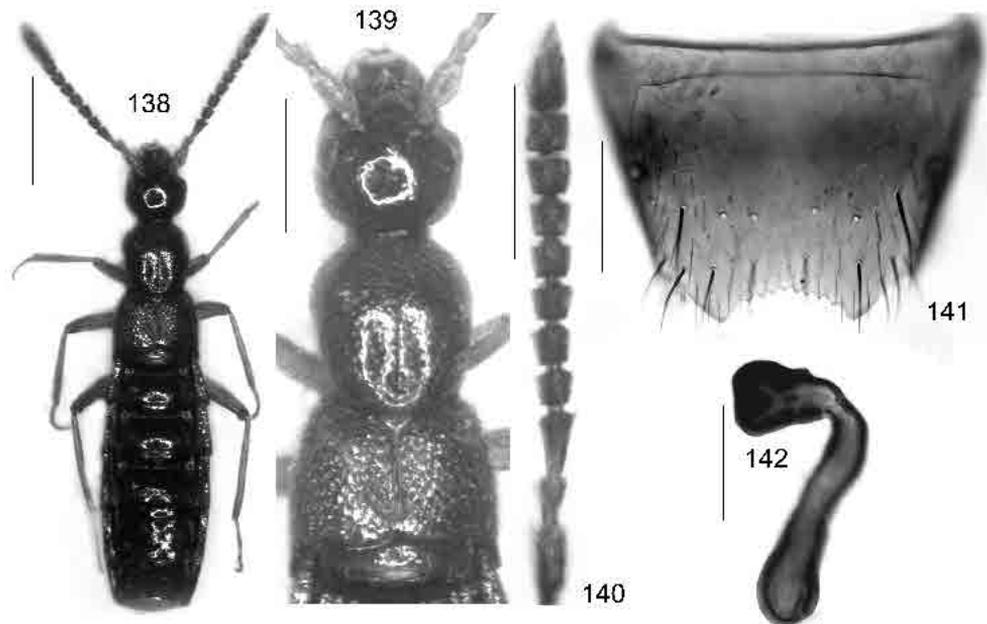
Figs. 100–111: *Drusilla sinuosa* (Gaziantep): 100) habitus (holotype); 101) ♀ forebody; 102) ♂ forebody; 103) ♂ pronotum; 104) antenna; 105) posterior part of ♂ tergite VIII; 106, 107) median lobe of aedeagus in lateral and in ventral view; 108) posterior part of ♀ tergite VIII; 109) posterior part of ♀ sternite VIII; 110, 111) spermatheca. Scale bars: 100–104: 1.0 mm; 105–111: 0.2 mm.



Figs. 112–125: *Drusilla recta* (112–122) and *D. erichsoni* (123–125). 112) habitus (holotype); 113) ♀ forebody (holotype); 114) antenna (holotype); 115, 123) ♂ tergite VIII; 116, 124) posterior margin of ♂ tergite VIII; 117) median lobe of aedeagus in lateral view; 118) ♀ tergite VIII; 119) ♀ sternite VIII; 120, 121) spermatheca; 122) teratological spermatheca; 125) median lobe of aedeagus in lateral view; compressor plate and internal structures partly missing. Scale bars: 112–114: 1.0 mm; 115–125: 0.2 mm.



Figs. 126–137: *Drusilla besucheti* (126–131) and *D. anceps* (132–137). 126 habitus (holotype); 127 ♀ forebody; 128, 133) antenna; 129, 136) ♀ tergite VIII; 130, 131, 137: spermatheca; 132: ♂ forebody; 134: ♂ tergite VIII; 135) median lobe of aedeagus in lateral view. Scale bars: 126–128, 132–133: 1.0 mm; 129–131, 134–137: 0.2 mm.



Figs. 138–142: *Drusilla persica*. 138) habitus; 139) ♀ forebody; 140) antenna; 141) ♀ tergite VIII; 142: spermatheca. Scale bars: 138: 1.0 mm; 139–140: 0.5 mm; 141: 0.2 mm; 142: 0.1 mm.



Fig. 143: Type locality of *Drusilla denigrata*: Turkey, Antakya, 19 km S Antakya, SW Şenköy, 36°01'48N, 36°07'19E, 920 m.

