

Catalogue of the Triassic and Lower Jurassic Brachiopod Holotypes (excl. Bittner) in the Collections of the Geological Survey of Austria

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3 Plates

*Geological Survey of Austria
 Paleontological Collection
 Type Specimens
 Brachiopoda
 Eastern Alps
 Mesozoic*

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Katalog der triassischen und unterjurassischen Brachiopoden-Holotypen (exkl. Bittner) in den Sammlungen der Geologischen Bundesanstalt in Wien

Zusammenfassung

Diese Arbeit ergänzt den ersten Teil des Katalogs der triassischen und unterjurassischen Brachiopoden-Holotypen (SIBLÍK, 2010) und umfasst die zusätzlich zu den von Bittner im ersten Katalogteil beschriebenen 19 weiteren Holotypen. Sie werden in den Sammlungen der Geologischen Bundesanstalt in Wien aufbewahrt.

Abstract

This paper follows the first part of the catalogue of the Triassic and Lower Jurassic brachiopod holotypes (SIBLÍK, 2010) and offers the inventory of the 19 Triassic and Lower Jurassic brachiopod holotypes (excl. those of Bittner's authorship) currently deposited in the collections of the Geological Survey of Austria in Vienna.

Introduction

This paper is the second and final part of the catalogue of all Triassic and Lower Jurassic brachiopod holotypes deposited in the collections of the Geological Survey of Austria in Vienna. As in the first part where the holotypes of Bittner's authorship were dealt with (SIBLÍK, 2010), the holotypes in the present contribution are divided into Triassic or Lower Jurassic ones and then sorted by the year of publication and by inventory numbers. At the end of each item, the valid name is introduced in bold according to present knowledge. Finally, the holotypes previously held or reported by their authors as deposited in the collections

of the Geological Survey in Vienna but at present missing there, are mentioned.

In some newly described species the possibility exists that the species were established on the base of more than one specimen. According to the "Recommendation 73F" by ICZN (1999) it is recommended in such cases to proceed the way as in the case of the existence of syntypes, and to choose the lectotypes. It concerns the Lower Jurassic species *Terebratula Bersaskensis*, *T. Hinterhuberi*, *T. Dellegraziana*, *Rhynchonella Drenkovana* and *Rh. Sirinniae* (all by TIETZE, 1872), and *Terebratula semiplana* and *Rhynchonella pilulaeformis* (both by SCHMID, 1880).

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List of Type Specimens

Triassic

Discina Cellensis SUESS, 1854

(Pl. 1, Figs. 7, 7a)

Coll. no.: GBA 1854/006/0019.

Type level: Triassic, Rhaetian, Kössen Beds.

Type locality: Bürgeralpe near Mariazell, Styria, Austria.

Type figure: SUESS (1854): p. 63, Pl. 2, Fig. 18.

Remarks: Holotype by monotypy.

Discinisca cellensis (SUESS).

Spirigera Deslongchampsii SUESS, 1855

(Pl. 1, Fig. 3)

Coll. no.: GBA 1855/005/0002.

Type level: Upper Triassic, Norian, Hallstatt Limestone.

Type locality: Steinbergkogel near Hallstatt, Upper Austria, Austria.

Type figure: SUESS (1855): p. 26, Pl. 1, Fig. 3.

Remarks: Holotype by monotypy. It was refigured by SYKORA et al. (1998, Pl. 1, Fig. 2).

"Spirigera" deslongchampsii Suess.

Terebratula Schloenbachii LAUBE, 1866

(Pl. 1, Fig. 5)

Coll. no.: GBA 1866/005/0003/1.

Type level: Triassic, Cassian Beds.

Type locality: St. Cassian, Italy.

Type figure: LAUBE (1866): p. 5, Pl. 11, Fig. 3.

Remarks: Holotype by monotypy.

"Spirigera" schloenbachi (LAUBE).

Retzia Arara LAUBE, 1866

(Pl. 1, Fig. 6)

Coll. no.: GBA 1866/005/0022.

Type level: Triassic, Cassian Beds.

Type locality: St. Cassian, Italy.

Type figure: LAUBE (1866): p. 21, Pl. 13, Fig. 2.

Remarks: Holotype by monotypy. In the box with the figured original specimen, another specimen most probably from Laube signed as *Retzia* aff. *arara* is deposited. Generic attribution by DAGYS (1974).

Hungarispira arara (LAUBE).

