JAHRBUCH DER GEOLOGISCHEN BUNDESANSTALT
Jb. Geol. B.-A. | ISSN 0378-0864 | Band 150 | Heft 1+2 | S. 263–299 | Wien, 23. Mai 2010

Ostracodal Type Specimens Stored in the Paleontological Collection of the Geological Survey of Austria

IRENE ZORN*)

1 Table, 9 Plates

Ostracoda
Microfossils
Type Specimens
Palaeontological collection

Contents

Ostracoden-Typen in der Sammlung der Geologischen Bundesanstalt in Wien

Zusammenfassung

In den Sammlungen der Geologischen Bundesanstalt in Wien befinden sich 44 valide und 2 invalide Holotypen sowie Paratypen zu Ostracodenarten. Sie stammen aus dem Karbon (Viseum) von Nötsch (SCHRAUT, 1996), Trias und Jura der Nördlichen und Südlichen Kalkalpen in Österreich und Italien (KOLLMANN, 1960b, 1963), Trias (Ladinium) des Iran (KRISTAN-TOLLMANN, 1991), Eozän (Lutetium) des Beckens von Pazin in Kroatien (KOLLMANN, 1962) sowie aus dem Miozän des Korneuburger Beckens (Karpatium; CERNAJSEK, 1971; ZORN, 1998), der Molassezone und des Wiener Beckens in Österreich (Sarmatium; CERNAJSEK, 1971, 1974). Elf Typusserien stellen die primären Typusexemplare von Typusarten dar. Darüberhinaus liegen Syntypen aus dem Miozän von Mähren (PROCHÁZKA, 1893) und dem Devon der Türkei (KAYSER, 1900) vor. Auf zum Großteil invalide und teilweise verloren gegangene Neotypen (CERNAJSEK, 1971, 1974) wird ebenfalls eingegangen. Es werden Details zu den Typen, ihre aktuelle Gattungszugehörigkeit sowie Original-Abbildungen geliefert.

Abstract

The collection of the Geological Survey of Austria contains 44 valid and 2 invalid ostracod holotypes and also paratypes. These were derived from the Carboniferous (Visean) of Nötsch (SCHRAUT, 1996), the Triassic and Jurassic of the Northern and Southern Calcareous Alps in Austria and Italy (KOLLMANN, 1960b, 1963), the Triassic (Ladinian) of Iran (KRISTAN-TOLLMANN, 1991), the Eocene (Lutetian) of the Pazin Basin, Croatia (KOLLMANN, 1962), and the Miocene of the Korneuburg Basin (Karpatian; CERNAJSEK, 1971; ZORN, 1998), the Molasse Basin and Vienna Basin in Austria (Sarmatian; CERNAJSEK, 1971, 1974). Eleven type series represent the primary type specimens of type species. Furthermore, several syntypes from the Miocene of Moravia (PROCHÁZKA, 1893) and the Devonian of Turkey (KAYSER, 1900) are also available. Neotypes (CERNAJSEK, 1971, 1974) which are mostly invalid and some of which have been lost, are also documented here. Details of the type specimens, their current classification, as well as original pictures, are presented.

*) IRENE ZORN: Geologische Bundesanstalt, Neulinggasse 38, A-1030 Wien, Austria. irene.zorn@geologie.ac.at

Introduction

The paleontological collection of the Geological Survey of Austria in Vienna contains a large number of published fossils, many originating back to the mid 19th century. Within this, there are several microfossil collections from that time, although historic ostracod material is rare and was mainly derived from the Miocene. The originally undetermined material mentioned in Čžjžek (1851) from Mauer, which today is part of the 23 rd district of Vienna, is still extant. This was later partly determined by STUR (1867) to belong to *Cytheridea heterostigma* REUSS, 1850. Ostracods from a well drilled in Mollardgasse, in the 6th district (Mariahilf) of Vienna, mentioned in FUCHS & KARRER (1875) also are available. Further material was published by PROCHÁZKA in 1892 from Walbersdorf in Burgenland, in Austria, and in 1893 from Židlochovice (Seelowitz) in Moravia (Czech Republic). A large part of this material, including foraminifers and otoliths, came to light when the Geological Survey moved premises in 2004. Within the Moravian ostracods, PROCHÁZKA (1900) erected seven new species, four of which *(Cythere vejhonensis*, *C. oviformis*, *C. reussi* and *C. blucinensis)* are still extant as syntypes. However, the samples of *Cythere fragilis*, *C. obliquus* and *C. moravica* have been lost. The syntypes of *Beyrichia roemeri* KAYSER, 1890 from the Devonian of Turkey, were also deposited at the Geological Survey.

In the following, only publications, in which type specimens were introduced are mentioned. In the 1960s, KOLLMANN published a series of ostracod papers, material from four of these was deposited in the Geological Survey collection (KOLLMANN, 1960a, 1960b, 1962, 1963). Two of these dealt with the Eocene of Italy and Croatia (1960a, 1962) and two dealt with the Triassic of the Northern and, to a lesser extent, the Southern Calcareous Alps (1960b, 1963). In three of these publications (KOLLMANN, 1960b, 1962, 1963), 34 new species were introduced whilst in two publications (KOLLMANN, 1962, 1963), 11 new genera were introduced, for which the following species are type species:

Parabairdia ploechingeri KOLLMANN, 1960b
Ptychobairdia kuepperi KOLLMANN, 1960b
Urobairdia austriaca KOLLMANN, 1963
Lobobairdia salinaria KOLLMANN, 1963
Anisobairdia cincta KOLLMANN, 1963
Nodobairdia mammilata KOLLMANN, 1963
Mirabairdia pernodosa KOLLMANN, 1963
Dicerobairdia bicornuta KOLLMANN, 1963
Neobairdiolites placklesensis KOLLMANN, 1963
Carinobairdia triassica KOLLMANN, 1963
Medwenitschia ornata KOLLMANN, 1963.

Subsequently, KRISTAN-TOLLMANN (1970) declared *Neobairdiolites* to be a junior synonym of *Bairdiolites*. KOLLMANN species *Ptychobairdia medwenitschi*, *Urobairdia angusta*, *Carinobairdia alta* and *C. tenuicarinata* have also been cancelled by various authors (see below).

CERNAJSEK (1971a, b, 1974) worked on Miocene ostracods from the Molasse, Korneuburg and Vienna basins. In his dissertation (CERNAJSEK, 1971a) on the Hemicytheridae of Austria, he erected two new subspecies, namely *Aurila angulata teiritzbergensis* and *Hemicytheria reniformis maior*. These have the status of nomina nuda, since the descriptions have never been published and the names are only mentioned in a summarizing article (CERNAJSEK, 1971b). Furthermore, CERNAJSEK (1971a) erected 17 neotypes which are also not valid. Four of them are missing from the collection. In 1974 CERNAJSEK erected the species *Aurila kollmanni*, *Loxoconcha schmidi* and *Bythocypris* ? *pappi*. Furthermore, he chose neotypes for the following species: *Cypridina hispidula* REUSS, 1850, *C. notata* REUSS, 1850, *C. omphalodes omphalodes* REUSS, 1850, *Cythereis mehesi* ZALÁNYI, 1913 and *C. merita* ZALÁNYI, 1913. Unfortunately, neither the holotypes nor the neotypes of this publication have been found in the Geological Survey collection.

The 1990s brought new ostracodal type material to the collection. KRISTAN-TOLLMANN (1991) worked on Triassic (Ladinian) ostracods of Aghdarband in Iran, including the type series of two new species *Ptychobairdia ruttneri* and *Polycope aghdarbandensis*. SCHRAUT (1996) erected six new ostracod species from the Visean, in a monograph on the arthropods of the Carboniferous of Nötsch in Carinthia. Material from the Karpatian of the Korneuburg Basin (ZORN, 1998) was partly deposited in the Museum of Natural History in Vienna and partly in the Geological Survey. In the latter the holotypes and topotypic paratypes of *Callistocythere karpatiensis* and *Heliocythere leobendorfensis* are housed, as well as paratypes of *Cyamocytheridea gracilis*.

In the following, details of the type specimens, their current classification, as well as the illustrations, have been presented. The selection of lectotypes or neotypes in case of syntypes and missing holo- or neotypes was beyond the aim of this publication. For the illustrations, the original Figures have been scanned and, where possible, digitally improved, to save the specimens from further handling.

List of Type Specimens

The holo-, neo- and syntypes in the following list are named as it was done by the original author. They are ordered alphabetically and chronologically, according to author and then year of publication. Within each publication, they are given according to the inventory number. Table 1 gives a short overview of the specimens and also includes all those which have been lost over the years. The informations on the type levels mostly follow the original authors. Additionally, remarks have been given if the specimens were published subsequently or if the generic or specific attributions have been changed. The index of KEMPF (1986, 1995) was taken into account when determining if the generic attributions have changed. For better retrieval of the species described in the text, an index list has been given at the end of the paper.

CERNAJSEK, T. (1971a): Die Entwicklung und Abgrenzung der Gattung *Aurila* POKORNY im Neogen Österreichs. – Unpubl. Thesis Univ. Vienna.

Although this material was derived from an unpublished thesis and includes nomina nuda and invalid holo- and neotypes it has been included here, to present completely the types in the ostracod collection. For photographic documentation, the original plates, with SEM photos, from the archives of the Geological Survey were scanned and digitally improved. Due to the relatively old SEM photographic techniques used, the pictures of many specimens were optically distorted which resulted in a different height/width-ratio. Details of paratypes have been omitted. Although the neotypes of *Aurila hispidula* (REUSS, 1850), *A. notata* (REUSS, 1850), *A. similis* (REUSS, 1850) and *Hemicytheria hungarica* (MÉHES, 1908) have not been found, they have nevertheless been treated here and figured. The first two neotypes were included in the remarks of the specimens in CERNAJSEK (1974) in which neotypes of five hemicytherid species were also selected. For the current classification of the species proposed, subgenera were not taken into consideration.

Aurila angulata teiritzbergensis CERNAJSEK, 1971
(Pl. 1, Fig. 2)

Coll. no.: GBA 1997/003/0007/07.

Type: holotype, right valve.

Type level: Miocene, Karpatian, Korneuburg beds.

Type locality: Teiritzberg near Stetten, Lower Austria, Austria.

Type reference and figure: CERNAJSEK, T., 1971: p. 61, Pl. 14, Fig. 3.

Remarks: This holotype (nomen nudum) and its paratypes are reference material in ZORN (1998: p. 197) under the name *Aurila larieyensis* MOYES, 1965?. ZORN (2003: Tab. 2) and AIELLO & SZCZECHURA (2004: p. 30) confirmed this determination without question mark.

Current classification: ***Aurila larieyensis* MOYES, 1965.**

Aurila angulata angulata (REUSS, 1850)
(Pl. 1, Fig. 1)

Coll. no.: GBA 2009/003/0001.

Type: neotype, right valve.

Type level: Miocene, Badenian.

Type locality: Nußdorf, Kahlenbergerstraße 108, 19th district, Vienna, Austria.

Type reference and figure: CERNAJSEK, T., 1971: p. 57, Pl. 14, Fig. 4.

Remarks: KUČEROVÁ (1986: p. 113) assigned the species to *Senesia*.

Current classification: ***Aurila angulata* (REUSS, 1850).**

Aurila cicatricosa (REUSS, 1850)
(Pl. 1, Fig. 3)

Coll. no.: GBA 2009/003/0002/01.

Type: neotype, left valve.

Type level: Miocene, Badenian.

Type locality: Nußdorf, Kahlenbergerstraße 108, 19th district, Vienna, Austria.

Type reference and figure: CERNAJSEK, T., 1971: p. 65, Pl. 14, Fig. 8.

Current classification: ***Aurila cicatricosa* (REUSS, 1850).**

Aurila cinctella (REUSS, 1850)
(Pl. 1, Fig. 4)

Coll. no.: GBA 2009/003/0003.

Type: neotype, left valve.

Type level: Miocene, Badenian.

Type locality: Steinebrunn, Kalkofen (lime oven), Lower Austria, Austria.

Type reference and figure: CERNAJSEK, T., 1971: p. 70, Pl. 14, Fig. 11.

Remarks: BRESTENSKÁ & JIŘÍČEK (1978: p. 409) assigned the species to *Senesia*.

Current classification: ***Senesia cinctella* (REUSS, 1850).**

Aurila galeata (REUSS, 1850)
(Pl. 1, Fig. 6)

Coll. no.: GBA 2009/003/0004.

Type: neotype, right valve.

Type level: Miocene, Badenian.

Type locality: Freibühl, near Wildon, Styria, Austria.

Type reference and figure: CERNAJSEK, T., 1971: p. 73, Pl. 14, Fig. 13.

Remarks: BRESTENSKÁ & JIŘÍČEK (1978: p. 410) assigned the species to *Senesia*.

Current classification: ***Senesia galeata* (REUSS, 1850).**

Aurila haueri (REUSS, 1850)
(Pl. 1, Fig. 5)

Coll. no.: GBA 2009/003/0005.

Type: neotype, left valve.

Type level: Miocene, Badenian.

Type locality: Nußdorf, Kahlenbergerstraße 108, 19th district, Vienna, Austria.

Type reference and figure: CERNAJSEK, T., 1971: p. 76, Pl. 14, Fig. 12.

Current classification: ***Aurila haueri* (REUSS, 1850).**

Aurila hispidula (REUSS, 1850)
(Pl. 1, Fig. 12)

Type: neotype, female right valve, specimen missing.

Type level: Miocene, upper Sarmatian, Upper Ervilia beds – Lower Mactra beds.

Type locality: Rosenhügelstraße near SW cemetery, 23rd district, Vienna, Austria.

Type reference and figure: CERNAJSEK, T., 1971: p. 83, Pl. 15, Fig. 4.

Remarks: Another female right valve was published in CERNAJSEK (1974) as a neotype (see below).

Current classification: ***Aurila hispidula* (REUSS, 1850).**

Aurila mehesi (Zalányi, 1913)
(Pl. 1, Fig. 10)

Coll. no.: GBA 2009/003/0007.

Type: neotype, left valve, female.

Type level: Miocene, lower Sarmatian, Rissoa beds.

Type locality: Siebenhirten near Mistelbach, Lower Austria, Austria.

Type reference and figure: Cernajsek, T., 1971: p. 87, Pl. 15, Fig. 1.

Remarks: Cernajsek (1974) chose a new neotype (see below).

Current classification: ***Aurila mehesi* (Zalányi, 1913).**

Aurila notata (Reuss, 1850)
(Pl. 1, Fig. 11)

Type: neotype, left valve, specimen missing.

Type level: Miocene, upper Sarmatian, *Nonion granosum* Zone.

Type locality: Nexing, "Hühnerfutterberg", Lower Austria, Austria.

Type reference and figure: Cernajsek, T., 1971: p. 96, Pl. 15, Fig. 7.

Remarks: Cernajsek (1974) chose a new neotype (see below).

Current classification: ***Aurila notata* (Reuss, 1850).**

Aurila punctata (Münster, 1830)
(Pl. 1, Fig. 8)

Coll. no.: GBA 2009/003/0010/01.

Type: neotype, left valve.

Type level: Miocene, Badenian.

Type locality: Nußdorf, Kahlenbergerstraße 108, 19th district, Vienna, Austria.

Type reference and figure: Cernajsek, T., 1971: p. 106, Pl. 14, Fig. 10.

Current classification: ***Aurila punctata* (Münster, 1830).**

Aurila similis (Reuss, 1850)
(Pl. 1, Fig. 9)

Type: neotype, right valve, specimen missing.

Type level: Miocene, Badenian.

Type locality: Wetzelsdorf, Styria, Austria.

Type reference and figure: Cernajsek, T., 1971: p. 113, Pl. 14, Fig. 6.

Current classification: ***Aurila similis* (Reuss, 1850).**

Aurila trigonella (Reuss, 1850)
(Pl. 1, Fig. 7)

Coll. no.: GBA 2009/003/0012.

Type: neotype, left valve.

Type level: Miocene, Badenian.

Type locality: Steinebrunn, Kalkofen (lime oven), Lower Austria, Austria.

Type reference and figure: Cernajsek, T., 1971: p. 116, Pl. 14, Fig. 5.

Remarks: Brestenská & Jiříček (1978: p. 410) assigned the species to *Senesia*.

Current classification: ***Senesia trigonella* (Reuss, 1850).**

Hemicytheria hungarica (Méhes, 1908)
(Pl. 1, Fig. 13)

Type: neotype, left female valve, specimen missing.

Type level: Miocene, lower Pannonian B.

Type locality: Draßburg (Drassburg), sand pit, Burgenland, Austria.

Type reference and figure: Cernajsek, T., 1971: p. 133, Pl. 15, Fig. 8.

Current classification: ***Hemicytheria hungarica* (Méhes, 1908).**

Hemicytheria omphalodes omphalodes (Reuss, 1850)
(Pl. 1, Fig. 14)

Coll. no.: GBA 2009/003/0016.

Type: neotype, left female valve.

Type level: Miocene, upper Sarmatian.

Type locality: Nexing or Hautzendorf, Lower Austria, Austria.

Type reference and figure: Cernajsek, T., 1971: p. 136, Pl. 15, Fig. 6.

Remarks: In the text Cernajsek (1971: p. 136) mentioned the neotype being a female left valve from Nexing, but in the figure captions was written Hautzendorf. It has been assumed here that the figured specimen is the neotype and that Nexing is the correct locality. In 1974, Cernajsek chose a right valve from Nexing for the neotype (see below).

Current classification: ***Hemicytheria omphalodes* (Reuss, 1850).**

Hemicytheria omphalodes loerentheyi (Méhes, 1908)
(Pl. 1, Fig. 15)

Coll. no.: GBA 2009/003/0017.

Type: neotype, right valve.

Type level: Miocene, Pannonian B.

Type locality: Draßburg (Drassburg), Burgenland, Austria.

Type reference and figure: Cernajsek, T., 1971: p. 142, Pl. 15, Fig. 10.

Current classification: ***Hemicytheria loerentheyi* (Méhes 1908).**

Hemicytheria reniformis reniformis (Reuss, 1850)
(Pl. 1, Fig. 17)

Coll. no.: GBA 2009/003/0018.

Type: neotype, left valve.

Type level: Miocene, Pannonian E.

Type locality: Brunn / Vösendorf clay pit, Lower Austria, Austria.

Type reference and figure: Cernajsek, T., 1971: p. 146, Pl. 15, Fig. 14.

Current classification: ***Hemicytheria reniformis* (Reuss, 1850).**

Hemicytheria reniformis maior Cernajsek, 1971
(Pl. 1, Fig. 16)

Coll. no.: GBA 2009/003/0019.

Type: holotype (nomen nudum), female left valve.

Type level: Miocene, Pannonian E.

Type locality: Wien, Karlsplatz bore hole, 34.5 m, Austria.

Type reference and figure: Cernajsek, T., 1971: p. 151, Pl. 15, Fig. 15.