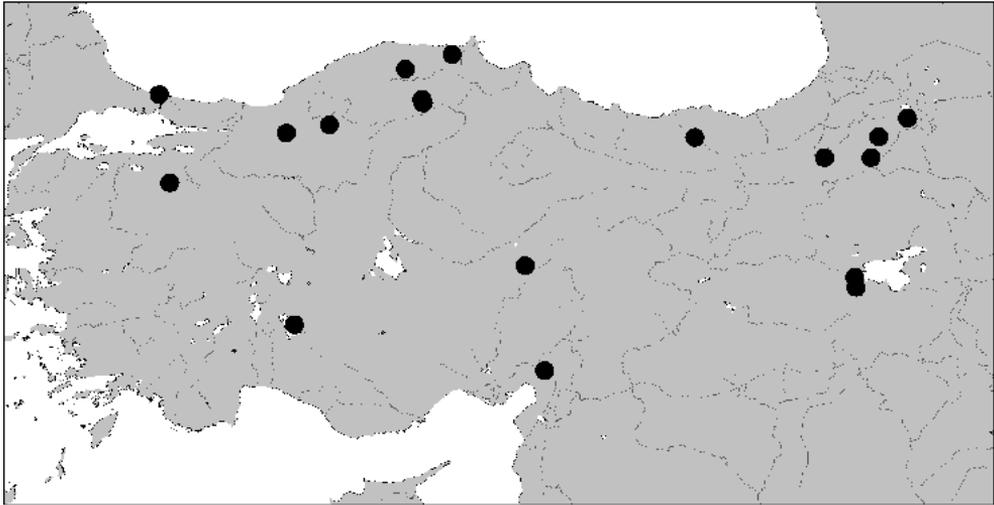


Fig. 144: Geographical distribution of *Drusilla canaliculata* in Turkey, based on revised records.

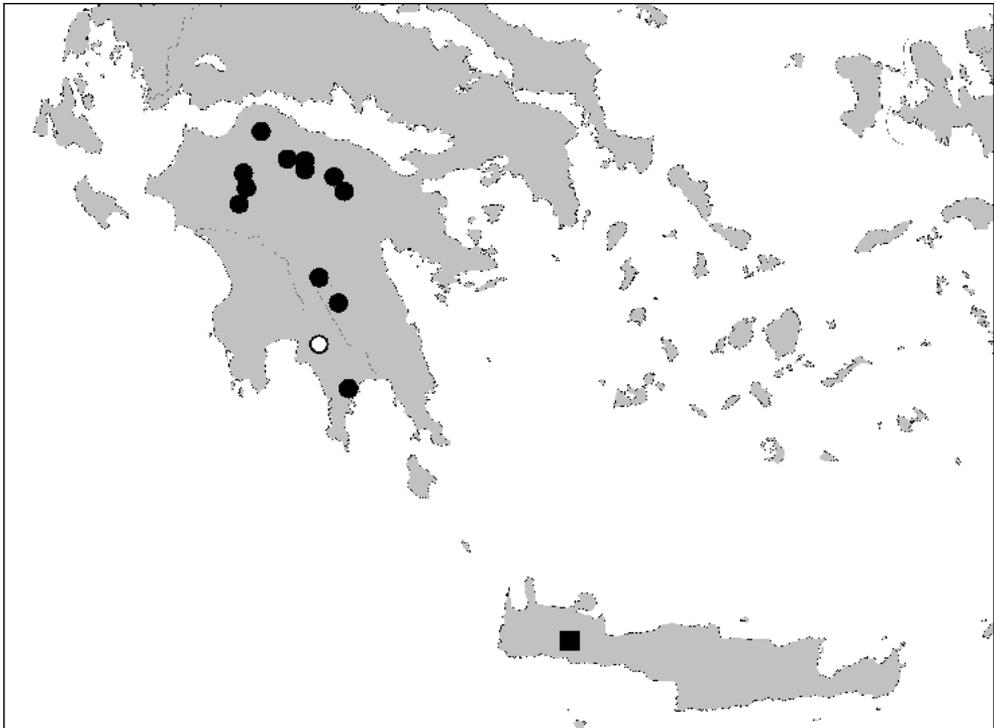


Fig. 145: Geographical distributions of *Drusilla meridiana* (black circles), *D. taygetana* (white circle), and *D. cretica* (square) in southern Greece.