Rhynchonella Edhemi n. sp. var. *plicata* TOULA, 1896

(Pl. 2, Fig. 2)

Coll. no.: GBA 1896/002/0003/1.

Type level: Triassic, Anisian, Bithynian.

Type locality: Between Kazmali and Malumkiöi, east of Gebze near Izmîd, Turkey.

Type figure: TOULA (1896): p. 159, Pl. 18, Fig. 11.

Remarks: Holotype by monotypy. Most probably variant only of *Rhynchonella edhemi*, which was arranged within *Holcorhynchella* by DAGYS (1974) and SULSER (1993).

Holcorhynchella edhemi plicata (TOULA).

Spiriferina (Mentzelia) Mentzelii DUNKER var. *propontica* TOULA, 1896

(Pl. 2, Fig. 1)

Coll. no.: GBA 1896/002/0004.

Type level: Triassic, Anisian, Bithynian.

Type locality: Between Kazmali and Malumkiöi, E of Gebze near Izmîd, Turkey.

Type figure: TOULA (1896): p. 159, Pl. 18, Fig. 7.

Remarks: Holotype by monotypy. In the box another smaller specimen is placed, both are indicated as syntypes. However, according to TOULA (1896) only one specimen was at disposal for description.

Mentzelia propontica TOULA.

Retzia Bittneri TOULA, 1913

(Pl. 2, Fig. 3)

Coll. no.: GBA 1913/002/0025.

Type level: Triassic, Cordevolian (according to PLÖCHINGER & PREY, 1974).

Type locality: "Jägerhaus" (forester's house) in the valley called Rauchstall(brunn)graben near Baden, Lower Austria, Austria.

Type figure: TOULA (1913): p. 94, Pl. 5, Fig. 20.

Remarks: Holotype by monotypy. Most probably identical with *Hungarispira procerrima* (KLIPSTEIN, 1843). Generic attribution by DAGYS (1974).

Hungarispira bittneri (TOULA).

Austriellula fuchsi SIBLÍK, 1975

(Pl. 3, Fig. 6)

Coll. no.: GBA 1975/003/0013.

Type level: Triassic, Anisian–Carnian (?).

Type locality: Ghyallong Rauna Lekh, Nepal.

Type figure: SIBLÍK (1975): p. 150, Pl. 19, Fig. 4.

Remarks: Holotype.

Austriellula fuchsi SIBLÍK.

Costirhynchopsis ruttneri SIBLÍK, 1991

(Pl. 3, Fig. 1)

Coll. no.: GBA 1982/008/0003/1.

Type level: Triassic, Nazarkardeh Formation, Anisian, Bithynian.

Type locality: Aghdarband, Iran.

Type figure: SIBLÍK (1991): p. 166, Pl. 1, Fig. 5.

Remarks: Holotype.

Costirhynchopsis ruttneri SIBLÍK.

Tethyspira persis SIBLÍK, 1991

(Pl. 3, Fig. 2)

Coll. no.: GBA 1982/008/0004.

Type level: Triassic, Sina Formation, Ladinian, Langobardian.

Type locality: Aghdarband, Iran.
 Type figure: SIBLÍK (1991): p. 168, Pl. 1, Fig. 1.
 Remarks: Genoholotype.
Tethyspira persis SIBLÍK.

***Dareithyris vulgaris* SIBLÍK, 1991**
 (Pl. 3, Fig. 3)

Coll. no.: GBA 1982/008/0010/1.
 Type level: Triassic, Nazarkardeh Formation, Anisian, Bithynian.
 Type locality: Aghdarband, Iran.
 Type figure: SIBLÍK (1991): p. 171, Pl. 1, Fig. 9.
 Remarks: Genoholotype.
Dareithyris vulgaris SIBLÍK.

***Rhaetina tirolensis* SIBLÍK, 1999**
 (Pl. 3, Fig. 5)

Coll. no.: GBA 1999/002/0005/1.
 Type level: Upper Triassic, Carnian.
 Type locality: Gaisberg near Kirchberg in Tirol, Austria.
 Type figure: SIBLÍK (1999a): p. 118, Pl. 1, Fig. 6.
 Remarks: Holotype.
Rhaetina tirolensis SIBLÍK.