Current classification: ***Hemicytheria* cf. *reniformis* (Reuss, 1850).**

Procythereis deformis (Reuss, 1850)
(Pl. 1, Fig. 19)

Coll. no.: GBA 2009/003/0022.

Type: neotype, right valve.

Type level: Miocene, Badenian.

Type locality: Nußdorf, Grünes Kreuz, 19th district, Vienna, Austria.

Type reference and figure: Cernajsek, T., 1971: p. 166, Pl. 14, Fig. 14.

Remarks: Ruggieri (1976: p. 34) assigned the species to *Pokornyella*.

Current classification: ***Pokornyella deformis* (Reuss, 1850).**

Procythereis sulcatopunctatus (Reuss, 1850)
(Pl. 1, Fig. 18)

Coll. no.: GBA 2009/003/0023.

Type: neotype, right valve.

Type level: Miocene, Badenian.

Type locality: Freibühl near Wildon, Steiermark, Austria.

Type reference and figure: Cernajsek, T., 1971: p. 170, Pl. 14, Fig. 15.

Remarks: Bonaduce et al. (1986: p. 532, 534) assigned the species to *Tenedocythere,* but also erected a new species on topotypic material of *T. sulcatopunctatus*, namely *T. perplexa,* which has to be considered a junior synonym (see also Gross, 2004: p. 68).

Current classification: ***Tenedocythere sulcatopunctata* (Reuss, 1850).**

Cernajsek, T. (1974): Die Ostracodenfaunen der Sarmatischen Schichten in Österreich. – Chronostratigraphie und Neostratotypen, Bd. 4.

Aurila hispidula (Reuss, 1850)
(Pl. 2, Fig. 1)

Type: neotype, right female valve, specimen missing.

Type level: Miocene, upper Sarmatian, Upper Ervilia beds – Lower Mactra beds, *Nonion granosum* Zone.

Type locality: Vienna, 13th district, Rosenhügelstraße near SW-graveyard, Austria.

Type reference and figure: Cernajsek, T., 1974: p. 462, Pl. 1, Fig. 1.

Remarks: Cernajsek (1971) had already chosen another neotype for *Cypridina hispidula* Reuss, 1850 from the same locality (see above). Neither specimen is currently in the Geological Survey collection. Many paraneotypes from the type locality are available.

Current classification: ***Aurila hispidula* (Reuss, 1850).**

Aurila kollmanni Cernajsek, 1974
(Pl. 2, Fig. 4)

Type: holotype, right valve, specimen missing.

Type level: Miocene, lower Sarmatian, Hernalser Tegel, *Elphidium reginum* Zone.

Type locality: Wien, 17th district, Gschwandtnergasse 56, Austria.

Type reference and figure: Cernajsek, T., 1974: p. 463, Pl. 1, Fig. 2.

Remarks: This species is probably synonymous with *Aurila mehesi minor* Jiříček, 1974 which is a nomen nudum and was mentioned in the same volume (p. 447). Many paratypes from the type locality as well as from Siebenhirten near Mistelbach, Neckenmarkt bore hole and Großkrut-1 bore hole (103 m) are in the collection.

Current classification: ***Aurila kollmanni* Cernajsek, 1974.**

Aurila mehesi (Zalányi, 1913)
(Pl. 2, Fig. 2)

Type: neotype, left female valve (?), specimen missing.

Type level: Miocene, lower Sarmatian, Rissoa beds, *Elphidium reginum* Zone.

Type locality: Siebenhirten, near Mistelbach, Lower Austria, Austria (?)

Type reference and figure: Cernajsek, T., 1974: p. 465, Pl. 1, Fig. 3.

Remarks: In the type figure, a right valve from Gschwandtnergasse is indicated as the neotype.

Current classification: ***Aurila mehesi* (Zalányi, 1913).**

Aurila merita (Zalányi, 1913)
(Pl. 2, Fig. 3)

Type: neotype, right valve, specimen missing.

Type level: Miocene, lower Sarmatian, Rissoa beds, *Elphidium reginum* Zone.

Type locality: Vienna, 17th district, Gschwandtnergasse 56, Austria.

Type reference and figure: Cernajsek, T., 1974: p. 466, Pl. 1, Fig. 4.

Current classification: ***Aurila merita* (Zalányi, 1913).**

Aurila notata (Reuss, 1850)
(Pl. 2, Fig. 5)

Type: neotype, left valve, specimen missing.

Type level: Miocene, upper Sarmatian, *Nonion granosum* Zone.

Type locality: Nexing, “Hühnerfutterberg”, Lower Austria, Austria.

Type reference and figure: Cernajsek, T., 1974: p. 467, Pl. 1, Fig. 6.

Remarks: CERNAJSEK (1971) had already chosen a neotype from the same locality (see above). Neither specimen is currently in the Geological Survey collection.

Current classification: ***Aurila notata* (REUSS, 1850).**

Hemicytheria omphalodes omphalodes (REUSS, 1850)
(Pl. 2, Fig. 6)

Type: neotype, right valve, specimen missing.

Type level: Miocene, upper Sarmatian, *Nonion granosum* Zone.

Type locality: Nexing, "Hühnerfutterberg", Lower Austria, Austria.

Type reference and figure: CERNAJSEK, T., 1974: p. 468, Pl. 1, Fig. 7.

Remarks: CERNAJSEK (1971) had already chosen a neotype from the same locality (see above). This specimen is still extant in the collection.

Current classification: ***Hemicytheria omphalodes* (REUSS, 1850).**

Loxoconcha schmidi CERNAJSEK, 1974
(Pl. 2, Fig. 7)

Type: holotype, left valve, specimen missing.

Type level: Miocene, lower Sarmatian, Hernalser Tegel, Rissoa beds, *Elphidium reginum* Zone.

Type locality: Vienna, 17th district, Gschwandtnergasse 56, Austria.

Type reference and figure: CERNAJSEK, T., 1974: p. 479, Pl. 3, Fig. 4.

Remarks: Paratypes labelled with the name of the type locality, with Siebenhirten near Mistelbach or with Breitenbrunn quarry, as indicated in the publication are missing. Instead three carapaces and three right valves, including one juvenile, were found in a slide containing early Sarmatian ostracods, arranged by CERNAJSEK. Unfortunately the slide is not labelled. Also, on a SEM-stub, found amongst others, a left valve was found, but this is not identical with the holotype. One paratype from Neckenmarkt bore hole (103.8 m) exists in the collection. GROSS (2006) assigned the species to the genus *Loxocorniculum*.

Current classification: ***Loxocorniculum schmidi* CERNAJSEK, 1974.**

? *Bythocypris pappi* CERNAJSEK, 1974
(Pl. 2, Fig. 8)

Type: holotype, left valve, specimen missing.

Type level: Miocene, upper Sarmatian, *Porosononion granosum* Zone.

Type locality: Nexing, "Hühnerfutterberg", Lower Austria, Austria.

Type reference and figure: CERNAJSEK, T., 1974: p. 480, Pl. 3, Fig. 9.

Remarks: ZELENKA (1990) declared this species to be a synonym of *Phlyctenophora farkasi* (ZALÁNYI, 1913). The latter species was synonymized with *Ghardaglaia pectinata* (HÉJJAS, 1894) by ZORN (1998). The following paratypes are in the collection: 1 carapace from the type locality, 4 right valves and 1 left valve from Hölles, 6 right and 6 left valves and larval stages (2 right and 1 left valve) from Hautzendorf, 1 right valve from Heiligenberg, 2 right valves from the surroundings of Baden and 2 left and 2 right valves from Ebendorf, near Mistelbach (all Lower Austria).

Current classification: ***Ghardaglaia pectinata* (HÉJJAS, 1894).**

KAYSER, E. (1900): Devon-Fossilien vom Bosporus und von der Nordküste des Marmara-Meeres (Zwischen Pendik und Kartal). – Beitr. Paläont. Geol. Österr.-Ung. Orients, 12 (1899).

Beyrichia roemeri KAYSER, 1900
(Pl. 3, Figs. 39–40)

Coll. no.: GBA 1900/002/0005.

Type: several syntypes on a rock (1 red indicated imprint with 3 artificial casts, 1 red indicated cast, 1 imprint).

Type level: Lower Devonian.

Type locality: Kanlydsa, Turkey.

Type reference and figure: KAYSER, E.,1900: p. 30, Pl. 1, Fig. 9.

Coll. no.: GBA 1900/002/0028.

Type: 1 syntype on a rock.

Type level: Lower Devonian.

Type locality: between Pendik and Kartal, Turkey.

Type reference and figure: KAYSER, E.,1900: p. 35, Pl. 1, Fig. 10.

Remarks: The specimens originate from the collection of Franz TOULA (collected 1895) and were originally deposited in the geological collection of the "K.k. technische Hochschule in Wien" (acquisition 1903). GROSS-UFFENORDE (1982) assigned *Beyrichia roemeri* to the genus *Zygobeyrichia.*

Current classification: ***Zygobeyrichia roemeri* (KAYSER, 1900).**

KOLLMANN, K. (1960b): Ostracoden aus der alpinen Trias Österreichs I. *Parabairdia* n.g. und *Ptychobairdia* n.g. (Bairdiidae). – Jb. Geol. Bundesanst., Sonderbd. 5.

Parabairdia ploechingeri KOLLMANN, 1960b
(Pl. 4, Figs. 1–3)

Coll. no.: GBA 2008/133/0001.

Type: holotype, carapace.

Type level: Triassic, Rhaetian, Zlambach marls.

Type locality: Grünbachgraben, Untersberg, Salzburg, Austria.

Type reference and figure: KOLLMANN, K., 1960b: p. 94, Pl. 23, Figs. 1–3.

Remarks: Genoholotype. In the original publication, the invalid coll. no. GBA/01 was given. BOLZ (1971: p. 141–144) interpreted the holotype to be a larval stage and placed the species in *Bairdia,* rejecting the genus *Parabairdia* through synonymy. KOZUR (1973: p. 21) kept the genus *Parabairdia*. Eight figured paratypes (coll. nos. GBA

2008/133/0002, 0005) inclusive 2 thin-sections (coll. nos. GBA 2008/133/0003, 0004) are in the collection.

Current classification: ***Parabairdia ploechingeri* KOLLMANN, 1960b.**

Ptychobairdia kuepperi KOLLMANN, 1960b
(Pl. 4, Figs. 4–5)

Coll. no.: GBA 2008/133/0006.

Type: holotype, carapace.

Type level: Triassic, Rhaetian, Zlambach marls.

Type locality: Grünbachgraben, Untersberg, Salzburg, Austria.

Type reference and figure: KOLLMANN, K., 1960b: p. 97, Pl. 24, Fig. 1, 4.

Remarks: Genoholotype. In the original publication, the invalid coll. no. GBA/06 was given. BOLZ (1971: p. 199) placed the species in *Triebelina (Ptychobairdia).* Later authors considered *Ptychobairdia* to have the rank of a genus (e.g. KRISTAN-TOLLMANN, 1990a: p. 174; SEPKOSKI, 2002). Three paratypes exist in the collection (coll. nos. GBA 2008/133/0008, 0009), but one (Pl. 24, Figs. 2-3) has been lost.

Current classification: ***Ptychobairdia kuepperi* KOLLMANN, 1960b.**

Ptychobairdia kristanae KOLLMANN, 1960b
(Pl. 4, Figs. 6–9)

Coll. no.: GBA 2008/133/0010.

Type: holotype, carapace.

Type level: Upper Triassic.

Type locality: Lanzing, base of the northern slope of the Hutberg, Lower Austria, Austria.

Type reference and figure: KOLLMANN, K., 1960b: p. 99, Pl. 25, Figs. 6–9.

Remarks: In the original publication, the invalid coll. no. GBA/010 was given. The holotype is reference material in KOLLMANN (1963: p. 181). BOLZ (1971: p. 210–211) placed the species in *Triebelina (Ptychobairdia)* and found the holotype to be a larval stage. KOZUR (1971: p. 10) named it *Triebelina kristanae kristanae* when erecting the subspecies *T. kristanae praecursor*, intending *Ptychobairdia* to be a junior synonym of *Triebelina*.

Current classification: ***Ptychobairdia kristanae* KOLLMANN, 1960b.**

Ptychobairdia medwenitschi KOLLMANN, 1960b
(Pl. 4, Figs. 10–13)

Coll. no.: GBA 2008/133/0011.

Type: holotype, carapace.

Type level: Upper Triassic.

Type locality: Hallstätter Salzberg, Upper Austria, Austria.

Type reference and figure: KOLLMANN, K., 1960b: p. 100, Pl. 26, Figs. 1–4.

Remarks: In the original publication, the invalid coll. no. GBA/011 was given. The holotype is reference material in KOLLMANN (1963: p. 181) sub *Ptychobairdia kristanae* (larval stage, species *P. medwenitschi* rejected). Six figured paratypes are in the collection (coll. no. GBA 2008/133/0012–0016a,b).

Current classification: ***Ptychobairdia kristanae* KOLLMANN, 1960b**.

Ptychobairdia oberhauseri KOLLMANN, 1960b
(Pl. 4, Figs. 14–15; Pl. 5., Figs. 1, 3)

Coll. no.: GBA 2008/133/0017.

Type: holotype, carapace.

Type level: Triassic, Rhaetian, Zlambach marls.

Type locality: Grünbachgraben, Untersberg, Salzburg, Austria.

Type reference and figure: KOLLMANN, K., 1960b: p. 98, Pl. 27, Figs. 1–4.

Remarks: In the original publication, the invalid coll. no. GBA/017 was given. BOLZ (1971: p. 208–210) placed the species in *Triebelina (Ptychobairdia)* and established that the holotype represents a larval stage. KOZUR (1971: p. 13) named it *Triebelina oberhauseri oberhauseri* when erecting the subspecies *T. oberhauseri hungarica*, intending *Ptychobairdia* to be a junior synonym of *Triebelina*.

Current classification: ***Ptychobairdia oberhauseri* KOLLMANN, 1960b**.

KOLLMANN, K. (1962): Ostracoden aus dem mitteleozänen "Flysch" des Beckens von Pazin (Istrien, Jugoslawien). – Verh. Geol. Bundesanst., Jg. 1962 (2).

The reader will find remarks on old but nowadays invalid coll. nos. given by KOLLMANN (1962) in the Catalogue of ELLIS & MESSINA. The coll. nos. cited in the text of KOLLMANN are written on the slides. All mentioned paratypes are available.

Cytherella triestina KOLLMANN, 1962
(Pl. 3, Figs. 1–3)

Coll. no.: GBA 2008/134/0001.

Type: holotype, carapace.

Type level: Eocene, Lutetian.

Type locality: Triest, Faccanoni quarry, Italy.

Type reference and figure: KOLLMANN, K., 1962: p. 210, Pl. 3, Figs. 6–8.

Remarks: The specimen was previously figured in KOLLMANN (1960a: 191, Pl. 7, Figs. 1–3) sub *Cytherella* sp./136 (this numbering system was used by KOLLMANN, 1962). Eighteen paratypes are in the collection (coll. no. GBA 2008/135/0033–0035), although KOLLMANN mentioned only eleven.

Current classification: ***Cytherella triestina* KOLLMANN, 1962.**

Cythereis ? pisinensis KOLLMANN, 1962
(Pl. 3, Figs. 4–6)

Coll. no.: GBA 2008/135/0020.

Type: holotype, carapace.

Type level: Eocene, upper Lutetian.

Type locality: Pazin, near the old bridge, Istria, Kroatia.

Type reference and figure: KOLLMANN, K., 1962: p. 205, Pl. 6, Figs. 11–13.

Remarks: WHATLEY & COLES (1991: p. 124) assigned this species to *Trachyleberidea.* Four paratypes exist in the collection (coll. no. GBA 2008/135/0021, 0022).

Current classification: ***Trachyleberidea pisinensis* (KOLLMANN, 1962).**

Trachyleberidea ? *sikici* KOLLMANN, 1962
(Pl. 3, Figs. 7–9)

Coll. no.: GBA 2008/135/0024.

Type: holotype, carapace.

Type level: Eocene, upper Lutetian.

Type locality: Zanetina, near the bridge, Istria, Kroatia.

Type reference and figure: KOLLMANN, K., 1962: p. 206, Pl. 6, Figs. 7–9.

Remarks: Six paratypes (coll. no. GBA 2008/135/0025, 0026) exist.

Current classification: ***Trachyleberidea ? sikici* KOLLMANN, 1962.**

Cytherella ventroinflata KOLLMANN, 1962
(Pl. 3, Figs. 10–12)

Coll. no.: GBA 2008/135/0030.

Type: holotype, left valve.

Type level: Eocene, upper Lutetian.

Type locality: Zanetina, near the bridge, Istria, Kroatia.

Type reference and figure: KOLLMANN, K., 1962: p. 209, Pl. 2, Figs. 11–13.

Remarks: One paratype (coll. no. GBA 2008/135/0031) is in the collection.

Current classification: ***Cytherella ventroinflata* KOLLMANN, 1962.**

Cytherella praehumilis KOLLMANN, 1962
(Pl. 3, Figs. 13–14)

Coll. no.: GBA 2008/135/0038.

Type: holotype, carapace.

Type level: Eocene,Upper Lutetian.

Type locality: Zanetina, near the bridge, Istria, Kroatia.

Type reference and figure: KOLLMANN, K., 1962: p. 213, Pl. 4, Figs. 9–10.

Remarks: Two figured paratypes (coll. no. GBA 2008/135/0039) exist.

Current classification: ***Cytherella praehumilis* KOLLMANN, 1962.**

Cytherella unguiformis KOLLMANN, 1962
(Pl. 3, Figs. 15–17)

Coll. no.: GBA 2008/135/0040.

Type: holotype, carapace.

Type level: Eocene, upper Lutetian.

Type locality: Zanetina, near the bridge, Istria, Kroatia.

Type reference and figure: KOLLMANN, K., 1962: p. 214, Pl. 4, Figs. 13–15.

Remarks: One paratype (coll. no. GBA 2008/135/0041) exists.

Current classification: ***Cytherella unguiformis* KOLLMANN, 1962.**

KOLLMANN, K. (1963): Ostracoden aus der alpinen Trias. II. Weitere Bairdiidae. – Jb. Geol. Bundesanst., 106.

Bairdia deformata KOLLMANN, 1963
(Pl. 6, Fig. 6)

Coll. no.: GBA 2008/136/0001.

Type: holotype, left valve.

Type level: Triassic, Rhaetian.

Type locality: Lanzing, Hohe Wand, NW Wiener Neustadt, Lower Austria, Austria.

Type reference and figure: KOLLMANN, K., 1963: p. 165, Pl. 4, Fig. 4.

Remarks: In the original publication, the invalid coll. no. GBA/0142 was given. One paratype (coll. no. GBA 2008/136/0002) is in the collection.

Current classification: ***Bairdia deformata* KOLLMANN, 1963.**

Urobairdia austriaca KOLLMANN, 1963
(Pl. 6, Figs. 16–19)

Coll. no.: GBA 2008/136/0003.

Type: holotype, carapace.