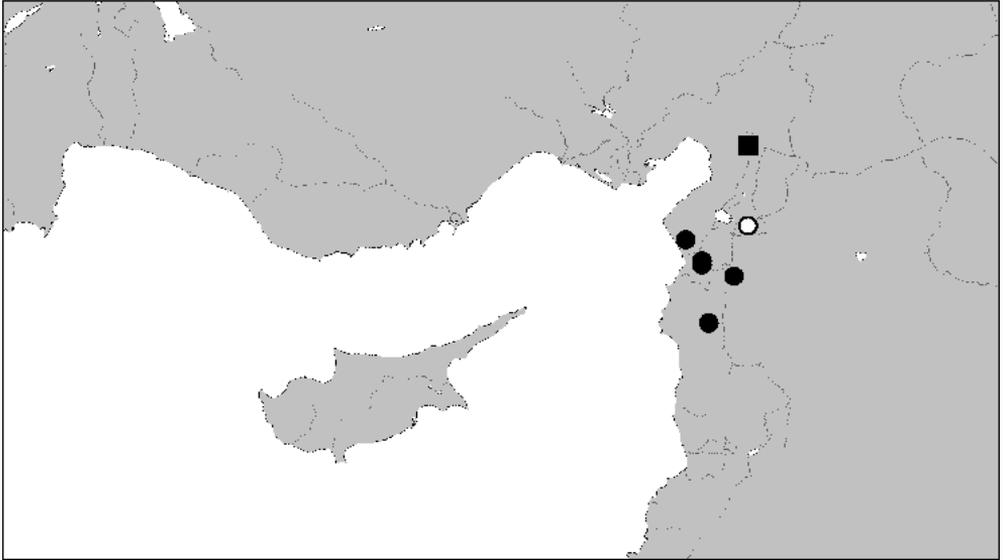


Fig. 146: Geographical distributions of *Drusilla denigrata* (black circles), *D. pallidicornis* (white circle), and *D. cernens* (square) in central southern Turkey and the Middle East.

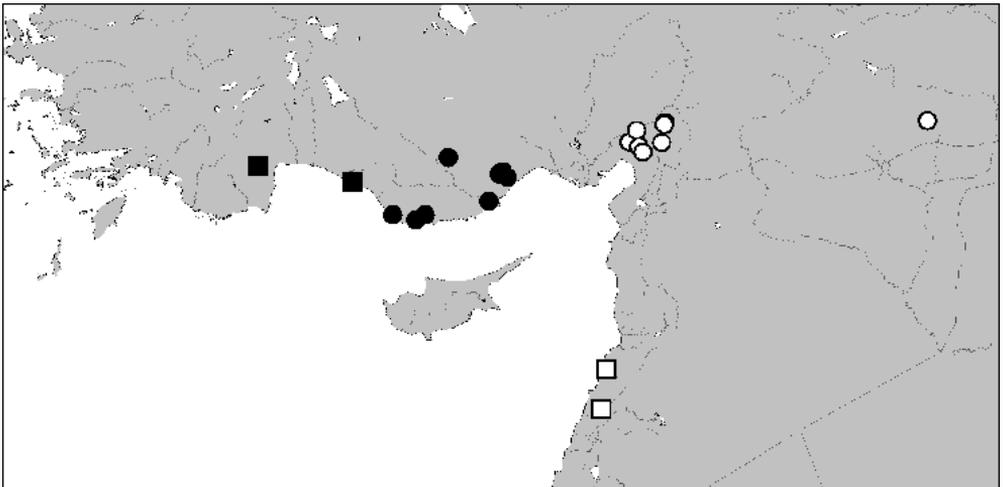


Fig. 147: Geographical distributions of *Drusilla recta* (black circles), *D. sinuosa* (white circles), *D. limata* (black squares), and *D. besucheti* (white squares) in southern Turkey and the Middle East.

### Zusammenfassung

Die *Drusilla*-Arten insbesondere des östlichen Mittelmeerraums und angrenzender Gebiete werden revidiert. 14 Arten werden beschrieben bzw. redeskribiert und abgebildet: *D. erichsoni* (PEYRON) (SO-Frankreich), *D. meridiana* (FAUVEL) (Griechenland: Peloponnes), *D. taygetana* sp.n. (Griechenland: Peloponnes), *D. cretica* sp.n. (Griechenland: Kreta), *D. gracilis* (HOCHHUTH) (östliche Kaukasusregion, NW-Iran), *D. endorica* (SAULCY) (Israel), *D. pallidicornis* sp.n. (Türkei: Antakya), *D. denigrata* sp.n. (Türkei: Antakya; Syrien), *D. cernens* sp.n. (Türkei: Antakya), *D. limata* sp.n. (Türkei: Antalya), *D. sinuosa* sp.n. (Türkei: Gaziantep, Adana, Kahramanmaraş, Mardin), *D. recta* sp.n. (Türkei: Mersin, Antalya, Konya), *D. besucheti* sp.n. (Libanon) und *D. persica* sp.n. (NO-Iran). *Drusilla endorica* (SAULCY) wird revalidisiert und zwei Namen werden synonymisiert: *D. canaliculata* (FABRICIUS, 1787) = *D. caucasica* (BERNHAEUER, 1903), syn.n.; *D. memnonia* (MÄRKEL, 1845) = *D. tristis* (LUCAS, 1846), syn.n. Für *D. meridiana* wird ein Lectotypus und für *D. endorica* wird ein Neotypus designiert. *Drusilla canaliculata* wird erstmals aus dem Iran und aus Kasachstan nachgewiesen. Für elf Arten werden Verbreitungskarten erstellt. Für alle westpaläarktischen Arten wird eine Bestimmungstabelle und ein Katalog vorgelegt.

### Acknowledgements

My sincere thanks are due to all the colleagues indicated in the material section for the loan of material. Benedikt Feldmann (Münster) proof-read the manuscript.

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Artikel/Article: [On the western Palaearctic species of \*Drusilla\* LEACH, with special reference to the species of the eastern Mediterranean \(Coleoptera: Staphylinidae, Aleocharinae\). 111-149](#)