Lower Jurassic

***Rhynchonella banatica* TIETZE, 1872**
 (Pl. 1, Fig. 4)

Coll. no.: GBA 1872/002/0071.
 Type level: Lower Jurassic, red brachiopod limestone.
 Type locality: Muntjana near Bersaska, Banat, Romania.
 Type figure: TIETZE (1872): p. 131, Pl. 7, Fig. 10.
 Remarks: Holotype by monotypy.
 “*Rhynchonella*” *banatica* TIETZE.

***Terebratula crassa* NEUMAYR, 1879**
 (Pl. 2, Fig. 6)

Coll. no.: GBA 1879/003/0001.
 Type level: Lower Jurassic, Hettangian, Kendlbach Formation.
 Type locality: Breitenberg south of lake Wolfgangsee, Salzburg, Austria.
 Type figure: NEUMAYR (1879): p. 12, Pl. 1, Fig. 10.
 Remarks: Holotype by monotypy. NEUMAYR (1879) named his new terebratulid species “*crassa*” even though he knew that the Cenomanian *Terebratula crassa* D’ARCHIAC, 1847 already existed, arguing that the specific name had not been in use for a long time. Nevertheless, *Terebratula crassa* NEUMAYR is the junior homonym and should be thus substituted by *nomen novum*. Later on, Cenomanian *Terebratula crassa* D’ARCHIAC, 1847 became a type species of a new genus *Harmatosia* COOPER (1983, p. 196).
 “*Terebratula*” *crassa* NEUMAYR.

***Waldheimia hierlatzica* OPP. var. *plicata* GEYER, 1889**
 (Pl. 1, Fig. 1)

Coll. no.: GBA 1889/001/0022.
 Type level: Lower Jurassic, Sinemurian, Hierlatz Limestone.
 Type locality: Hierlatz near Hallstatt, Upper Austria, Austria.
 Type figure: GEYER (1889): p. 27, Pl. 3, Fig. 30.
 Remarks: Holotype by monotypy. BAEZA-CARRATALÁ & TENT-MANCLÚS (2004) recorded this taxon as *Securina plicata* (GEYER).
Securina hierlatzica plicata (GEYER).

***Rhynchonella Cartieri* OPP. var. *rimata* GEYER, 1889**
 (Pl. 1, Fig. 2)

Coll. no.: GBA 1889/001/0047.
 Type level: Lower Jurassic, Sinemurian, Hierlatz Limestone.
 Type locality: Hierlatz near Hallstatt, Upper Austria, Austria.
 Type figure: GEYER (1889): p. 64, Pl. 7, Fig. 15.
 Remarks: Holotype by monotypy.
Cuneirhynchia cartieri rimata (GEYER).

***Terebratula* (?) *Grossaviensis* TRAUTH, 1909**
 (Pl. 2, Fig. 4)

Coll. no.: GBA 1909/001/0017.
 Type level: Lower Jurassic, Gresten Beds.
 Type locality: Grossau, Krenkogel, Lower Austria, Austria.
 Type figure: TRAUTH (1909): p. 70, Pl. 2, Fig. 7.
 Remarks: Holotype by monotypy.
 “*Terebratula*” *grossaviensis* TRAUTH.

***Waldheimia (Zeilleria) opima* TRAUTH, 1909**
 (Pl. 2, Fig. 5)

Coll. no.: GBA 1909/001/0021.
 Type level: Lower Jurassic, Gresten Beds.
 Type locality: Gresten, Lower Austria, Austria.
 Type figure: TRAUTH (1909): p. 75, Pl. 2, Fig. 8.
 Remarks: Holotype by monotypy.
Zeilleria opima TRAUTH.

***Tetrarhynchia inopinata* SIBLÍK, 1999**
 (Pl. 3, Fig. 4)

Coll. no.: GBA 1999/017/0003.
 Type level: Lower Jurassic, Hettangian, Kendlbach Formation.
 Type locality: Hochleitengraben near Gaissau, Salzburg, Austria.
 Type figure: SIBLÍK (1999b): p. 425, Pl. 1, Fig. 3.
 Remarks: Holotype.
Tetrarhynchia inopinata SIBLÍK.

Holotypes Previously Held or Reported by the Authors as Deposited in the Collection of the Geological Survey, but now Missing:

Triassic

***Discina Suessi* GÜMBEL, 1861**

Type level: Upper Triassic, Kössen Beds.
 Type locality: Schobergraben near Adnet, Salzburg, Austria.
 Type figure: *Discina* sp. in SUESS (1854): p. 63, Pl. 4, Fig. 24.
 Remarks: Holotype by monotypy.
Discinisca suessi (GÜMBEL).