Type level: Triassic, upper Norian, lower Sevatian, Zlambach marls.

Type locality: Rossmoos, Bad Goisern, Upper Austria, Austria.

Type reference and figure: KOLLMANN, K., 1963: p. 166, Pl. 6, Figs. 5–8.

Remarks: Genoholotype. In the original publication, the invalid coll. no. GBA/0144 was given. KOLLMANN did not mention paratypes and there are none in the collection, too, but he mentions the occurrence of this species in several other samples from various localities. BOLZ (1971: p. 144–148, 241) presented a new description of the species and proposed that the holotype is a female larval stage and placed the species in *Bairdia,* thus invalidating the genus *Urobairdia*. Later authors (KRISTAN-TOLLMANN, 1987: p. 238; CRASQUIN-SOLEAU & GRADINARU, 1996: p. 27) kept the name *Urobairdia austriaca*. In recent years, *Urobairdia* has also been interpreted as a subgenus of *Bairdia* (see CRASQUIN-SOLEAU et al., 2006: p. 60).

Current classification: ***Bairdia (Urobairdia) austriaca* KOLLMANN, 1963.**

Urobairdia angusta KOLLMANN 1963
(Pl. 6, Figs. 12–15)

Coll. no.: GBA 2008/136/0004.

Type: holotype, carapace.

Type level: Triassic, upper Norian, lower Sevatian, Zlambach marls.

Type locality: Rossmoos, Bad Goisern, Upper Austria, Austria.

Type reference and figure: KOLLMANN, K., 1963: p. 167, Pl. 6, Figs. 1–4.

Remarks: In the original publication, the invalid coll. no. GBA/0145 was given. There are no paratypes either in the collection or mentioned in the publication. BOLZ (1971: p. 144–148) found the holotype to be a male larval stage of *Bairdia austriaca,* and thus rejected the species *U. angusta.*

Current classification: ***Bairdia (Urobairdia) austriaca* KOLLMANN, 1963.**

Cryptobairdia hians KOLLMANN, 1963
(Pl. 6, Figs. 1–3)

Coll. no.: GBA 2008/136/0005.

Type: holotype, carapace.

Type level: Triassic, Rhaetian.

Type locality: Lanzing, Hohe Wand NW Wiener Neustadt, Lower Austria, Austria.

Type reference and figure: KOLLMANN, K., 1963: p. 168, Pl. 4, Figs. 1–3.

Remarks: In the original publication, the invalid coll. no. GBA/0146 was given. BOLZ (1971: p. 153–154) placed the species in *Bairdia,* for which he proposed *Cryptobairdia* as a junior synonym. In SEPKOSKI (2002) *Cryptobairdia* was a valid genus. From the type locality 4 paratypes (coll. No. GBA 2008/136/0006) are in the collection, but are not mentioned by KOLLMANN.

Current classification: ***Cryptobairdia hians* KOLLMANN, 1963.**

Lobobairdia salinaria KOLLMANN, 1963
(Pl. 7, Figs. 1–4)

Coll. no.: GBA 2008/136/0007.

Type: holotype, carapace.

Type level: Triassic, Rhaetian, Zlambach marls.

Type locality: Hallstatt, Salzberg, Upper Austria, Austria.

Type reference and figure: KOLLMANN, K., 1963: p. 169, Pl. 6, Figs. 9–12.

Remarks: Genoholotype. In the original publication, the invalid coll. no. GBA/0147 was given. One paratype exists (coll. no. 2008/133/0018) and was previously figured in KOLLMANN (1960b: p. 102, Pl. 27, Figs. 5–8) under the name *Ptychobairdia* ? sp.

Current classification: ***Lobobairdia salinaria* KOLLMANN, 1963.**

Anisobairdia cincta KOLLMANN, 1963
(Pl. 6, Figs. 8–11)

Coll. no.: GBA 2008/136/0008.

Type: holotype, carapace.

Type level: Triassic, Rhaetian, Zlambach marls.

Type locality: Halleiner Salzberg, Salzburg, Austria.

Type reference and figure: KOLLMANN, K., 1963: p. 170, Pl. 5, Figs. 1–4.

Remarks: Genoholotype. In the original publication, the invalid coll. no. GBA/0148 was given. BOLZ (1971: p. 161–163) regarded the holotype as a larval stage and placed this (and the next species below) to *Bairdia,* for which he intended *Anisobairdia* to be a junior synonym. He revised one paratype from Grünbachgraben (coll. no. GBA 2008/136/0009) to belong to his new species *Bairdia ventricosa* BOLZ, 1971. KRISTAN-TOLLMANN et al. (1987: 243, 1990b: 544) kept the genus *Anisobairdia.* Two figured paratypes (coll. nos. GBA 2008/136/0009–0010) exist.

Current classification: ***Anisobairdia cincta* KOLLMANN, 1963.**

Anisobairdia salisburgensis KOLLMANN, 1963
(Pl. 6, Figs. 4–5)

Coll. no.: GBA 2008/136/0011.

Type: holotype, left valve.

Type level: Jurassic, Liassic, "Liasfleckenmergel", Jakobbergseries ?

Type locality: Grünbachgraben, Untersberg, Salzburg, Austria.

Type reference and figure: KOLLMANN, K., 1963: p. 171, Pl. 4, Figs. 7–8.

Remarks: In the original publication, the invalid coll. no. GBA/0151 was given. BOLZ (1971: p. 167–170) placed the species in *Bairdia* (see above) and found the holotype to be a larval stage. There are no paratypes either in the collection or especially treated in the publication, but the occurrence of the species is also mentioned for the Triassic (Rhaetian).

Current classification: ***Anisobairdia salisburgensis* KOLLMANN, 1963.**

Nodobairdia mammilata KOLLMANN, 1963
(Pl. 7, Figs. 8–11)

Coll. no.: GBA 2008/136/0012.

Type: holotype, carapace.

Type level: Triassic, upper Ladinian, Seeland beds = upper Cassian beds.

Type locality: Seelandalpe, Pragser Dolomiten, South Tyrol, Italy.

Type reference and figure: KOLLMANN, K., 1963: p. 174, Pl. 7, Figs. 9–12.

Remarks: Genoholotype. In the publication, the invalid coll. no. GBA/0152 was given. BOLZ (1971: p. 213) classified *Nodobairdia* to be a subgenus of *Triebelina*. This was not adopted by later authors (KRISTAN-TOLLMANN et al., 1980: p. 185; KRISTAN-TOLLMANN, 1990a: p. 174; see also SEPKOSKI, 2002). Three figured paratypes (coll. nos. GBA 2008/136/0013–0015) are in the collection.

Current classification: ***Nodobairdia mammilata* KOLLMANN, 1963.**

Nodobairdia verrucosa KOLLMANN, 1963
(Pl. 7, Figs. 5–7)

Coll. no.: GBA 2008/136/0016.

Type: holotype, left valve.

Type level: Triassic, Carnian, lower Julian, "Halobienschiefer".

Type locality: Hohe Wand W Wiener Neustadt, Lower Austria, Austria.

Type reference and figure: KOLLMANN, K., 1963: p. 176, Pl. 7, Figs. 1–3.

Remarks: In the original publication, the invalid coll. no. GBA/0156 was given. Two figured paratypes (coll. nos. GBA 2008/136/0017–0018) are available.

Current classification: ***Nodobairdia verrucosa* KOLLMANN, 1963.**

Mirabairdia pernodosa KOLLMANN, 1963

(Pl. 7, Fig. 12)

Coll. no.: GBA 2008/136/0019.

Type: holotype, left valve.

Type level: Triassic, upper Ladinian, "Seeland beds = upper Cassian beds.

Type locality: Seelandalpe, Pragser Dolomiten, South Tyrol, Italy.

Type reference and figure: KOLLMANN, K., 1963: p. 177, Pl. 8, Fig. 1.

Remarks: Genoholotype. In the publication, the invalid coll. no. GBA/0159 was given. BOLZ (1971: p. 213) placed the species in *Triebelina (Nodobairdia)* and KOZUR (1971: p. 15) named it *Triebelina (Mirabairdia) pernodosa pernodosa* when erecting his new subspecies *Triebelina (Mirabairdia) pernodosa illyrica. Nodobairdia* and *Mirabairdia* are valid genera after SEPKOSKI (2002). Four figured paratypes (coll. nos. GBA 2008/136/0020–0023) exist.

Current classification: ***Mirabairdia pernodosa* KOLLMANN, 1963.**

Ptychobairdia schaubergeri KOLLMANN, 1963

(Pl. 5, Figs. 2, 4–6)

Coll. no.: GBA 2008/136/0026.

Type: holotype, carapace.

Type level: Jurassic, Liassic, Jakobbergseries, "Liasfleckenmergel".

Type locality: Hallein, Salzberg, Salzburg, Austria.

Type reference and figure: KOLLMANN, K., 1963: p. 179, Pl. 2, Figs. 1–2; Pl. 3, Figs. 1–2.

Remarks: In the original publication, the invalid coll. no. GBA/0165 was given. BOLZ (1971: p. 210) placed the species in *Triebelina (Ptychobairdia)* and KOZUR (1971: p. 15) in *Triebelina* for which he intended *Ptychobairdia* to be a junior synonym. *Ptychobairdia* is a valid genus after KRISTAN-TOLLMANN (1990a: p. 174–178). One figured paratype (coll. no. GBA 2008/136/0027) exists.

Current classification: ***Ptychobairdia schaubergeri* KOLLMANN, 1963.**

Dicerobairdia bicornuta KOLLMANN, 1963

(Pl. 5, Figs. 7–9; Pl. 7, Fig. 13)

Coll. no.: GBA 2008/136/0028.

Type: holotype, left valve.

Type level: Triassic, Rhaetian.

Type locality: Plackleswiese, W Plackles, Hohe Wand, NW Wiener Neustadt, Lower Austria, Austria.

Type reference and figure: KOLLMANN, K., 1963: p. 182, Pl. 1, Figs. 3–5; Pl. 9, Fig. 1.

Remarks: Genoholotype. In the original publication, the invalid coll. no. GBA/0167 was given. BOLZ (1971: p. 192–195) gave a new description of this species. He assigned all of KOLLMANN's (1963) *Dicerobairdia* species to *Triebelina (Triebelina)* whereby *Dicerobairdia* became a junior synonym of *Triebelina*. KRISTAN-TOLLMANN (1970: p. 289, 1990a: p. 173; KRISTAN-TOLLMANN et al., 1980: p. 186) continued using *Dicerobairdia* and also (1970: p. 292) erected the subspecies *Dicerobairdia bicornuta kollmanni* which BOLZ (1971: p. 195) did not accept. Two figured paratypes (coll. nos. 2008/136/0029–0030) are in the collection.

Current classification: ***Dicerobairdia bicornuta bicornuta* KOLLMANN, 1963.**

Dicerobairdia ladinica KOLLMANN, 1963

(Pl. 7, Figs. 18–20)

Coll. no.: GBA 2008/136/0032.

Type: holotype, left valve.

Type level: Triassic, Ladinian, upper Cordevolian, upper Cassian beds = Falzarego beds.

Type locality: Settsass-Scharte, St. Cassian, South Tyrol, Italy.

Type reference and figure: KOLLMANN, K., 1963: p. 183, Pl. 9, Figs. 11–13.

Remarks: In the publication, the invalid coll. no. GBA/0171 was given. This is the only case for which KOLLMANN stated that there are no paratypes. Therefore it is a holotype by monotypy. BOLZ (1971: p. 183) did not mention the species, but placed it indirectly in *Triebelina (Triebelina*) because he declared the genus *Dicerobairdia* to be a synonym of *Triebelina* (see above).

Current classification: ***Triebelina ladinica* (KOLLMANN, 1963).**

Dicerobairdia gruenbachensis KOLLMANN, 1963

(Pl. 7, Figs. 16–17)

Coll. no.: GBA 2008/136/0033.

Type: holotype, left valve.

Type level: Triassic, Carnian, lower Julian, "Halobienschiefer".

Type locality: Hohe Wand, Segen-Gottes-Schacht, W Wiener Neustadt, Lower Austria, Austria.

Type reference and figure: KOLLMANN, K., 1963: p. 184, Pl. 9, Figs. 6–7.

Remarks: In the publication, the invalid coll. no. GBA/0172 was given. BOLZ (1971: p. 183) placed the species in *Triebelina (Triebelina)* (see above). KOZUR (1971: p. 10) erected the new subspecies *T. gruenbachensis tollmannae.* Two figured paratypes (coll. nos. GBA 2008/136/0034–0035) exist.

Current classification: ***Triebelina gruenbachensis* (KOLLMANN, 1963).**

Dicerobairdia elegans KOLLMANN, 1963

(Pl. 7, Figs. 14–15)

Coll. no.: GBA 2008/136/0036.

Type: holotype, carapace.

Type level: Triassic, Carnian, lower Julian, "Halobienschiefer".

Type locality: Hohe Wand, Segen-Gottes-Schacht, W Wiener Neustadt, Lower Austria, Austria.

Type reference and figure: KOLLMANN, K., 1963: p. 185, Pl. 9, Figs. 4–5.

Remarks: In the publication, the invalid coll. no. GBA/0175 was given. BOLZ (1971: p. 183) placed the species in *Triebelina (Triebelina)* (see above). Paratypes have not been found in the collection and were not mentioned by KOLLMANN (1963).

Current classification: ***Triebelina elegans* (KOLLMANN, 1963).**

Bairdiolites semisculptus KOLLMANN, 1963
(Pl. 7, Figs. 26–29)

Coll. no.: GBA 2008/136/0037.

Type: holotype, carapace.

Type level: Triassic, Rhaetian, Zlambach marls.

Type locality: Hallstatt, Salzberg, Upper Austria, Austria.

Type reference and figure: KOLLMANN, K., 1963: p. 188, Pl. 10, Figs. 6–9.

Remarks: In the publication, the invalid coll. no. GBA/0176 was given. The latin ending (-a) of the species name was corrected by KEMPF (1986: -us). There are no paratypes.

Current classification: ***Bairdiolites semisculptus* KOLLMANN, 1963.**

Neobairdiolites placklesensis KOLLMANN, 1963
(Pl. 7, Figs. 21–25)

Coll. no.: GBA 2008/136/0038.

Type: holotype, carapace.

Type level: Triassic, Rhaetian, Zlambach marls ?

Type locality: Plackleswiese, W Plackles, Hohe Wand, NW Wiener Neustadt, Lower Austria, Austria.

Type reference and figure: KOLLMANN, K., 1963: p. 190, Pl. 10, Figs. 1–5.

Remarks: Genoholotype. In the original publication, the invalid coll. no. GBA/0177 was given. KRISTAN-TOLLMANN (1970: p. 279) assigned the species to *Bairdiolites* declaring the monospecific *Neobairdiolites* to be a junior synonym of *Bairdiolites.* There are no paratypes.

Current classification: ***Bairdiolites placklesensis* KOLLMANN, 1963.**

Carinobairdia triassica KOLLMANN, 1963
(Pl. 5, Figs. 15–16; Pl. 8, Fig. 5)

Coll. no.: GBA 2008/136/0039.

Type: holotype, left valve.

Type level: Triassic, Rhaetian, Zlambach marls ?

Type locality: Plackleswiese, W Plackles, Hohe Wand, NW Wiener Neustadt, Lower Austria, Austria.

Type reference and figure: KOLLMANN, K., 1963: p. 191, Pl. 3, Figs. 5–6; Pl. 11, Fig. 1.

Remarks: Genoholotype. In the original publication, the invalid coll. no. GBA/0178 was given. BOLZ (1971: p. 228–229) assigned *C. triassica* and *C. umbonata* to the genus *Lobobairdia*. He rejected the genus *Carinobairdia,* which he synonymized partly with *Lobobairdia* and partly with *Triebelina (Nodobairdia)*. This opinion stands in contrast with the works of KRISTAN-TOLLMANN (1969: p. 85; 1970: p. 295; 1990a: p. 173) and KRISTAN-TOLLMANN et al. (1979: p. 150, 1980: p. 182). URLICHS (1973: p. 676) first followed BOLZ's (1971) opinion, but later used *Carinobairdia* (in HILLEBRANDT et al., 2007: p. 10). KRISTAN-TOLLMANN (1970: p. 302) erected the subspecies *Carinobairdia triassica interrupta.* Two figured paratypes (coll. nos. GBA 2008/136/0040–0041) are at hand.

Current classification: ***Carinobairdia triassica triassica* KOLLMANN, 1963**

Carinobairdia umbonata KOLLMANN, 1963
(Pl. 5, Figs. 12–14; Pl. 6, Fig. 7)

Coll. no.: GBA 2008/136/0042.

Type: holotype, left valve.

Type level: Triassic, Rhaetian, Zlambach marls ?

Type locality: Plackleswiese, W Plackles, Hohe Wand, NW Wiener Neustadt, Lower Austria, Austria.

Type reference and figure: KOLLMANN, K., 1963: p. 193, Pl. 3, Figs. 10–12; Pl. 4, Fig. 9.

Remarks: In the original publication, the invalid coll. no. GBA/0181 was given. BOLZ (1971: p. 228) assigned the species to *Lobobairdia* and KRISTAN-TOLLMANN et al. (1979: p. 153, 1980: p. 184) to *Carinobairdia* (see above). There is one figured paratype (coll. no. GBA 2008/136/0043).

Current classification: ***Carinobairdia umbonata* KOLLMANN, 1963.**

Carinobairdia alpina KOLLMANN, 1963
(Pl. 5, Figs. 10–11)

Coll. no.: GBA 2008/136/0044.

Type: holotype, right valve.

Type level: Triassic, Rhaetian, Zlambach marls.

Type locality: Grünbachgraben, Untersberg, Salzburg, Austria.

Type reference and figure: KOLLMANN, K., 1963: p. 194, Pl. 3, Figs. 3–4.

Remarks: In the original publication, the invalid coll. no. GBA/0183 was given. BOLZ (1971: p. 218) assigned the species to *Triebelina (Nodobairdia)* and KOZUR (1985: p. 75) to his new genus *Bolzibairdia*. KRISTAN-TOLLMANN et al. (1979: p. 150, 1980: p. 183), KRISTAN-TOLLMANN (1990a: p. 173) and URLICHS (in HILLEBRANDT et al., 2007: p. 10) followed the concept of *Carinobairdia*. The mentioned paratypes are still present (coll. nos. GBA 2008/136/0045–0046).

Current classification: ***Carinobairdia alpina* KOLLMANN, 1963.**

Carinobairdia alta KOLLMANN, 1963
(Pl. 8, Fig. 6)

Coll. no.: GBA 2008/136/0047.

Type: holotype, left valve.

Type level: Triassic, Rhaetian.

Type locality: Lanzing, Hohe Wand, NW Wiener Neustadt, Lower Austria, Austria.

Type reference and figure: KOLLMANN, K., 1963: p. 195, Pl. 11, Fig. 3.

Remarks: In the original publication, the invalid coll. no. GBA/0186 was given. BOLZ (1969: p. 427; 1971: p. 218)

and KRISTAN-TOLLMANN (1970: p. 297) declared *Carinobairdia alta* to be synonymous with *C. alpina* (see above), because the specimens are the left valves of this species. One figured paratype from the Hallstätter Salzberg (coll. no. GBA 2008/136/0048) exists.

Current classification: ***Carinobairdia alpina* KOLLMANN, 1963.**

Carinobairdia tenuicarinata KOLLMANN, 1963
(Pl. 8, Figs. 7–8)

Coll. no.: GBA 2008/136/0049.

Type: holotype, carapace.

Type level: Triassic, Rhaetian.

Type locality: Dolomitenhütte, Lienzer Dolomiten, Tyrol, Austria.

Type reference and figure: KOLLMANN, K., 1963: p. 196, Pl. 11, Figs. 5, 7.

Remarks: In the original publication, the invalid coll. no. GBA/0188 was given. KRISTAN-TOLLMANN (1970: p. 301) and BOLZ (1971: p. 218) declared *Carinobairdia tenuicarinata* to be a synonym of *C. alpina* (see above) because all specimens represent larval stages of this species. Two figured paratypes (coll. nos. GBA 2008/136/0050–0051) exist in the collection.

Current classification: ***Carinobairdia alpina* KOLLMANN, 1963.**

Medwenitschia ornata KOLLMANN, 1963
(Pl. 8, Figs. 1–4)

Coll. no.: GBA 2008/136/0052.

Type: holotype, carapace.

Type level: Triassic, Rhaetian, Zlambach marls.

Type locality: Hallstatt, Salzberg, Upper Austria, Austria.

Type reference and figure: KOLLMANN, K., 1963: p. 197, Pl. 10, Figs. 11–14.

Remarks: Genoholotype. In the original publication, the invalid coll. no. GBA/0191 was given. One figured paratype (coll. no. GBA 2008/136/0053) exists. BOLZ (1971: p. 195, 183) found more material of this species and described the inner characteristics of the valves for the first time. With this knowledge, he declared the monospecific genus *Medwenitschia* to be a junior synonym of *Triebelina (Triebelina)*. At the same time, KRISTAN-TOLLMANN (1971: p. 73) erected a second species of *Medwenitschia*, based on one carapace, and kept the genus.

Current classification: ***Medwenitschia ornata* KOLLMANN, 1963.**

KRISTAN-TOLLMANN, E. (1991): Ostracods from the Middle Triassic Sina Formation (Aghdarband Group) in NE-Iran. – Abh. Geol. Bundesanst., 38.

Ptychobairdia ruttneri KRISTAN-TOLLMANN, 1991
(Pl. 8, Figs. 10–11)

Coll. no.: GBA 1985/005/0004.

Type: holotype, carapace.

Type level: Triassic, Ladinian, upper Langobardian (*Frankites regoledanus* Zone), Aghdarband Group, Sina Formation, Faqir Marl Bed.

Type locality: Aghdarband, E Mashad, Khorassan province, Iran.

Type reference and figure: Kristan-TOLLMANN, E., 1991: p. 196, Pl. 1, Fig. 4.

Current classification: ***Ptychobairdia ruttneri* KRISTAN-TOLLMANN, 1991.**

Polycope aghdarbandensis KRISTAN-TOLLMANN, 1991
(Pl. 8, Fig. 9)

Coll. no.: GBA 1985/005/0011.

Type: holotype, single valve.

Type level: Triassic, Ladinian, upper Langobardian (*Frankites regoledanus* Zone), Aghdarband Group, Sina Formation, Faqir Marl Bed.

Type locality: Aghdarband E Mashad, province Khorassan, Iran.

Type reference and figure: KRISTAN-TOLLMANN, E., 1991: p. 197, Pl. 1, Fig. 11.

Current classification: ***Polycope aghdarbandensis* KRISTAN-TOLLMANN, 1991.**

PROCHÁZKA, V.J. (1893): Miocaen Židlochovický na Moravě a jeho zvířena (Das Miocaen von Seelowitz in Moravia und dessen Fauna). – Rozpravy České Akad. Císaře Františka Josefa Pro Vědy, Slovesnost a Uměni v Praze, ser. 2 (matematicko-Přírodnická), 2 (24).

PROCHÁZKA (1893) described seven new Miocene ostracod species from the surroundings of Židlochovice in Moravia, four of which have been found in the collection of the Geological Survey of Austria. However, the samples of *Cythere fragilis*, *C. obliquus* and *C. moravica* have been lost. These species are not treated in detail in the present paper, but the original drawings are presented on Plate 3.

Cythere vejhonensis PROCHÁZKA, 1893
(Pl. 3, Figs. 36–38)

Coll. no.: GBA 2008/171/0001.

Type: 1 syntype, left valve.

Type level: Miocene, Badenian.

Type locality: Židlochovice (Seelowitz), Vejhonberg, Moravia, Czech Republic.

Type reference and figure: PROCHÁZKA, V.J., 1893: p. 54, 78, Taf. 1, Fig. 11a–c.

Locality details: quarry near the city waterworks ("Steinbruch nächst der städtischen Wasserleitung").

Coll. no.: GBA 2008/171/0002.

Type: 1 syntype, right valve.

Locality details: clay pit opposite Hlinikstreet ("Tongrube gegenüber Hlinikgasse").

Remarks: BONADUCE et al. (1988) assigned *Cythere vejhonensis* to their new genus *Heliocythere*. *Cythere moedlingensis* TOULA, 1915 is very probably identical with this species.

Current classification: ***Heliocythere vejhonensis* (PROCHÁZKA, 1893).**

Cythere oviformis PROCHÁZKA, 1893
(Pl. 3, Figs. 30–32)

Coll. no.: GBA 2008/171/0003.

Type: 9 syntypes, 7 left valves (one larval stage), 2 right valves.

Type level: Miocene, Badenian, Leda beds.

Type locality: Židlochovice (Seelowitz), Vejhonberg, Moravia, Czech Republic.

Type reference and figure: PROCHÁZKA, V.J., 1893: p. 55, 78, Taf. 1, Fig. 9.

Remarks: Because there is only one complete right valve available, this one is presumed to be the figured syntype. All of the specimens belong to *Bosquetina carinella*. *Cythere oviformis* must be regarded to be a junior synonym.

Current classification: ***Bosquetina carinella* (REUSS, 1850).**

Cythere reussi PROCHÁZKA, 1893
(Pl. 3, Figs. 18–20)

Type level: Miocene, Badenian.

Type locality: Židlochovice (Seelowitz), Vejhonberg, Moravia, Czech Republic.

Type reference and figure: PROCHÁZKA, V.J., 1893: p. 56, 79.

Coll. no.: GBA 2008/171/0004.

Type: 1 syntype, left valve.

Locality details: road cut, real "Schlier" ("Wegeinschnitt, echter Schlier").

Coll. no.: GBA 2008/171/0005.

Type: 6 syntypes, 5 right and 1 left valve.

Locality details: road cut, fossil-rich layer ("Wegeinschnitt, fossilreiche Lage").

Coll. no.: GBA 2008/171/0006.

Type: 7 syntypes, 2 right and 5 left valves.

Locality details: quarry near the city waterworks ("Steinbruch nächst der städtischen Wasserleitung").

Coll. no.: GBA 2008/171/0007.

Type: 8 syntypes, 2 right and 6 left valves.

Locality details: hillside opposite the cross at the street ("Hang gegenüber dem Kreuze an der Straße").

Remarks: PROCHÁZKA (1893: p. 16, 20, 25, 79) stated that he found *Cythere reussi* at Vejhonberg, in the beds that are rich in *Corbula gibba* and *Leda nitida*, in the real "Schlier", in the clay pit opposite Hlinikstreet and in the fossil-rich layer. In the collection the syntypes from two of these localities are extant as is additional material from two other localities, for which he did not mention the occurrence (see above).

The figured specimens (PROCHÁZKA, 1893: Pl. 2, Fig. 1) cannot be identified among the 22 syntypes. TRIEBEL (1950) recognised that *Cythere reussi* PROCHÁZKA, 1893 is a homonym of *Cythere reussi* BRADY, 1869. He substituted the name with *Cnestocythere lamellicosta* n.n. All available syntypes belong to *Cnestocythere lamellicosta* TRIEBEL, 1950.

Current classification: ***Cnestocythere lamellicosta* TRIEBEL, 1950.**

Cythere blucinensis PROCHÁZKA, 1893
(Pl. 3, Figs. 33–35)

Coll. no.: GBA 2008/171/0008.

Type: 1 syntype, right valve.

Type level: Miocene, Badenian.

Type locality: Židlochovice (Seelowitz), Kohlberg near Blucina, Moravia, Czech Republic.

Type reference and figure: PROCHÁZKA, V.J., 1893: p. 56, 79, Taf. 2, Fig. 3.

Remarks: PROCHÁZKA (1893: p. 30, 87) mentioned that *Cythere blucinensis* occur in the quarry near the city waterworks of Židlochovice and at Kohlberg. Only one syntype from Kohlberg is available and is probably the figured specimen. However, this belongs to *Nonurocythereis seminulum* (SEGUENZA, 1880). *Cythere blucinensis,* therefore, has to be regarded a junior synonym of this species.

Current classification: ***Nonurocythereis seminulum* (SEGUENZA, 1880).**

SCHRAUT, G. (1996): Die Arthropoden aus dem Unterkarbon von Nötsch (Kärnten/Österreich). – Abh. Geol. Bundesanst., 51.

Hollinella (Hollinella) bulbolobata SCHRAUT, 1996
(Pl. 9, Figs. 1–2)

Coll. no.: GBA 1996/002/0020.

Type: holotype, artificial cast of right male valve.

Type level: Carboniferous, upper Visean / lower Namurian, Erlachgraben Formation.

Type locality: Hermsberg, Oberhöher near Nötsch, Carinthia, Austria.

Type reference and figure: SCHRAUT, G., 1996: p. 66–67, Pl. 5, Fig. 2; Text-Fig. 54.

Remarks: Number of holotype in publication: T33 H1397. One figured paratype (number T33 K03206) exists.

Current classification: ***Hollinella (Hollinella) bulbolobata* SCHRAUT, 1996.**

Knoxiella ? *bicornuta* SCHRAUT, 1996
(Pl. 9, Figs. 3–4)

Coll. no.: GBA 1996/002/0079.

Type: holotype, artificial cast of left valve.

Type level: Carboniferous, upper Visean, Nötsch Formation.

Type locality: Oberhöher, near Nötsch (locality SCHÖNLAUB 1), Carinthia, Austria.

Type reference and figure: SCHRAUT, G., 1996: p. 99–100, Pl. 7, Fig. 14; Text-Fig. 91.

Remarks: Holotypus monotypicus, number in publication: T19 S1253.

Current classification: ***Knoxiella* ? *bicornuta* SCHRAUT, 1996.**

Pseudobeyrichiopsis angustata SCHRAUT, 1996
(Pl. 9, Figs. 5–6)

Coll. no.: GBA 1996/002/0082.

Type: holotype, artificial cast of a female left valve.

Type level: Carboniferous, upper Visean, Nötsch Formation.

Type locality: Oberhöher, near Nötsch (locality SCHÖNLAUB 1), Carinthia, Austria.

Type reference and figure: SCHRAUT, G., 1996: p. 102–103, Pl. 8, Fig. 1; Text-Fig. 94.

Remarks: Holotypus monotypicus, number in publication: T22 S03109.

Current classification: ***Pseudobeyrichiopsis angustata* SCHRAUT, 1996.**

Pseudobeyrichiopsis longispinosa SCHRAUT, 1996
(Pl. 9, Figs. 7–8)

Coll. no.: GBA 1996/002/0085.

Type: holotype, artificial cast of a male right valve.

Type level: Carboniferous, upper Visean, Nötsch Formation.

Type locality: Oberhöher, near Nötsch (locality SCHÖNLAUB 1), Carinthia, Austria.

Type reference and figure: SCHRAUT, G., 1996: p. 104–105, Pl. 8, Fig. 4; Text-Fig. 96.

Remarks: Number of holotype in publication: T5 K1468. Five paratypes (casts) exist.

Current classification: ***Pseudobeyrichiopsis longispinosa* SCHRAUT, 1996**

Acratia dorsoangulata SCHRAUT, 1996
(Pl. 9, Figs. 9–10)

Coll. no.: GBA 1996/002/0102.

Type: holotype, artificial cast of left valve.

Type level: Carboniferous, upper Visean, Nötsch Formation.

Type locality: Oberhöher, near Nötsch (locality SCHÖNLAUB 1), Carinthia, Austria.

Type reference and figure: SCHRAUT, G., 1996: p. 127–128, Pl. 10, Fig. 9; Text-Fig. 109.

Remarks: Holotypus monotypicus, number in publication: T23 S03136.

Current classification: ***Acratia dorsoangulata* SCHRAUT, 1996.**

Acratia rectiventralis SCHRAUT, 1996
(Pl. 9, Figs. 11–12)

Coll. no.: GBA 1996/002/0103.

Type: holotype, artificial cast of left valve.

Type level: Carboniferous, Upper Visean, Nötsch Formation.

Type locality: Oberhöher, near Nötsch (locality SCHÖNLAUB 1), Carinthia, Austria.

Type reference and figure: SCHRAUT, G., 1996: p. 128–129, Pl. 10, Fig. 10; Text-Fig. 110.

Remarks: Holotypus monotypicus, number in publication: T23 S03142.

Current classification: ***Acratia rectiventralis* SCHRAUT, 1996.**

ZORN, I. (1998): Ostracoda aus dem Karpat (Unter-Miozän) des Korneuburger Beckens (Niederösterreich). – Beitr. Paläont., 23.

For this publication only the holo- and paratypes that are stored in the collection of the Geological Survey are documented. Further material is deposited at the Museum of Natural History in Vienna.

Callistocythere karpatiensis ZORN, 1998
(Pl. 2, Figs. 9–10)

Coll. no.: GBA 1997/003/0004/04.

Type: holotype, female right valve.

Type level: Miocene, Karpatian, Korneuburg beds.

Type locality: Teiritzberg, near Stetten, Lower Austria, Austria.

Type reference and figure: ZORN, I., 1998: p. 183, Pl. 2, Fig. 1.

Remarks: The following paratypes from the type locality are in the collection: 1 figured female left valve (coll. no. GBA 1997/0003/004/05: Pl. 2, Fig. 2; Pl. 14, Fig. 1), 1 female right and 1 female left valve and 2 fragments (coll. no. GBA 1997/0003/004/06).

Current classification: ***Callistocythere karpatiensis* ZORN, 1998.**

Heliocythere leobendorfensis ZORN, 1998
(Pl. 2, Figs. 11–12)

Coll. no.: GBA 1997/003/0011/18.

Type: holotype, carapace.

Type level: Miocene, Karpatian, Korneuburg Beds.

Type locality: Leobendorf, behind the school, Lower Austria, Austria.

Type reference and figure: ZORN, I. 1998: p. 201, Pl. 8, Figs. 7–8.

Remarks: The following paratypes from the type locality are in the collection: 1 figured right valve (coll. no. GBA 1997/003/0011/19: Pl. 8, Fig. 6; Pl. 18, Fig. 3), 1 left valve and 2 larval left valves (coll. no. GBA 1997/003/0011/20).

Current classification: ***Heliocythere leobendorfensis* ZORN, 1998.**

Cyamocytheridea gracilis ZORN, 1998

Type and type reference: paratypes, ZORN, I. 1998: p. 187.

Type level: Miocene, Karpatian, Korneuburg beds.

Coll. nos.:

GBA 1997/003/0011/10: 1 right valve (Leobendorf, behind the school).

GBA 1997/003/0013/02: 3 right and 2 left valves Korneuburg-1 borehole: 102,0–104,6 m).

Current classification: ***Cyamocytheridea gracilis* ZORN, 1998.**

Acknowledgements

Many thanks are due to Helga PRIEWALDER, Monika BRÜGGEMANN-LEDOLTER and Ilka WÜNSCHE (Geologische Bundesanstalt) for their help in terms of scanning and digital imaging of the original plates.

Index of Specific Names

Generic names according the author who introduced the type

(Sub-)species with holo- (H), neo- (N) or syntypes (S) in GBA-collection					Coll. no./remarks	Chronostratigraphy
Cernajsek (1971)	*Aurila*	*angulata angulata*	(Reuss, 1850)	N	2009/003/0001	Miocene, Badenian
	Aurila	*angulata teiritzbergensis*	Cernajsek, 1971	H	1997/003/0007/07	Miocene, Karpatian
	Aurila	*cicatricosa*	(Reuss, 1850)	N	2009/003/0002/1	Miocene, Badenian
	Aurila	*cinctella*	(Reuss, 1850)	N	2009/003/0003	Miocene, Badenian
	Aurila	*galeata*	(Reuss, 1850)	N	2009/003/0004	Miocene, Badenian
	Aurila	*haueri*	(Reuss, 1850)	N	2009/003/0005	Miocene, Badenian
	Aurila	*hispidula*	(Reuss, 1850)	N	specimen missing	Miocene, Sarmatian
	Aurila	*mehesi*	(Zalányi, 1913)	N	2009/003/0007	Miocene, Sarmatian
	Aurila	*notata*	(Reuss, 1850)	N	specimen missing	Miocene, Sarmatian
	Aurila	*punctata*	(Münster, 1830)	N	2009/003/0010/1	Miocene, Badenian
	Aurila	*similis*	(Reuss, 1850)	N	specimen missing	Miocene, Badenian
	Aurila	*trigonella*	(Reuss, 1850)	N	2009/003/0012	Miocene, Badenian
	Hemicytheria	*hungarica*	(Méhes, 1908)	N	specimen missing	Miocene, Pannonian
	Hemicytheria	*omphalodes omphalodes*	(Méhes, 1908)	N	2009/003/0016	Miocene, Sarmatian
	Hemicytheria	*omphalodes loerentheyi*	(Méhes, 1908)	N	2009/003/0017	Miocene, Pannonian
	Hemicytheria	*reniformis maior*	Cernajsek, 1971	H	2009/003/0019	Miocene, Sarmatian
	Hemicytheria	*reniformis reniformis*	(Reuss, 1850)	N	2009/003/0018	Miocene, Pannonian
	Procythereis	*deformis*	(Reuss, 1850)	N	2009/003/0022	Miocene, Badenian
	Procythereis	*sulcatopunctatus*	(Reuss, 1850)	N	2009/003/0023	Miocene, Badenian
Cernajsek (1974)	*Aurila*	*kollmanni*	Cernajsek, 1974	H	specimen missing	Miocene, Sarmatian
	Loxoconcha	*schmidi*	Cernajsek, 1974	H	specimen missing	Miocene, Sarmatian
	Bythocypris ?	*pappi*	Cernajsek, 1974	H	specimen missing	Miocene, Sarmatian
	Aurila	*hispidula*	(Reuss, 1850)	N	specimen missing	Miocene, Sarmatian
	Aurila	*mehesi*	(Zalányi, 1913)	N	specimen missing	Miocene, Sarmatian
	Aurila	*merita*	(Zalányi, 1913)	N	specimen missing	Miocene, Sarmatian
	Aurila	*notata*	(Reuss, 1850)	N	specimen missing	Miocene, Sarmatian
	Hemicytheria	*omphalodes omphalodes*	(Reuss, 1850)	N	specimen missing	Miocene, Sarmatian
Kayser (1900)	*Beyrichia*	*roemeri*	Kayser, 1890	S	1902/002/0005	Devonian
	Beyrichia	*roemeri*	Kayser, 1890	S	1902/002/0028	Devonian
Kollmann (1960b)	*Parabairdia*	*ploechingeri*	Kollmann, 1960	H	2008/133/0001	Triassic, Rhaetian
	Ptychobairdia	*kuepperi*	Kollmann, 1960	H	2008/133/0006	Triassic, Rhaetian
	Ptychobairdia	*kristanae*	Kollmann, 1960	H	2008/133/0010	Late Triassic
	Ptychobairdia	*medwenitschi*	Kollmann, 1960	H	2008/133/0011	Late Triassic
	Ptychobairdia	*oberhauseri*	Kollmann, 1960	H	2008/133/0017	Triassic, Rhaetian
Kollmann (1962)	*Cytherella*	*triestina*	Kollmann,1962	H	2008/134/0001	Eocene, Lutetian
	Cythereis ?	*pisinensis*	Kollmann, 1962	H	2008/135/0020	Eocene, Lutetian
	Trachyleberidea ?	*sikici*	Kollmann, 1962	H	2008/135/0024	Eocene, Lutetian
	Cytherella	*ventroinflata*	Kollmann, 1962	H	2008/135/0030	Eocene, Lutetian
	Cytherella	*praehumilis*	Kollmann, 1962	H	2008/135/0038	Eocene, Lutetian
	Cytherella	*unguiformis*	Kollmann, 1962	H	2008/135/0040	Eocene, Lutetian