Lower Jurassic

***Terebratula brachyrhyncha* SCHMID, 1880**

Type level: Lower Jurassic.
 Type locality: Vinica Mt. (Vinicaberg), SE of Karlovac (Karlstadt), Croatia.
 Type figure: SCHMID (1880): p. 726, Pl. 11, Fig. 8.
 Remarks: Holotype by monotypy.
"Terebratula" brachyrhyncha SCHMID.

***Rhynchonella Sapetzai* SCHMID, 1880**

Type level: Lower Jurassic.
 Type locality: Vinica Mt. (Vinicaberg), SE of Karlovac (Karlstadt), Croatia.
 Type figure: SCHMID (1880): p. 727, Pl. 11, Fig. 9.
 Remarks: Holotype by monotypy.
"Rhynchonella" sapetzai SCHMID.

***Rhynchonella unguulaeformis* SCHMID, 1880**

Type level: Lower Jurassic.
 Type locality: Vinica Mt. (Vinicaberg), SE of Karlovac (Karlstadt), Croatia.

Type figure: SCHMID (1880): p. 727, Pl. 11, Fig. 10.
 Remarks: Holotype by monotypy.
"Rhynchonella" unguulaeformis SCHMID.

***Spiriferina aequiglobata* UHLIG, 1900**

Type level: Lower Jurassic, upper part of the Lower Liasic.
 Type locality: Valesacca near Kimpolung, Bukowina, Romania.
 Type figure: UHLIG (1900): p. 31, Pl. 1, Fig. 8.
 Remarks: Holotype by monotypy. The specimen is missing, only the box with label exists.
Liospiriferina aequiglobata (UHLIG).

***Rhynchonella subcostellata* GEMM. var. *alpina* HAAS, 1912**

Type level: Lower Jurassic, Upper Pliensbachian (Dome-rian).
 Type locality: Ballino, Trentino, Italy.
 Type figure: HAAS (1912): p. 247, Pl. 19, Fig. 21.
 Remarks: Holotype by monotypy.
"Rhynchonella" subcostellata alpina HAAS.

***Terebratula (Pygope)? rheumatica* CAN. var. *decipiens* HAAS, 1912**

Type level: Lower Jurassic, Upper Pliensbachian (Dome-rian).
 Type locality: Ballino, Trentino, Italy.
 Type figure: HAAS (1912): p. 262, Pl. 19, Fig. 28.
 Remarks: Holotype by monotypy. *Terebratula rheumatica* CANAVARI was attributed to *Phymatothyris* by MANCENÍDO (1993 etc.).
Phymatothyris rheumatica decipiens (HAAS).

Index of Specific Names

aequilobata
crassa
banatica
bittneri
brachyrhyncha
cartieri plicata
cellensis
crassa
deslongchampsii
edhemi plicata
fuchsi
grossaviensis
hierlatzica plicata

inopinata
opima
persis
propontica
rheumatica decipiens
ruttneri
sapetzai
schloenbachi
subcostellata alpina
suessi
tirolensis
ungulaeformis
vulgaris

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Plate 1

- Fig. 1abc: *Securina hierlatzica plicata* (GEYER).
GBA 1889/001/0022.
2 x.
- Fig. 2abc: *Cuneirhynchia cartieri rimata* (GEYER).
GBA 1889/001/0047.
3 x.
- Fig. 3abc: "*Spirigera*" *deslongchampsii* SUESS.
GBA 1855/005/0002.
1.5 x.
- Fig. 4abc: "*Rhynchonella*" *banatica* TIETZE.
GBA 1872/002/0071.
2 x.
- Fig. 5abc: "*Spirigera*" *schloenbachi* (LAUBE).
GBA 1866/005/0003/1.
4 x.
- Fig. 6abc: *Hungarispira arara* (LAUBE).
GBA 1866/005/0022.
4 x.
- Fig. 7: Sample with *Discinisca cellensis* (SUESS).
GBA 1854/006/0019.
1 x.
- Fig. 7a: *Discinisca cellensis* (SUESS).
GBA 1854/006/0019.
7 x.
-