(Sub-)species with holo- (H), neo- (N) or syntypes (S) in GBA-collection					Coll. no./remarks	Chronostratigraphy
Kollmann (1963)	*Bairdia*	*deformata*	Kollmann, 1963	H	2008/136/0001	Triassic, Rhaetian
	Urobairdia	*austriaca*	Kollmann, 1963	H	2008/136/0003	Triassic, Norian
	Urobairdia	*angusta*	Kollmann, 1963	H	2008/136/0004	Triassic, Norian
	Cryptobairdia	*hians*	Kollmann, 1963	H	2008/136/0005	Triassic, Rhaetian
	Lobobairdia	*salinaria*	Kollmann, 1963	H	2008/136/0007	Triassic, Rhaetian
	Anisobairdia	*cincta*	Kollmann, 1963	H	2008/136/0008	Triassic, Rhaetian
	Anisobairdia	*salisburgensis*	Kollmann, 1963	H	2008/136/0011	Jurassic, Liassic
	Nodobairdia	*mammilata*	Kollmann, 1963	H	2008/136/0012	Triassic, Ladinian
	Nodobairdia	*verrucosa*	Kollmann, 1963	H	2008/136/0016	Triassic, Carnian
	Mirabairdia	*pernodosa*	Kollmann, 1963	H	2008/136/0019	Triassic, Ladinian
	Ptychobairdia	*schaubergeri*	Kollmann, 1963	H	2008/136/0026	Jurassic, Liassic
	Dicerobairdia	*bicornuta*	Kollmann, 1963	H	2008/136/0028	Triassic, Rhaetian
	Dicerobairdia	*ladinica*	Kollmann, 1963	H	2008/136/0032	Triassic, Ladinian
	Dicerobairdia	*gruenbachensis*	Kollmann, 1963	H	2008/136/0033	Triassic, Carnian
	Dicerobairdia	*elegans*	Kollmann, 1963	H	2008/136/0036	Triassic, Carnian
	Bairdiolites	*semisculptus*	Kollmann, 1963	H	2008/136/0037	Triassic, Rhaetian
	Neobairdiolites	*placklesensis*	Kollmann, 1963	H	2008/136/0038	Triassic, Rhaetian
	Carinobairdia	*triassica*	Kollmann, 1963	H	2008/136/0039	Triassic, Rhaetian
	Carinobairdia	*umbonata*	Kollmann, 1963	H	2008/136/0042	Triassic, Rhaetian
	Carinobairdia	*alpina*	Kollmann, 1963	H	2008/136/0044	Triassic, Rhaetian
	Carinobairdia	*alta*	Kollmann, 1963	H	2008/136/0047	Triassic, Rhaetian
	Carinobairdia	*tenuicarinata*	Kollmann, 1963	H	2008/136/0049	Triassic, Rhaetian
	Medwenitschia	*ornata*	Kollmann, 1963	H	2008/136/0052	Triassic, Rhaetian
Kristan-T. (1991)	*Ptychobairdia*	*ruttneri*	Kristan-Tollmann, 1991	H	1985/005/0004	Triassic, Ladinian
	Polycope	*aghdarbandensis*	Kristan-Tollmann, 1991	H	1985/005/0011	Triassic, Ladinian
Procházka (1893)	*Cythere*	*fragilis*	Procházka, 1893	S	specimens missing	Miocene, Badenian
	Cythere	*obliquus*	Procházka, 1893	S	specimens missing	Miocene, Badenian
	Cythere	*vejhonensis*	Procházka, 1893	S	2008/171/0001-2	Miocene, Badenian
	Cythere	*moravica*	Procházka, 1893	S	specimens missing	Miocene, Badenian
	Cythere	*oviformis*	Procházka, 1893	S	2008/171/0003	Miocene, Badenian
	Cythere	*reussi*	Procházka, 1893	S	2008/171/0004-7	Miocene, Badenian
	Cythere	*blucinensis*	Procházka, 1893	S	2008/171/0008	Miocene, Badenian
Schraut (1996)	*Hollinella (Hollinella)*	*bulbolobata*	Schraut, 1996	H	1996/002/0020	Carboniferous, Visean
	Knoxiella ?	*bicornuta*	Schraut, 1996	H	1996/002/0079	Carboniferous, Visean
	Pseudobeyrichiopsis	*angustata*	Schraut, 1996	H	1996/002/0082	Carboniferous, Visean
	Pseudobeyrichiopsis	*longispinosa*	Schraut, 1996	H	1996/002/0085	Carboniferous, Visean
	Acratia	*dorsoangulata*	Schraut, 1996	H	1996/002/0102	Carboniferous, Visean
	Acratia	*rectiventralis*	Schraut, 1996	H	1996/002/0103	Carboniferous, Visean
Zorn (1998)	*Callistocythere*	*karpatiensis*	Zorn, 1998	H	1997/003/0004/04	Miocene, Karpatian
	Heliocythere	*leobendorfensis*	Zorn, 1998	H	1997/003/0011/18	Miocene, Karpatian

Table 1.
List of holo-, neo- and syntypes of ostracod species stored in the collection of the Geological Survey of Austria (paratypes are only mentioned in the text). Dark grey underlayed species are genotypes and light grey underlayed specimens are from an unpublished thesis. Names of species are in the spelling of the author who introduced the type specimens.

Plate 1

Unpublished holo- and neotypes from CERNAJSEK (1971). The original SEM photos were usually optically distorted compared to the dimensions of the specimens. They have been scanned and if possible only revised in quality.

Fig. 1: *Aurila angulata angulata* (REUSS, 1850).
"Neotype".
Coll. no.: GBA 2009/003/0001.

Fig. 2: *Aurila angulata teiritzbergensis* CERNAJSEK, 1971.
"Holotype".
Coll. no.: GBA 1997/003/0007/07.

Fig. 3: *Aurila cicatricosa* (REUSS, 1850).
"Neotype".
Coll. no.: GBA 2009/003/0002/01.

Fig. 4: *Aurila cinctella* (REUSS, 1850).
"Neotype".
Coll. no.: GBA 2009/003/0003.

Fig. 5: *Aurila haueri* (REUSS, 1850).
"Neotype".
Coll. no.: GBA 2009/003/0005.

Fig. 6: *Aurila galeata* (REUSS, 1850).
"Neotype".
Coll. no.: GBA 2009/003/0004.

Fig. 7: *Aurila trigonella* (REUSS, 1850).
"Neotype".
Coll. no.: GBA 2009/003/0012.

Fig. 8: *Aurila punctata* (MÜNSTER, 1830).
"Neotype".
Coll. no.: GBA 2009/003/0010/01.

Fig. 9: *Aurila similis* (REUSS, 1850).
"Neotype".
Specimen missing.

Fig. 10: *Aurila mehesi* (ZALÁNYI, 1913).
"Neotype".
Coll. no.: GBA 2009/003/0007.

Fig. 11: *Aurila notata* (REUSS, 1850).
"Neotype".
Specimen missing.

Fig. 12: *Aurila hispidula* (REUSS, 1850).
"Neotype".
Specimen missing.

Fig. 13: *Hemicytheria hungarica* (MÉHES, 1908).
"Neotype".
Specimen missing.

Fig. 14: *Hemicytheria omphalodes omphalodes* (REUSS, 1850).
"Neotype".
Coll. no.: GBA 2009/003/0016.

Fig. 15: *Hemicytheria omphalodes loerentheyi* (MÉHES, 1908).
"Neotype".
Coll. no.: GBA 2009/003/0017.

Fig. 16: *Hemicytheria reniformis maior* CERNAJSEK, 1971.
"Holotype".
Coll. no.: GBA 2009/003/0019.

Fig. 17: *Hemicytheria reniformis reniformis* (REUSS, 1850).
"Neotype".
Coll. no.: GBA 2009/003/0018.

Fig. 18: *Procythereis sulcatopunctatus* (REUSS, 1850).
"Neotype".
Coll. no.: GBA 2009/003/0023.

Fig. 19: *Procythereis deformis* (REUSS, 1850).
"Neotype".
Coll. no.: GBA 2009/003/0022.

Magnifications of all Figures = x 50.

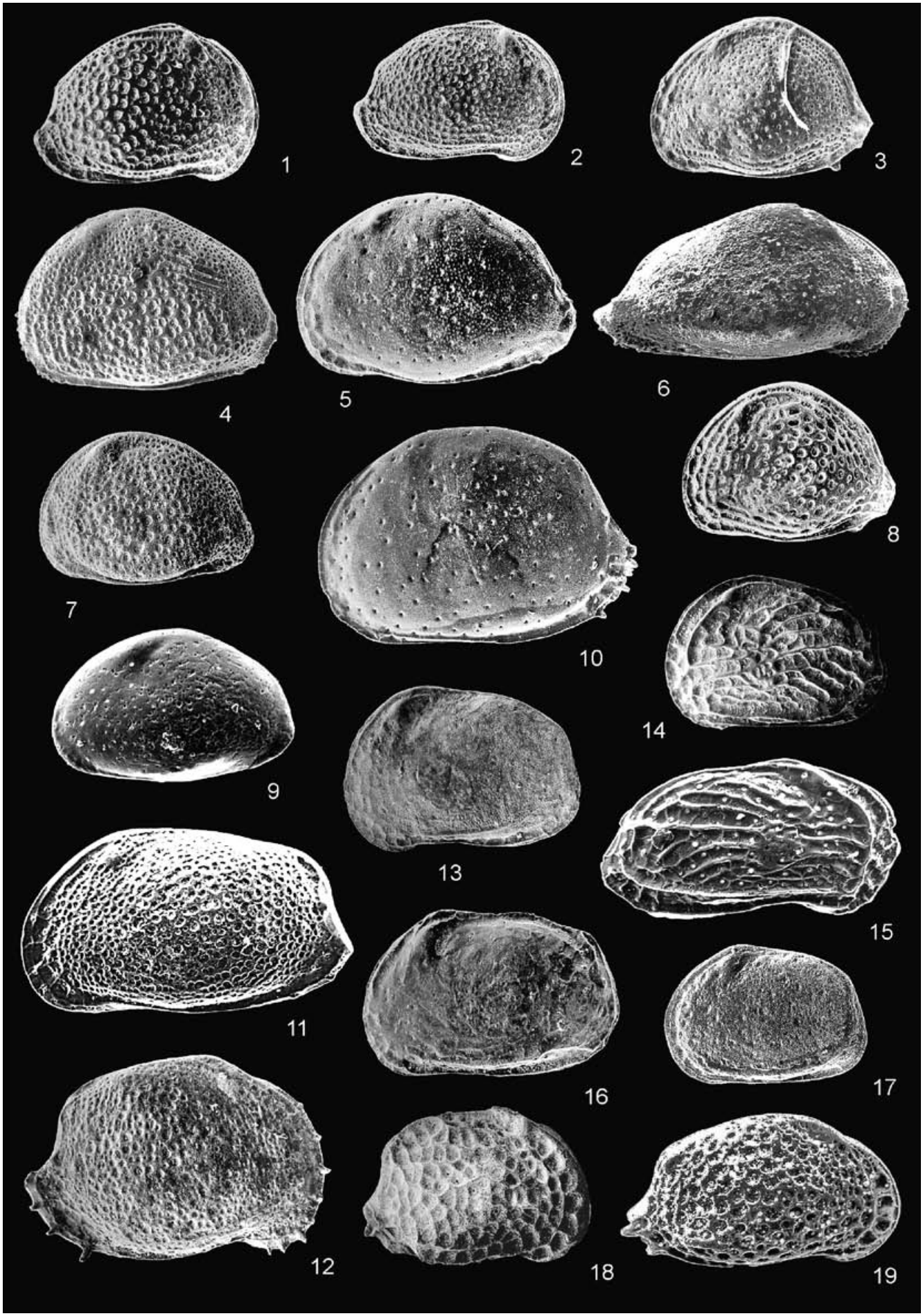

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19

Plate 2

Type specimens published in CERNAJSEK (1974) and ZORN (1998).

Fig. 1: *Aurila hispidula* (REUSS, 1850).
Neotype.
Specimen missing.

Fig. 2: *Aurila mehesi* (ZALÁNYI, 1913).
Neotype.
Specimen missing.

Fig. 3: *Aurila merita* (ZALÁNYI, 1913).
Neotype.
Specimen missing.

Fig. 4: *Aurila kollmanni* CERNAJSEK, 1974.
Holotype.
Specimen missing.

Fig. 5: *Aurila notata* (REUSS, 1850).
Neotype.
Specimen missing.

Fig. 6: *Hemicytheria omphalodes omphalodes* (REUSS, 1850).
Neotype.
Specimen missing.

Fig. 7: *Loxoconcha schmidi* CERNAJSEK, 1974.
Holotype.
Specimen missing.

Fig. 8: *Bythocypris pappi* CERNAJSEK, 1974.
Holotype.
Specimen missing.

Figs. 9–10: *Callistocythere karpatiensis* ZORN, 1998.
Fig. 9: Holotype.
Coll. no.: GBA 1997/003/0004/04.
Fig. 10: paratype, inner view.
Coll. no.: GBA 1997/003/0004/05.

Figs. 11–12: *Heliocythere leobendorfensis* ZORN, 1998.
Holotype.
Coll. no.: GBA 1997/003/0011/18.

Magnifications: Figs. 1–8: not given by original author, Figs. 9–10 = x 100, Figs. 11–12 = x 80.

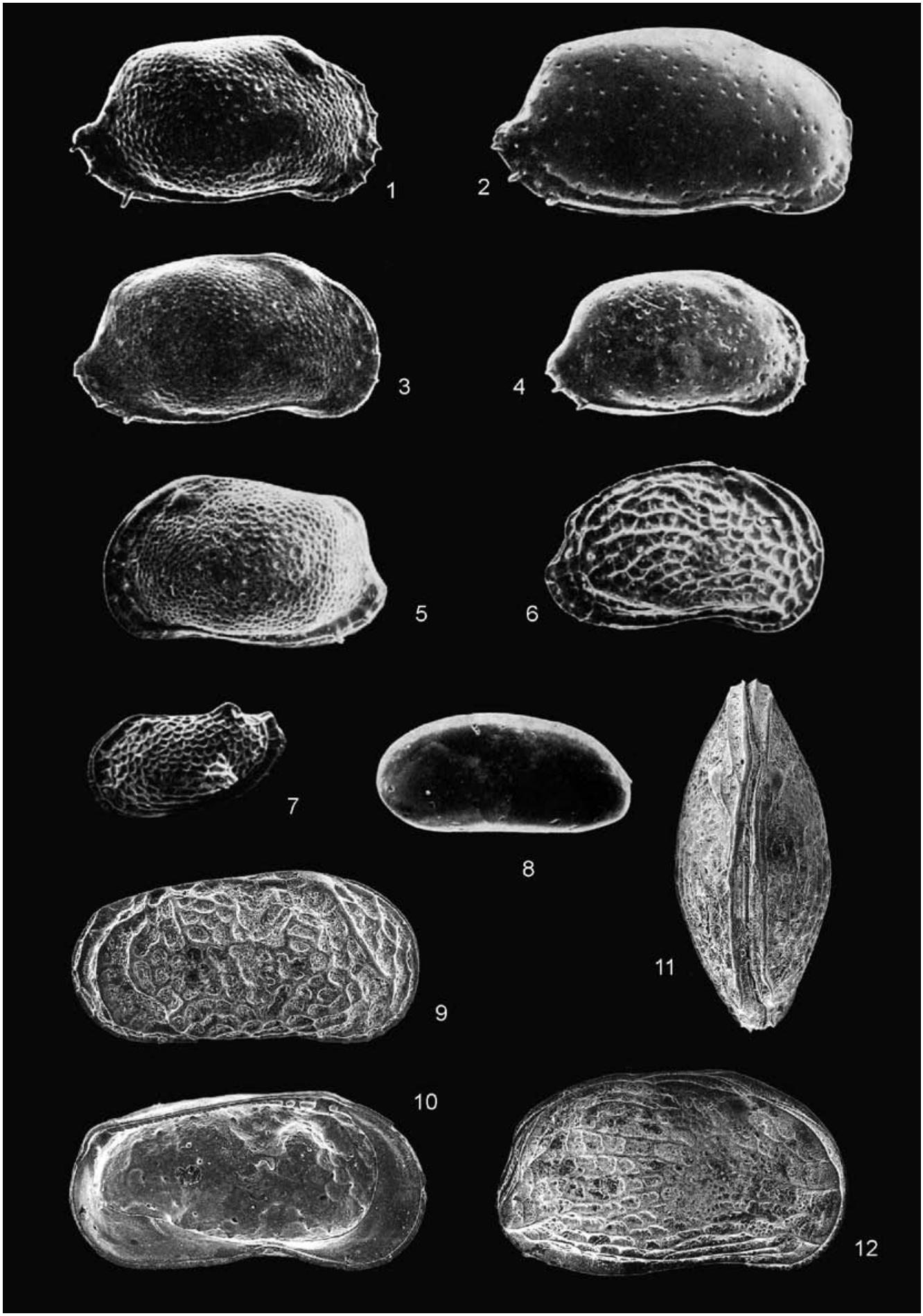

1
2
3
4
5
6
7
8
9
10
11
12

Plate 3

Figs. 1–3: *Cytherella triestina* KOLLMANN, 1962.
Holotype.
Coll. no.: GBA 2008/134/0001, 1: left side, 2: anterior view, 3: dorsal view.

Figs. 4–6: *Cythereis* ? *pisinensis* KOLLMANN, 1962.
Holotype.
Coll. no.: GBA 2008/135/0020, 4: right side, 5: dorsal view, 6: ventral view.

Figs. 7–9: *Trachyleberidea* ? *sikici* KOLLMANN, 1962.
Holotype.
Coll. no.: GBA 2008/135/0024, 7: right side, 8: dorsal view, 9: ventral view.

Figs. 10–12: *Cytherella ventroinflata* KOLLMANN, 1962.
Holotype.
Coll. no.: GBA 2008/135/0030, 10: lateral view, 11: anterior view, 12: dorsal view.

Figs. 13–14: *Cytherella praehumilis* KOLLMANN, 1962.
Holotype.
Coll. no.: GBA 2008/135/0038, 13: left side, 14: dorsal view.

Figs. 15–17: *Cytherella unguiformis* KOLLMANN, 1962.
Holotype.
Coll. no.: GBA 2008/135/0040, 15: left side, 16: dorsal view, 17: anterior view.

Figs. 18–20: *Cythere reussi* PROCHÁZKA, 1893.
Syntype.
Specimen missing.

Figs. 21–23: *Cythere blucinensis* PROCHÁZKA, 1893.
Syntype.
Coll. no.: GBA 2008/171/0008.

Figs. 24–26: *Cythere fragilis* PROCHÁZKA, 1893.
Syntype.
Specimen missing.

Figs. 27–29: *Cythere obliquus* PROCHÁZKA, 1893.
Syntype.
Specimen missing.

Figs. 30–32: *Cythere oviformis* PROCHÁZKA, 1893.
Syntype.
Coll. no.: GBA 2008/171/0003.

Figs. 33–35: *Cythere moravica* PROCHÁZKA, 1893.
Syntype.
Specimen missing.

Figs. 36–38: *Cythere vejhonensis* PROCHÁZKA, 1893.
Syntype.
Coll. no.: GBA 2008/171/0001.

Fig. 39: *Beyrichia roemeri* KAYSER, 1900.
Syntype.
Coll. no.: GBA 1900/002/0005.

Fig. 40: *Beyrichia roemeri* KAYSER, 1900.
Syntype.
Coll. no.: GBA 1900/002/0028.

Magnifications: Fig. 1–17 = x 50, Fig. 18–38 = x 24.

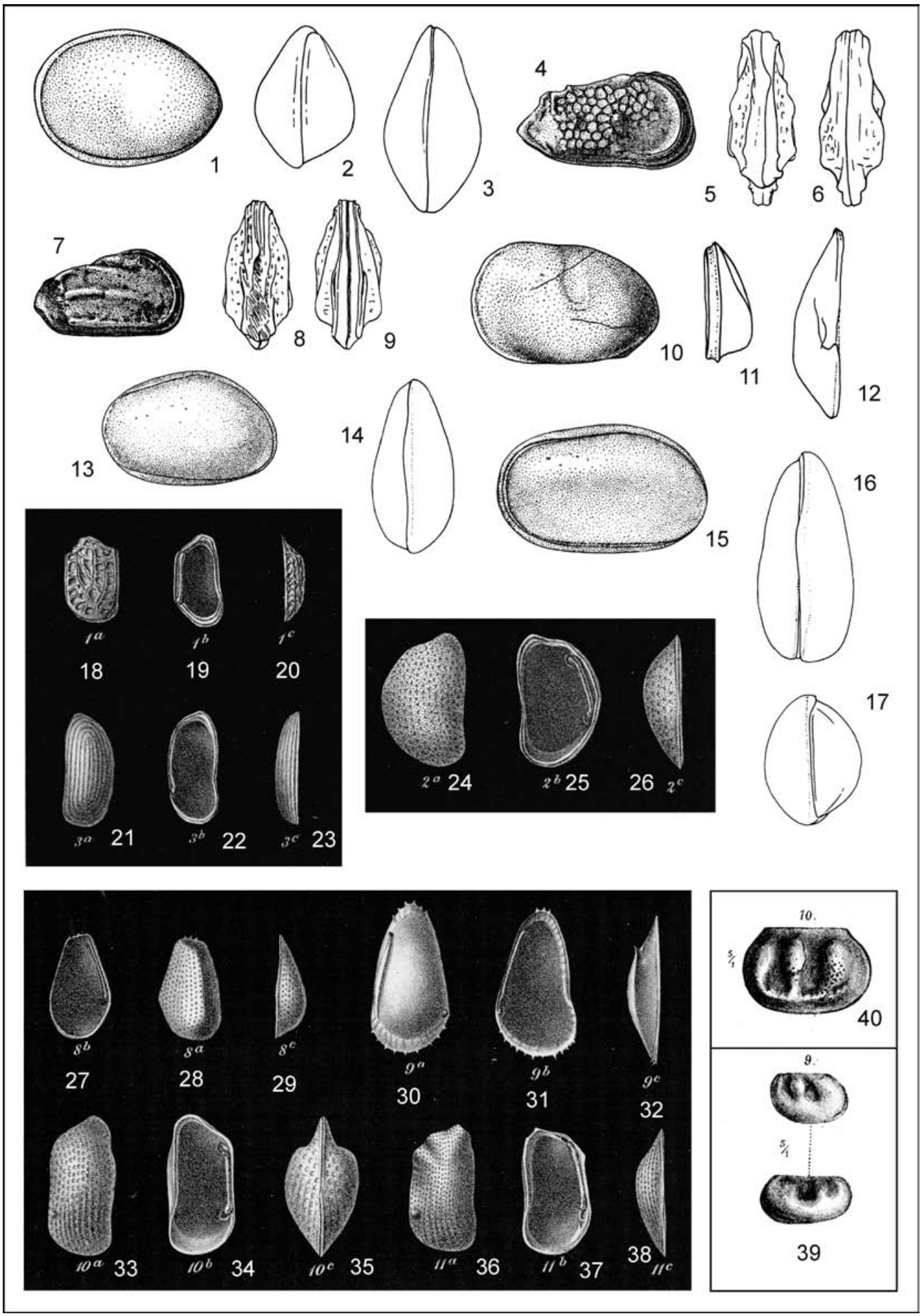

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
40
39

Plate 4

Figs. 1–3: *Parabairdia ploechingeri* KOLLMANN, 1960b.
Holotype.
Coll. no.: GBA 2008/133/0001.
Fig. 1: dorsal view.
Fig. 2: left side.
Fig. 3: right side.

Figs. 4–5: *Ptychobairdia kuepperi* KOLLMANN, 1960b.
Holotype.
Coll. no.: GBA 2008/133/0006.
Fig. 4: left side.
Fig. 5: anterior view.

Figs. 6–9: *Ptychobairdia kristanae* KOLLMANN, 1960b.
Holotype.
Coll. no.: GBA 2008/133/0010.
Fig. 6: left side.
Fig. 7: right side.
Fig. 8: dorsal view.
Fig. 9: anterior view.

Figs. 10–13: *Ptychobairdia medwenitschi* KOLLMANN, 1960b.
Holotype.
Coll. no.: GBA 2008/133/0011.
Fig. 10: left side.
Fig. 11: right side.
Fig. 12: dorsal view.
Fig. 13: anterior view.

Figs. 14–15: *Ptychobairdia oberhauseri* KOLLMANN, 1960b.
Holotype.
Coll. no.: GBA 2008/133/0017.
Fig. 14: left side.
Fig. 15: right side.

Magnification of all Figures = x 50.

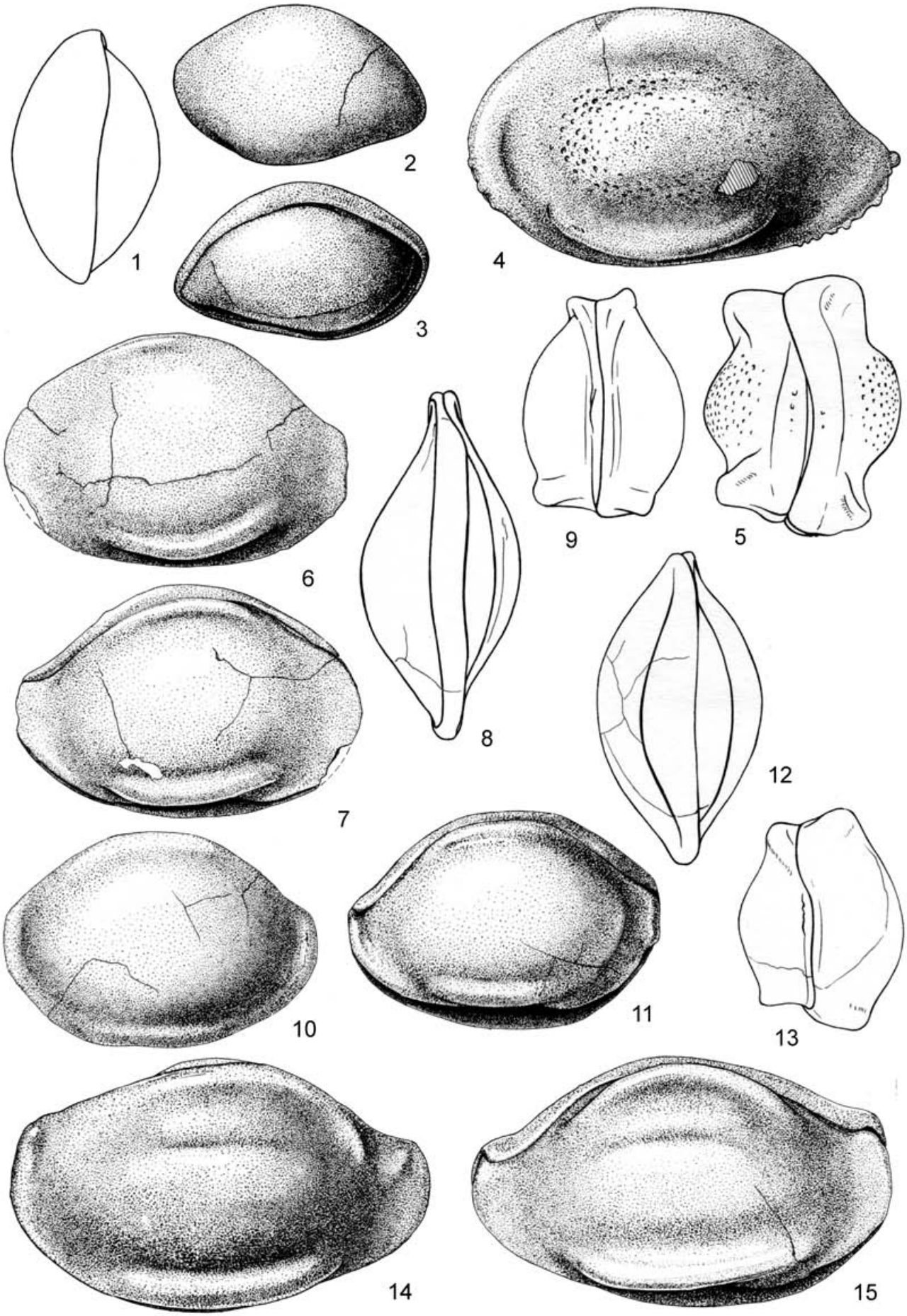

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15

Plate 5

Figs. 1, 3: *Ptychobairdia oberhauseri* KOLLMANN, 1960b.
Holotype.
Coll. no.: GBA 2008/133/0017.
Fig. 1: dorsal view.
Fig. 3: anterior view.

Figs. 2, 4–6: *Ptychobairdia schaubergeri* KOLLMANN, 1963.
Holotype.
Coll. no.: GBA 2008/136/0026.
Fig. 2: dorsal view.
Fig. 4: anterior view.
Fig. 5: left side.
Fig. 6: right side.

Figs. 7–9: *Dicerobairdia bicornuta* KOLLMANN, 1963.
Holotype.
Coll. no.: GBA 2008/136/0028.
Fig. 7: left valve from outside.
Fig. 8: left valve from inside.
Fig. 9: dorsal view.

Figs. 10–11: *Carinobairdia alpina* KOLLMANN, 1963.
Holotype.
Coll. no.: GBA 2008/136/0044.
Fig. 10: right valve.
Fig. 11: dorsal view.

Figs. 12–14: *Carinobairdia umbonata* KOLLMANN, 1963.
Holotype.
Coll. no.: GBA 2008/136/0042.
Fig. 12: left valve from outside.
Fig. 13: left valve from inside.
Fig. 14: dorsal view.

Figs. 15–16: *Carinobairdia triassica* KOLLMANN, 1963.
Holotype.
Coll. no.: GBA 2008/136/0039.
Fig. 15: left valve from outside.
Fig. 16: left valve from inside.

Magnifications: Figs. 1, 3, 5–16 = x 50 and Figs. 2, 4 = x 42.

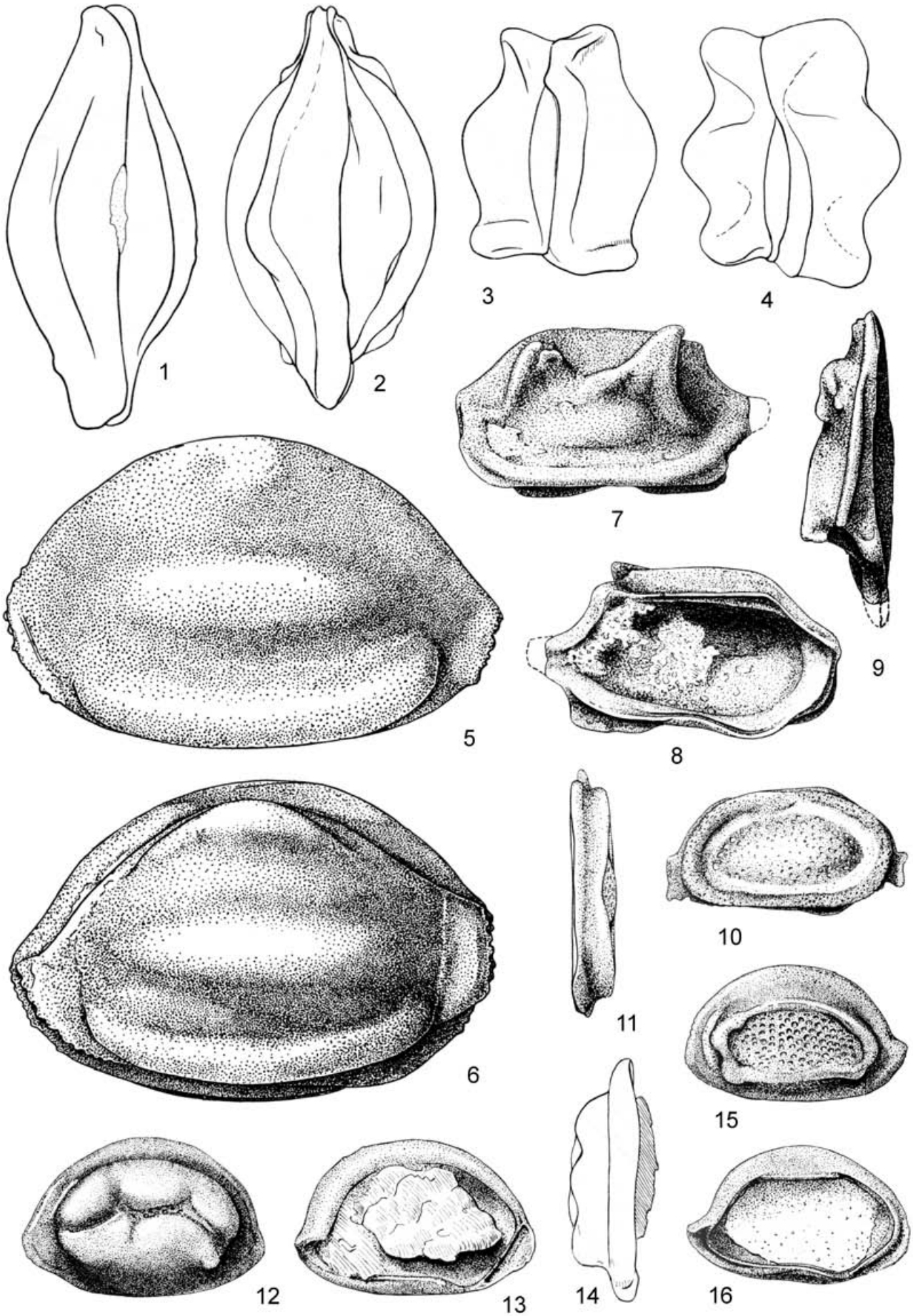

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16

Plate 6

Figs. 1–3: *Cryptobairdia hians* KOLLMANN, 1963.
Holotype.
Coll. no.: GBA 2008/136/0005.
Fig. 1: left side.
Fig. 2: right side.
Fig. 3: ventral view.

Figs. 4–5: *Anisobairdia salisburgensis* KOLLMANN, 1963.
Holotype.
Coll. no.: GBA 2008/136/0011.
Fig. 4: left valve from outside.
Fig. 5: left valve from inside.

Fig. 6: *Bairdia deformata* KOLLMANN, 1963.
Holotype.
Coll. no.: GBA 2008/136/0001.

Fig. 7: *Carinobairdia umbonata* KOLLMANN, 1963.
Holotype.
Coll. no.: GBA 2008/136/0042.

Figs. 8–11: *Anisobairdia cincta* KOLLMANN, 1963.
Holotype.
Coll. no.: GBA 2008/136/0008.
Fig. 8: dorsal view.
Fig. 9: ventral view.
Fig. 10: left side.
Fig. 11: right side.

Figs. 12–15: *Urobairdia angusta* KOLLMANN, 1963.
Holotype.
Coll. no.: GBA 2008/136/0004.
Fig. 12: left side.
Fig. 13: right side.
Fig. 14: dorsal view.
Fig. 15: ventral view.

Figs. 16–19: *Urobairdia austriaca* KOLLMANN, 1963.
Holotype.
Coll. no.: GBA 2008/136/0003.
Fig. 16: left side.
Fig. 17: anterior view.
Fig. 18: dorsal view.
Fig. 19: ventral view.

Magnification of all Figures = x 50.