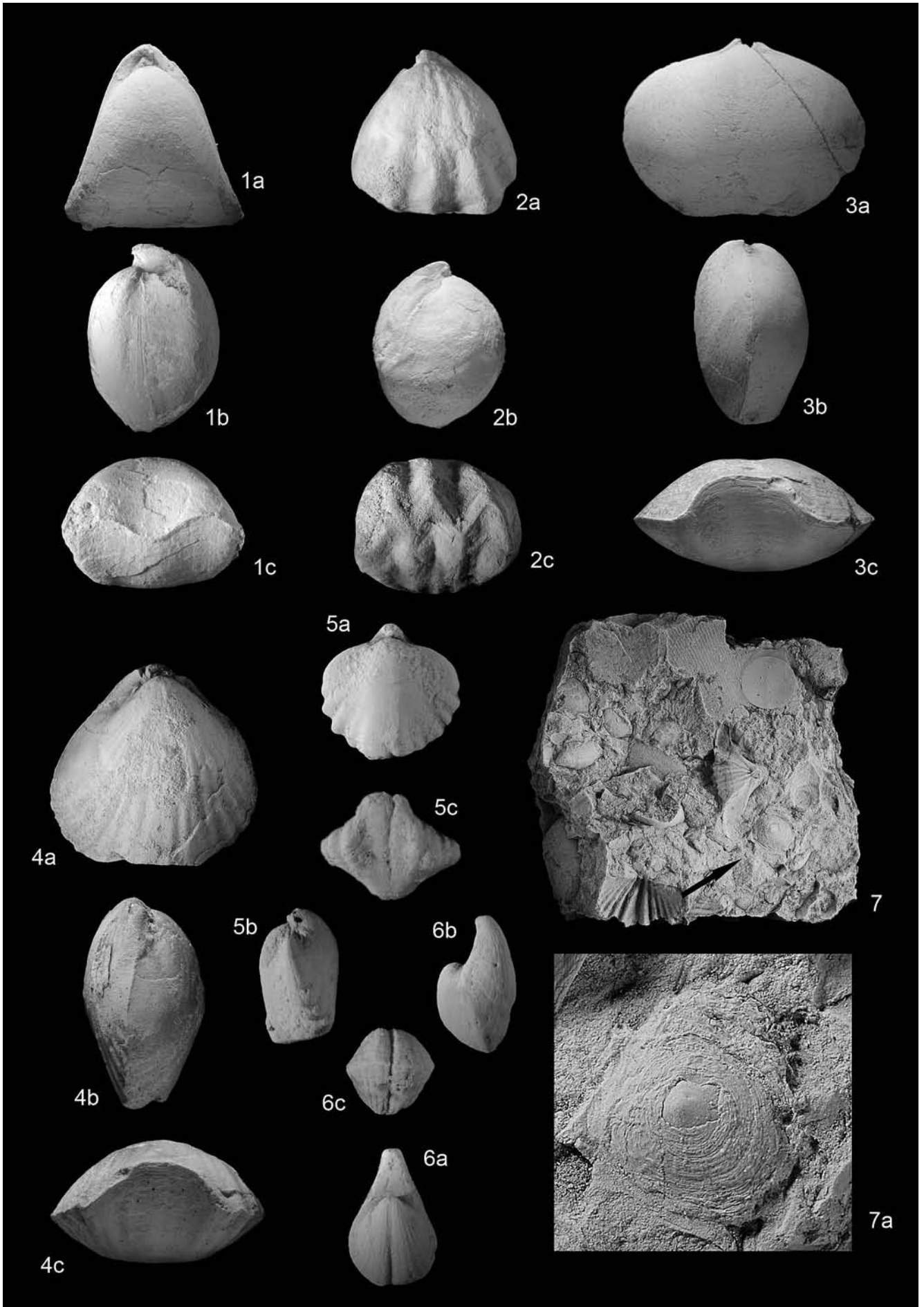


Plate 2

- Fig. 1abc: *Mentzelia propontica* TOULA.
GBA 1896/002/0004.
2 x.
- Fig. 2abc: *Holcorhynchella edhemi plicata* (TOULA).
GBA 1896/002/0003/1.
2 x.
- Fig. 3abc: *Hungarispira bittneri* (TOULA).
GBA 1913/002/0025.
3 x.
- Fig. 4abc: "*Terebratula*" *grossaviensis* TRAUTH.
GBA 1909/001/0017.
1.5 x.
- Fig. 5abc: *Zeilleria opima* TRAUTH.
GBA 1909/001/0021.
1.5 x.
- Fig. 6abc: "*Terebratula*" *crassa* NEUMAYR.
GBA 1879/003/0001.
2 x.

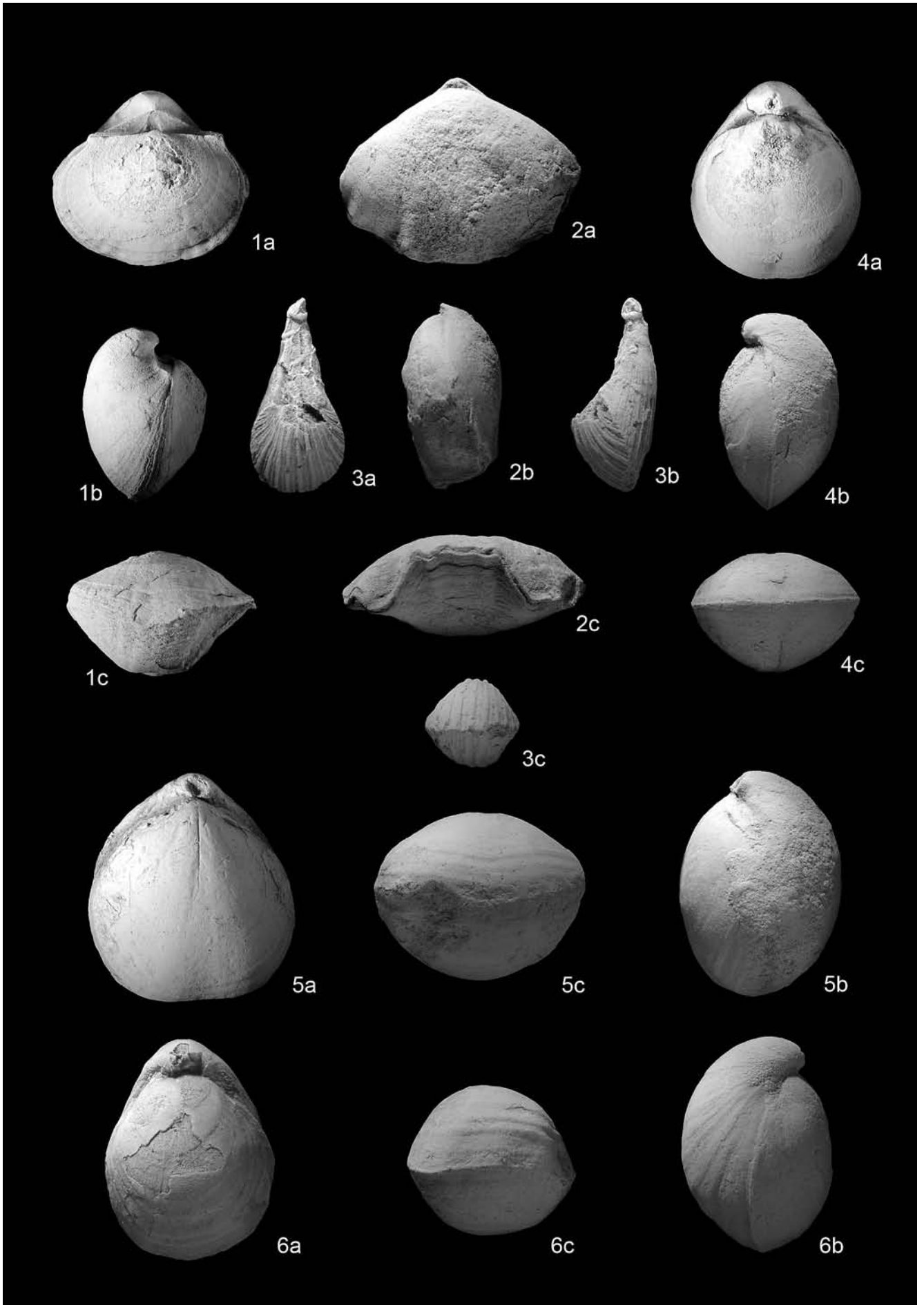
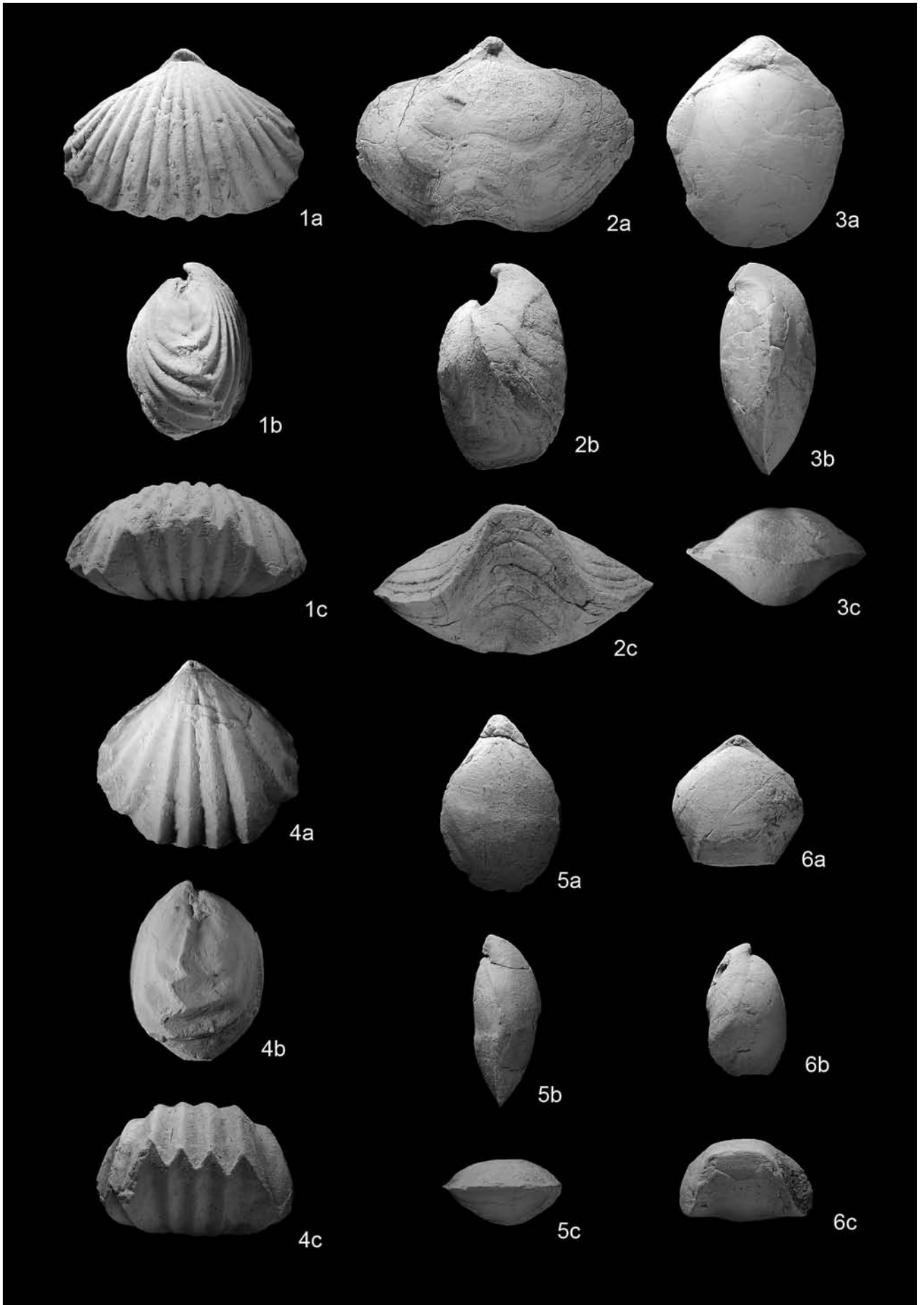


Plate 3

- Fig. 1abc: *Costirhynchopsis ruttneri* SIBLÍK.
GBA 1982/008/0003/1.
2 x.
- Fig. 2abc: *Tethyspira persis* SIBLÍK.
GBA 1982/008/0004.
1 x.
- Fig. 3abc: *Dareithyris vulgaris* SIBLÍK.
GBA 1982/008/0010/1.
2 x.
- Fig. 4abc: *Tetrarhynchia inopinata* SIBLÍK.
GBA 1999/017/0003.
2 x.
- Fig. 5abc: *Rhaetina tirolensis* SIBLÍK.
GBA 1999/002/0005/1.
1.5 x.
- Fig. 6abc: *Austriellula fuchsi* SIBLÍK.
GBA 1975/003/0013.
2 x.



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