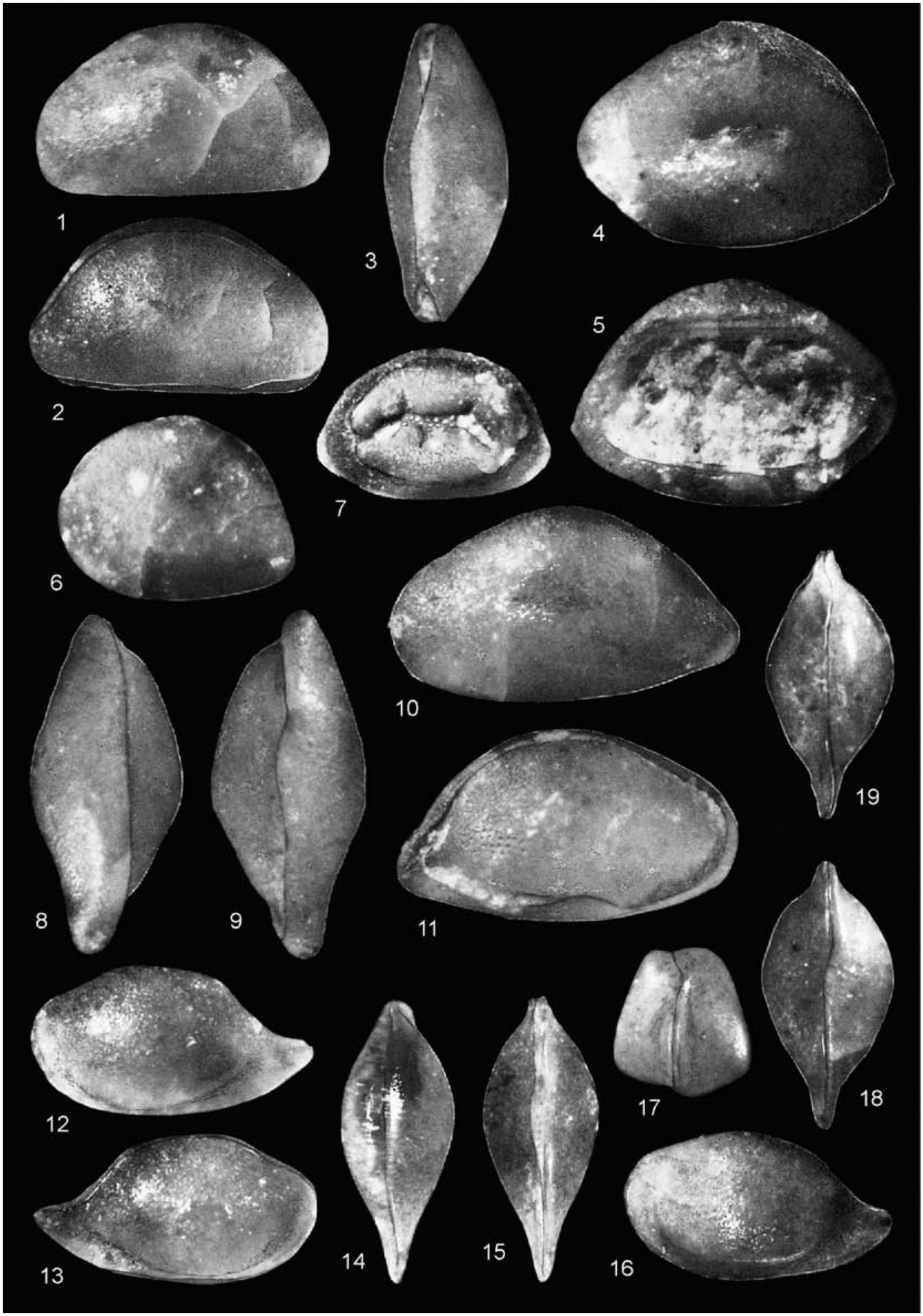

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19

Plate 7

Figs. 1–4: *Lobobairdia salinaria* KOLLMANN, 1963.
Holotype.
Coll. no.: GBA 2008/136/0007.
Fig. 1: right side.
Fig. 2: left side.
Fig. 3: dorsal view.
Fig. 4: ventral view.

Figs. 5–7: *Nodobairdia verrucosa*, KOLLMANN, 1963.
Holotype.
Coll. no.: GBA 2008/136/0016.
Fig. 5: dorsal view.
Fig. 6: left valve from outside.
Fig. 7: left valve from inside.

Figs. 8–11: *Nodobairdia mammilata* KOLLMANN, 1963.
Holotype.
Coll. no.: GBA 2008/136/0012.
Fig. 8: left side.
Fig. 9: right side.
Fig. 10: ventral view.
Fig. 11: dorsal view.

Fig. 12: *Mirabairdia pernodosa* KOLLMANN, 1963.
Holotype.
Coll. no.: GBA 2008/136/0019.

Fig. 13: *Dicerobairdia bicornuta* KOLLMANN, 1963.
Holotype.
Coll. no.: GBA 2008/136/0028.

Figs. 14–15: *Dicerobairdia elegans* KOLLMANN, 1963.
Holotype.
Coll. no.: GBA 2008/136/0036.
Fig. 14: left side.
Fig. 15: dorsal view.

Figs. 16–17: *Dicerobairdia gruenbachensis* KOLLMANN, 1963.
Holotype.
Coll. no.: GBA 2008/136/0033.
Fig. 16: left valve from outside.
Fig. 17: left valve from inside.

Fig. 18–20: *Dicerobairdia ladinica* KOLLMANN, 1963.
Holotype.
Coll. no.: GBA 2008/136/0032.
Fig. 18: dorsal view.
Fig. 19: left valve from outside.
Fig. 20: left valve from inside.

Figs. 21–25: *Neobairdiolites placklesensis* KOLLMANN, 1963.
Holotype.
Coll. no.: GBA 2008/136/0038.
Fig. 21: left side.
Fig. 22: right side.
Fig. 23: posterior view.
Fig. 24: dorsal view.
Fig. 25: ventral view.

Figs. 26–29: *Bairdiolites semisculptus* KOLLMANN, 1963.
Holotype.
Coll. no.: GBA 2008/136/0037.
Fig. 26: left side.
Fig. 27: right side.
Fig. 28: dorsal view.
Fig. 29: ventral view.

Magnification of all Figures = x 50.

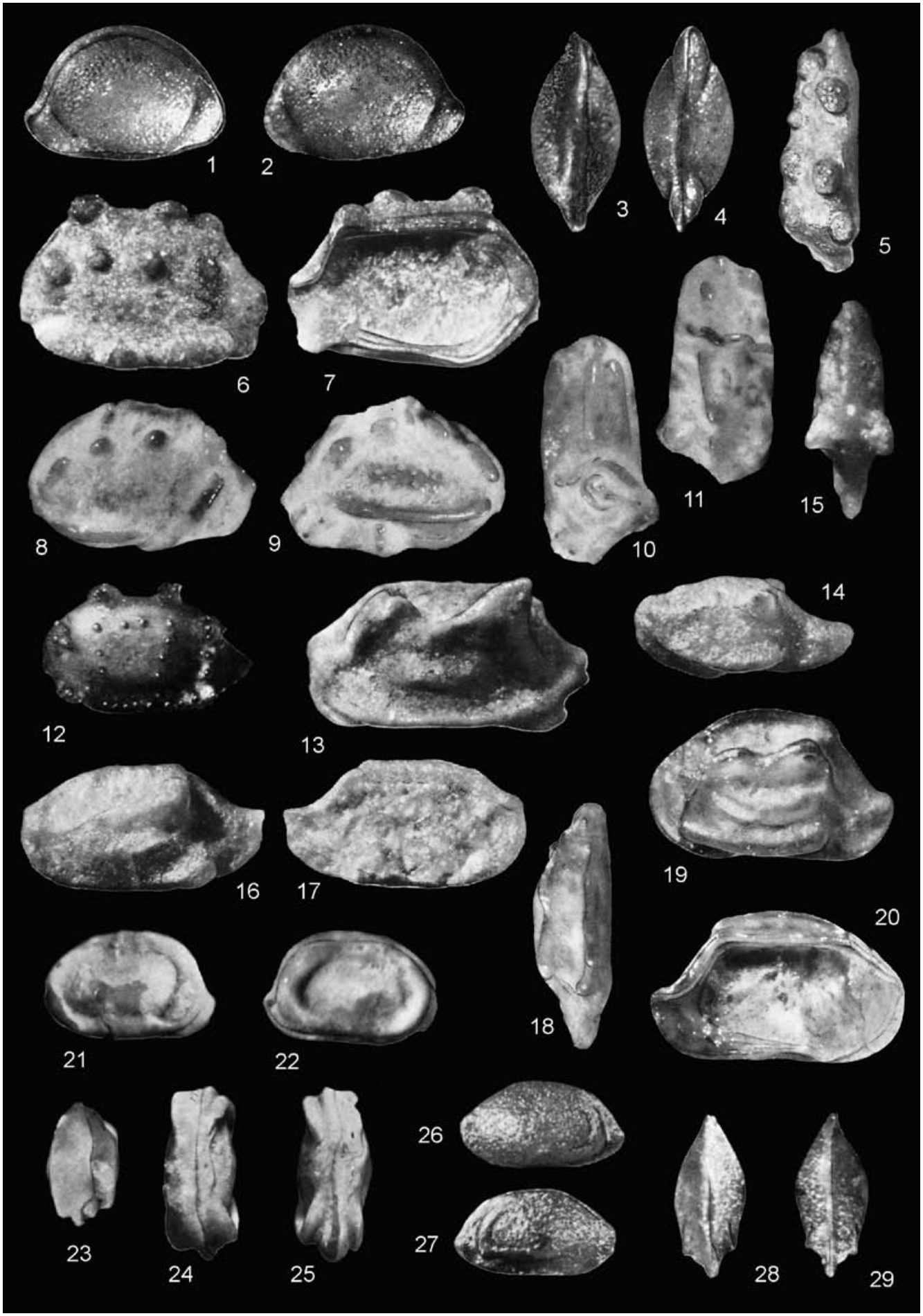

1
2
3
4
5
6
7
8
9
10
11
15
12
13
14
16
17
18
19
20
21
22
23
24
25
26
27
28
29

Plate 8

Figs. 1–4: *Medwenitschia ornata* KOLLMANN, 1963.
Holotype.
Coll. no.: GBA 2008/136/0052.
Fig. 1: left side.
Fig. 2: right side.
Fig. 3: dorsal view.
Fig. 4: ventral view.

Fig. 5: *Carinobairdia triassica* KOLLMANN, 1963.
Holotype.
Coll. no.: GBA 2008/136/0039.

Fig. 6: *Carinobairdia alta* KOLLMANN, 1963.
Holotype.
Coll. no.: GBA 2008/136/0047.

Figs. 7–8: *Carinobairdia tenuicarinata* KOLLMANN, 1963.
Holotype.
Coll. no.: GBA 2008/136/0049.
Fig. 7: left side.
Fig. 8: right side.

Fig. 9: *Polycope aghdarbandensis* KRISTAN-TOLLMANN, 1991.
Holotype.
Coll. no.: GBA 1985/005/0011.

Figs. 10–11: *Ptychobairdia ruttneri* KRISTAN-TOLLMANN, 1991.
Holotype.
Coll. no.: GBA 1985/005/0004.
Fig. 10: left side.
Fig. 11: right side.

Magnification of Figures 1–8 = x 50. Scale bars of Figures 10-11 not defined by original author.

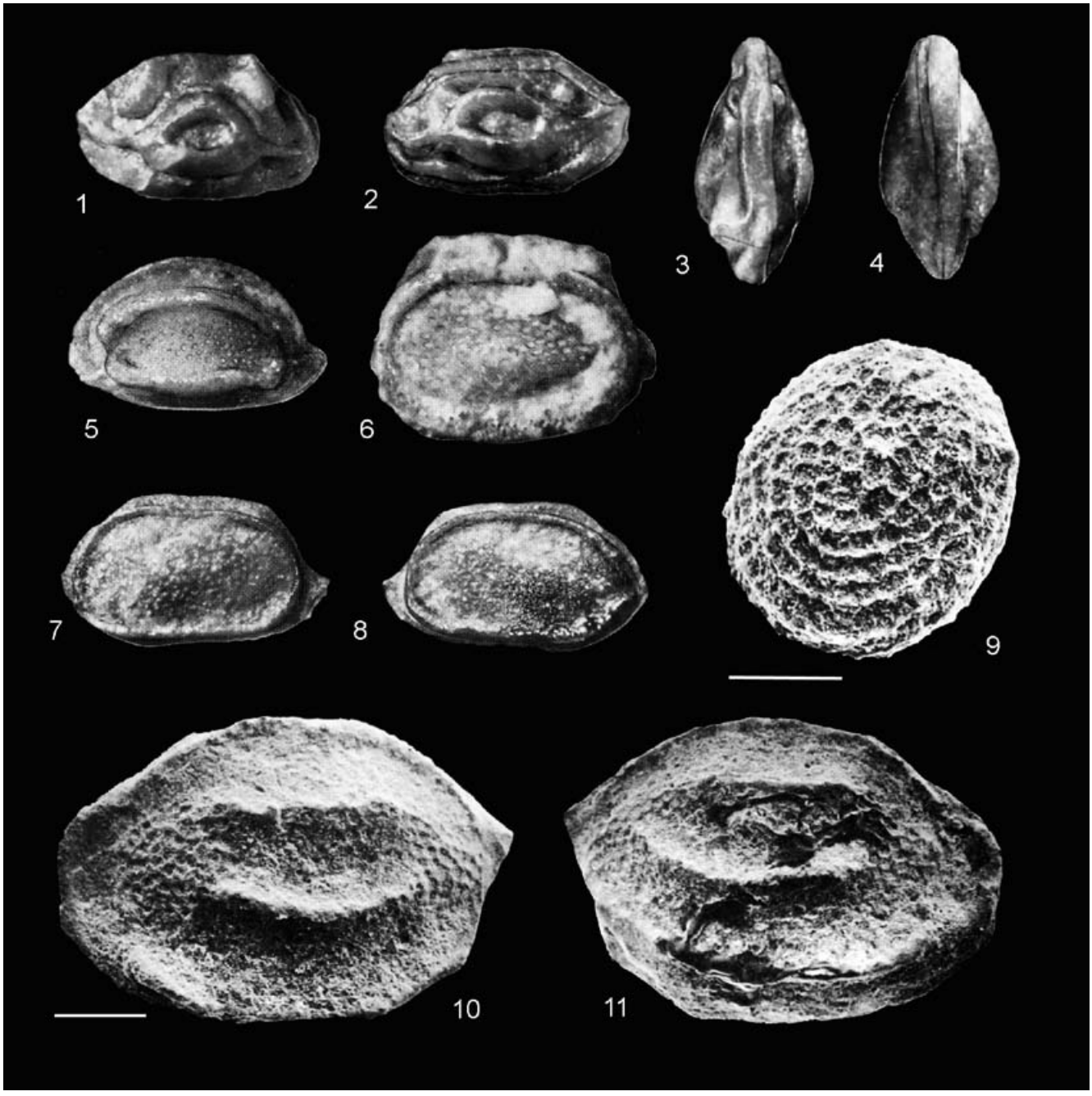

1
2
3
4
5
6
7
8
9
10
11

Plate 9

Figs. 1–2: *Hollinella (Hollinella) bulbolobata* SCHRAUT, 1996.
Holotype.
Coll. no.: GBA 1996/002/0020.

Figs. 3–4: *Knoxiella* ? *bicornuta* SCHRAUT, 1996.
Holotype.
Coll. no.: GBA 1996/002/0079.

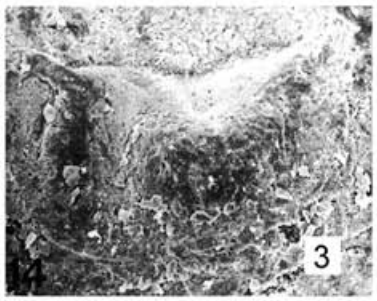
Figs. 5–6: *Pseudobeyrichiopsis angustata* SCHRAUT, 1996.
Holotype.
Coll. no.: GBA 1996/002/0082.

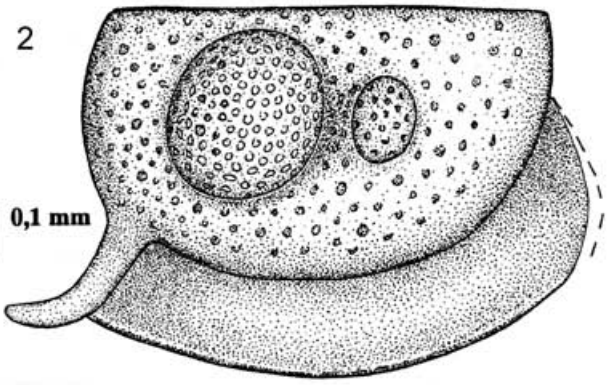
Figs. 7–8: *Pseudobeyrichiopsis longispinosa* SCHRAUT, 1996.
Holotype.
Coll. no.: GBA 1996/002/0085.

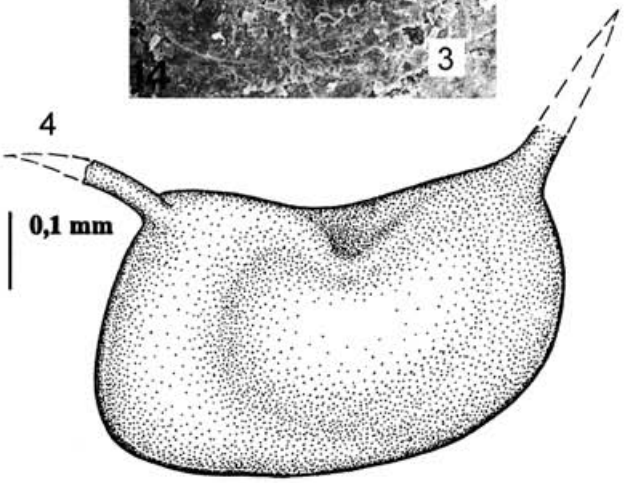
Figs. 9–10: *Acratia dorsoangulata* SCHRAUT, 1996.
Holotype.
Coll. no.: GBA 1996/002/0102.

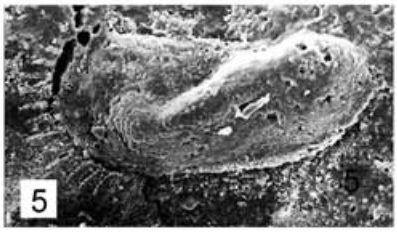
Figs. 11–12: *Acratia rectiventralis* SCHRAUT, 1996.
Holotype.
Coll. no.: GBA 1996/002/0103.

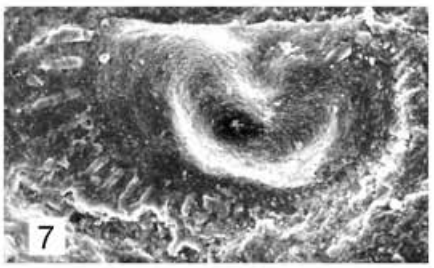

1

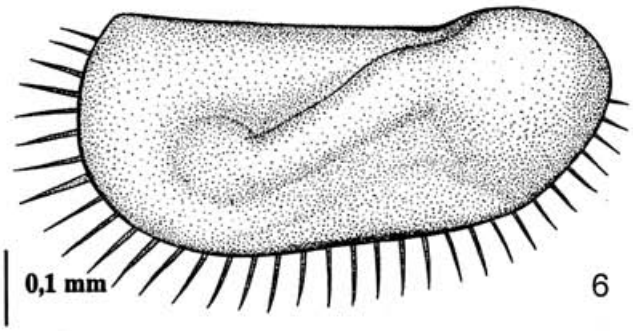

3

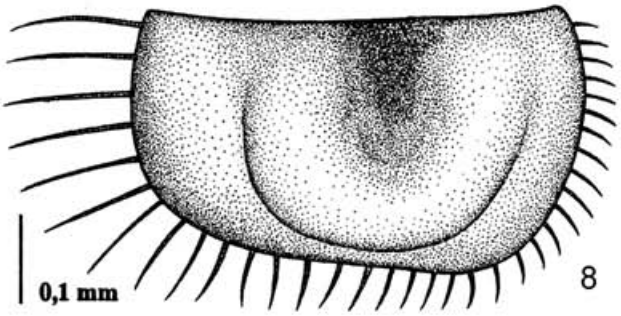

2
0,1 mm

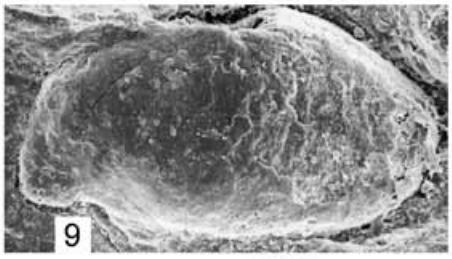

4
0,1 mm

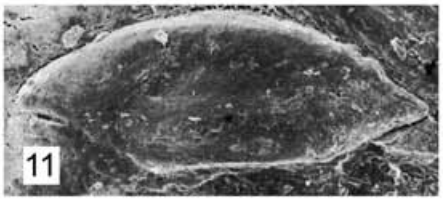

5

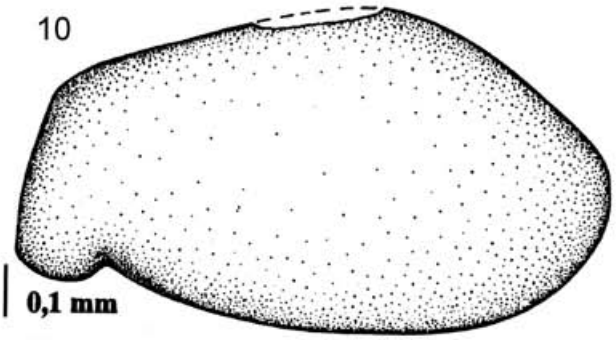

7

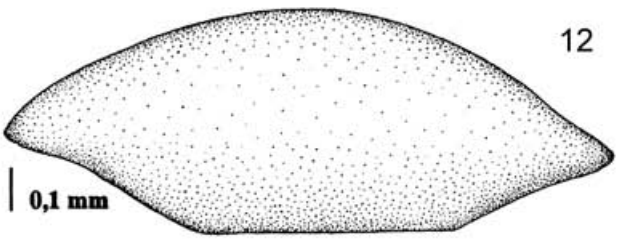

0,1 mm
6


0,1 mm
8


9


11


10
0,1 mm


12
0,1 mm

References

References with an asterisk (*) contain holo-, neo- or syntype descriptions of material stored at the Geological Survey of Austria.

Aiello, G. & Szczechura, J. (2004): Middle Miocene ostracods of the Fore-Carpathian Depression (Central Paratethys, southwestern Poland). – Boll. Soc. Paleont. Ital., **43** (1–2): 11–70, 16 Pls., Modena.

Bolz, H. (1969): Der "bairdoppilate" Verschluß und Skulptur-Unterschiede bei Bairdien (Ostrac.) der alpinen Obertrias. – Senkkenbergiana lethaea, **50** (5/6): 411–431, 1 Pl., 9 Figs., 4 Tabs., Frankfurt am Main.

Bolz, H. (1971): Die Zlambach-Schichten (alpine Obertrias) unter besonderer Berücksichtigung der Ostrakoden, 1: Ostrakoden der Zlambach-Schichten, besonders Bairdiidae. – Senckenbergiana lethaea, **52** (2/3): 129–283, 16 Pls., 34 Figs., Frankfurt am Main.

Bonaduce, G., Ruggieri, G. & Russo, A. (1986): The Genus *Tenedocythere* (Ostracoda, Podocopida) of the Mediterranean Miocene to Recent especially from Italy. – Boll. Soc. Paleont. Ital., **23** (1984) (3): 515–543, 10 Pls., 5 Figs., Modena.

Bonaduce, G., Ruggieri, G. & Russo, A. (1988): New Ostracode genera of the Mediterranean Miocene. – Boll. Soc. Paleont. Ital., **27** (3): 349–360, 4 Pls., Modena.

Brestenská, E. & Jiříček, R. (1978): Ostrakoden des Badenien der Zentralen Paratethys. – In: Brestenská, E. (Ed.), Chronostratigraphie und Neostratotypen, Miozän der zentralen Paratethys, vol. **6**, M4 Badenien (Moravien, Wielicien, Kosovien), 405–439, Tab. 16, 9 Pls., Bratislava (Veda Verlag Slowak. Akad. Wiss.).

* Cernajsek, T. (1971a): Die Entwicklung und Abgrenzung der Gattung *Aurila* Pokorny im Neogen Österreichs. – Unpubl. Thesis Univ. Wien, 198 pp., 2 Tabs., 18 Pls., 23 Diagr., Wien.

Cernajsek, T. (1971b): Die Entwicklung und Abgrenzung der Gattung *Aurila* Pokorny im Neogen Österreichs. – Verh. Geol. B.-A., **1971** (3): 571–575, Wien.

* Cernajsek, T. (1974): Die Ostracodenfaunen der Sarmatischen Schichten in Österreich. – In: Papp, A., Marinescu, F. & Seneš, J. (Eds.), Chronostratigraphie und Neostratotypen, Miozän der Zentralen Paratethys, vol. **4**, M5 Sarmatien, Die Sarmatische Schichtengruppe und ihr Stratotypus, 458–491, 3 Pls., Bratislava (Veda Verlag Slowak. Akad. Wiss.).

Crasquin-Soleau, S. & Gradinaru, E. (1996): Early Anisian ostracode fauna from the Tulcea Unit (Cimmerian north Dobrogean Orogen, Romania). – Ann. Paléont., **82** (2): 59–116, 15 Figs., 1 Tab., 9 Pls., Paris.

Crasquin-Soleau, S., Galfetti, T., Bucher, H. & Brayard, A. (2006): Palaeoecological changes after the end-Permian mass extinction: Early Triassic ostracods from northwestern Guangxi province, south China. – Riv. Ital. Paleont. Strat., **112** (1): 55–75, 4 Figs., 1 Tab., 4 Pls., Milano.

Czjžek, J. (1851): Fossilien bei Mauer. – Ber. Mitt. Freunde Naturwiss. Wien, **7** (3): p. 11, Wien.

Fuchs, T. & Karrer, F. (1875): Geologische Studien in den Tertiärbildungen des Wiener Beckens. XVIII. Aufschlüsse in den Schichten mit *Congeria spathulata* (Congerienstufe) und *Cardium plicatum* (sarmatische Stufe) am Westabhange des Eichkogels zwischen Mödling und Gumpoldskirchen. – Jb. k. k. Geol. Reichsanst., **25** (1): 1–62, 7 Profiles, Wien.

Gross, M. (2006): Mittelmiozäne Ostracoden aus dem Wiener Becken (Badenium/Sarmatium, Österreich). – Schriftenreihe Erdwiss. Komm. Österr. Akad. Wiss., Sonderbd. **1**: 224 pp., 6 Figs., 4 Tabs., 55 Pls., Wien.

* Gross-Uffenorde, H. (1982): Lower Devonian Beyrichiacea from the Siegerland and Sauerland area (Ostracoda, Rhenish Schiefergebirge). – Courier Forsch.-Inst. Senckenberg, **55**: 207–228, 2 Figs., 3 Pls., Frankfurt.

Jiříček, R. (1974): Biostratigraphische Bedeutung der Ostracoden des Sarmats s. str. – In: Papp, A., Marinescu, F. & Seneš, J. (Eds.), Chronostratigraphie und Neostratotypen, Miozän der Zentralen Paratethys, vol. **4**, M5 Sarmatien, Die Sarmatische Schichtengruppe und ihr Stratotypus: 434–457, 1 Tab., 4 Pls., Bratislava (Veda Verlag Slowak. Akad. Wiss.).

* Kayser, E. (1900): Devon-Fossilien vom Bosporus und von der Nordküste des Marmara-Meeres (Zwischen Pendik und Kartal). – Beitr. Paläont. Geol. Österr.-Ung. Orients, **12** (1899): 27–41, Pl. 1, Wien.

Kempf, E.K. (1986): Index and bibliography of marine Ostracoda, 2, Index B. – Sonderveröff. Geol. Inst. Univ. Köln, **51**: 712 pp., Köln.

Kempf, E.K. (1995): Index and bibliography of marine Ostracoda, 7, Index B, supplement 1. – Sonderveröff. Geol. Inst. Univ. Köln, **101**: 206 pp., Köln.

Kollmann, K. (1960a): 7. Zur Ostracodenfauna aus dem Grenzbereich zwischen Kalk- und Flyschfazies in der Aufschlußgruppe des Steinbruches Facconi. – Verh. Geol. B.-A., **1960** (2): 189–195, Pl. 7, Wien.

* Kollmann, K. (1960b): Ostracoden aus der alpinen Trias Österreichs. I. *Parabairdia* n.g. und *Ptychobairdia* n.g. (Bairdiidae). – Jb. Geol. B.-A., Sonderbd. **5**: 79–105, Pls. 22–27, 3 Figs., Wien.

* Kollmann, K. (1962): Ostracoden aus dem mitteleozänen "Flysch" des Beckens von Pazin (Istrien, Jugoslawien). – Verh. Geol. B.-A., **1962** (2): 187–227, 1 Tab., 6 Pls., Wien.

* Kollmann, K. (1963): Ostracoden aus der alpinen Trias. II. Weitere Bairdiidae. – Jb. Geol. B.-A., **106**: 121–203, 11 Pls., 3 Tabs., 8 Figs., Wien.

Kozur, H. (1971): Die Bairdiacea der Trias. Teil I: Skulpturierte Bairdiidae aus mitteltriassischen Flachwasserablagerungen. – Geol. Paläont. Mitt. Innsbruck, **1** (3): 1–27, 3 Pls., Innsbruck.

Kozur, H. (1973): Beiträge zur Stratigraphie und Paläontologie der Trias. – Geol. Paläont. Mitt. Innsbruck, **3**: 1–30, 1 Fig., 2 Tabs., 3 Pls., Innsbruck.

Kozur, H. (1985): Neue Ostracoden-Arten aus dem oberen Mittelkarbon (Höheres Moskovian), Mittel- und Oberperm des Bükk-Gebirges (N-Ungarn). – Geol. Paläont. Mitt. Innsbruck, Sonderbd. **2**: 1–145, 22 Pls., Innsbruck.

Kristan-Tollmann, E. (1969): Zur stratigraphischen Reichweite der Ptychobairdien und Anisobairdien (Ostracoda) in der alpinen Trias. – Geologica et Palaeontologica, **3**: 81–95, 4 Figs., 3 Pls., Marburg.

Kristan-Tollmann, E. (1970): Einige neue Bairdien (Ostracoda) aus der alpinen Trias. – N. Jb. Geol. Paläont. Abh., **135** (3): 268–310, Pls. 33–37, 5 Figs., Stuttgart.

Kristan-Tollmann, E. (1971): Weitere Beobachtungen an skulptierten Bairdiidae (Ostrac.) der alpinen Trias. – N. Jb. Geol. Paläont., Abh., **139** (1): 57–81, 5 Figs., Stuttgart.

Kristan-Tollmann, E. (1990a): Tethysweite Verbreitung triadischer und liassischer Ostracoden. – Geologica et Palaeontologica, **24**: 173–183, 2 Figs., 2 Pls., Marburg.

Kristan-Tollmann, E. (1990b): Pandemic ostracod communities in the Tethyan Triassic. – In: Whatley, R. & Maybury, C. (Eds.), Ostracoda and Global Events, Brit. Micropalaeont. Soc. Publ. Ser.: 541–544, London (Chapman and Hall).

* KRISTAN-TOLLMANN, E. (1991): Ostracods from the Middle Triassic Sina Formation (Aghdarband Group) in NE-Iran. – Abh. Geol. B.-A., **38**: 195–200, 1 Fig., 1 Pl., Wien.

KRISTAN-TOLLMANN, E., BARKHAM, S. & GRUBER, B. (1987): Pötschenschichten, Zlambachmergel (Hallstätter Obertrias) und Liasfleckenmergel in Zentraltimor, nebst ihren Faunenelementen. – Mitt. österr. geol. Ges., **80**: 229–285, 13 Figs., 5 Pls., Wien.

KRISTAN-TOLLMANN, E., TOLLMANN, A. & HAMEDANI, A. (1979): Beiträge zur Kenntnis der Trias von Persien. I. Revision der Triasgliederung, Rhätfazies im Raum von Isfahan und Kössener Fazieseinschlag bei Waliabad SE Abadeh. – Mitt. österr. geol. Ges., **70** (1977): 119–186, 17 Figs., 1 Tab., 5 Pls., Wien.

KRISTAN-TOLLMANN, E., TOLLMANN, A. & HAMEDANI, A. (1980): Beiträge zur Kenntnis der Trias von Persien. II. Zur Rhätfauna von Bagerabad bei Isfahan (Korallen, Ostracoden). – Mitt. österr. geol. Ges., **73** (1980): 163–25, 11 Figs., 13 Pls., Wien.

KUČEROVÁ, K. (1986): Bádenské a Sarmatské Ostrakódy íloviska v Rohožníku (Badenian and Sarmatian Ostracodes of the clay-pit in Rohoznik). – Reg. geol. Západnych Karpát, **21**: 113–115, Bratislava.

PROCHÁZKA, V.J. (1892): Příspěvek ku poznání Rázu Zvířeny Mořského Jílu a na něm uloženého pískovce Walbersdorfského v Uhrách (Ein Beitrag zur Kenntniss der Fauna des marinen Tegels und des diesen überlagernden Sandsteines von Walbersdorf). – Rozpravy České Akad. Císaře Františka Josefa Pro Vědy, Slovesnost a Uměni v Praze, ser. 2 (matematicko-Přírodnická), **1** (37): 729–750, 4 Tabs., Prag.

* PROCHÁZKA, V.J. (1893): Miocaen Židlochovický na Moravě a jeho zvířena (Das Miocaen von Seelowitz in Moravia und dessen Fauna). – Rozpravy České Akad. Císaře Františka Josefa Pro Vědy, Slovesnost a Uměni v Praze, ser. 2 (matematicko-Přírodnická), **2** (24): 1–90, 1 Tab., 3 Pls., Praha.

RUGGIERI, G. (1976): Contributo alla conoscenza del genere *Aurila* (Ostracoda, Podocopa) con particolare riguardo ai suoi rappresentanti nel Pleistocene italiano. – Boll. Soc. Paleont. Ital., **14** (1975) (1): 27–46, 15 Figs., 1 Pl., Modena.

* SCHRAUT, G. (1996): Die Arthropoden aus dem Unterkarbon von Nötsch (Kärnten/Österreich). – Abh. Geol. B.-A., **51**: 1–193, 138 Figs., 37 Tabs., 12 Pls., Wien.

SEPKOSKI, J.J. (2002): A compendium of fossil marine animal genera. – Bull. Amer. Paleont., **363**: 1–560, Ithaca, New York.

STUR, D. (1867): Beiträge zur Kenntnis der Flora, der Süßwasserquarze, der Congerien- und Cerithien-Schichten im Wiener und ungarischen Becken. – Jb. k. k. Geol. Reichsanst., **17**: 77-188, 2 Textfigs., Pls. 3-5, Wien.

TOULA, F. (1915): Eine Brunnenbohrung bis etwas über 100 m Tiefe in Mödling bei Wien. – Verh. Geol. B.-A., **1915** (10–11): 187–209, 6 Figs., Wien.

TRIEBEL, E. (1950): Homöomorphe Ostracoden-Gattungen. – Senckenbergiana, **31** (5/6): 313–330, 4 Pls., Frankfurt am Main.

URLICHS, M. in HILLEBRANDT, A. von, KRYSTYN, L. & KUERSCHNER, W.M. (2007): A candidate GSSP for the base of the Jurassic in the Northern Calcareous Alps (Kuhjoch section, Karwendel Mountains, Tyrol, Austria). – ISJS Newsl., **34** (1): 2–20, London.

URLICHS, M. (1973): Ostracoden aus den Kössener Schichten und ihre Abhängigkeit von der Ökologie. – Mitt. Ges. Geol. Bergbaustud., **21** (1972): 661–710, 8 Figs., 4 Pls., 1 Prof., Wien.

WHATLEY, R.C. & COLES, G.P. (1991): Global Change and the Biostratigraphy of North Atlantic Cainozoic deep water Ostracoda. – J. Micropalaeont., **9** (2): 119–132, 4 Figs., 4 Tabs., London.

ZELENKA, J. (1990): A review of the Sarmatian Ostracoda of the Vienna Basin. – In: WHATLEY, R. & MAYBURY, C. (Eds.), Ostracoda and Global Events, Brit. Micropalaeont. Soc. Publ. Ser.: 263–270, 2 Pls., London (Chapman and Hall).

ZORN, I. (1995): Preliminary report on the ostracodes from the Ottnangian (Early Miocene) of Upper Austria. – In: ŘÍHA, J. (Ed.), Ostracoda and Biostratigraphy, Proc. 12th Intern. Symp. Ostracoda, Prague 1994: 237–243, 4 Figs., Rotterdam (A.A. Balkema).

* ZORN, I. (1998): Ostracoda aus dem Karpat (Unter-Miozän) des Korneuburger Beckens (Niederösterreich). – In: SOVIS, W. & SCHMID, B. (Eds.), Das Karpat des Korneuburger Beckens, Teil 1, Beitr. Paläont., **23**: 175–271, 3 Tabs., 22 Pls., Wien.

ZORN, I. (1999): A history of the research on ostracodes from the Paleogene and Neogene of Austria (1839–1999). – In: LOBITZER, H. & GRECULA, P. (Eds.), Geologie ohne Grenzen, Festschrift 150 Jahre Geologische Bundesanstalt, Abh. Geol. B.-A., **56** (1): 185–198, 4 Figs., 1 Tab., Wien.

ZORN, I. (2003): Ostracods of the Karpatian. – In: BRZOBOHATÝ, R., CICHA, I., KOVÁC, M. & RÖGL, F. (Eds.), The Karpatian – A Lower Miocene Stage of the Central Paratethys: 229–242, 1 Fig., 2 Tabs., 3 Pls., Brno (Masaryk University).

Manuskript bei der Schriftleitung eingelangt am 2. März 2010