

Appendix 2.

Compilation of embryonic shell measurements of Paleozoic–recent coiled nautiloids, geographic areas and inferred climate.

| Species                                    | Naute size, mm | Family           | Location             | Climate (if known)      | Period       | Age (Stage)                                                                               | Source                         |
|--------------------------------------------|----------------|------------------|----------------------|-------------------------|--------------|-------------------------------------------------------------------------------------------|--------------------------------|
| <i>?Germanonautilus willeyi</i>            | 22.5           | Tainoceratidae   | France, Calvados     | Subtropical or Tropical | Jurassic     | Early Pliensbachian, <i>Ibex</i> Chron                                                    | Chirat (1997)                  |
| <i>?Cenoceras pseudotruncatum</i>          | 18             | Nautilidae       | France, Calvados     | Subtropical or Tropical | Jurassic     | Early Pliensbachian, <i>Ibex</i> Chron                                                    | Chirat & Rioult (1998)         |
| <i>?Cymatoceras bifurcatum</i>             | 25             | Nautilidae       | Crimea               | Subtropical or Tropical | Cretaceous   | Barremian–Aptian                                                                          | Shimansky (1975)               |
| <i>Aktubonautilus cruciformis</i>          | 22             | Aktubonautilidae | South Ural           |                         | Permian      | Artinskian                                                                                | Ruzhencev & Shimansky (1954)   |
| <i>Allonautilus perforatus</i>             | 26             | Nautilidae       | Indonesia            | Subtropical or Tropical | Cenozoic Era | Recent                                                                                    | Ward & Saunders (1997)         |
| <i>Anglonautilus japonicus</i>             | 15             | Nautilidae       | Japan                | Subtropical or Tropical | Cretaceous   | late Early Cenomanian, <i>Mantelliceras japonicum</i> Chron                               | Matsumoto <i>et al.</i> (1984) |
| <i>Anglonautilus subalbensis</i>           | 20             | Nautilidae       | Cacassus, Mangyshlak | Subtropical or Tropical | Cretaceous   | Aptian–Early Albian                                                                       | Shimansky (1975)               |
| <i>Aphelaceras arcansasum</i>              | 5.5            | Trigonoceratidae | USA                  |                         | Missisipian  | Chesterian                                                                                | Stephen & Staton (2002)        |
| <i>Apogonoceras remotum</i>                | 25             | Thrinoceratidae  | South Ural           |                         | Permian      | Artinskian                                                                                | Ruzhencev & Shimansky (1954)   |
| <i>Arctonautilus dolganensis</i>           | 23.5           | Tainoceratidae   | N Siberia            | Temperate               | Triassic     | Early Anisian, <i>Grambergia taimyrensis</i> and <i>Lenotropites tardus</i> Chrons        | Sobolev (1989)                 |
| <i>Arctonautilus egorovi</i>               | 23.4           | Tainoceratidae   | N Siberia            | Temperate               | Triassic     | Late Anisian, <i>Frechites nevadanus</i> Chron                                            | Sobolev (1989)                 |
| <i>Arctonautilus ljabovae</i>              | 20.55          | Tainoceratidae   | N Siberia            | Temperate               | Triassic     | Early Anisian, <i>Grambergia taimyrensis</i> Chron                                        | Sobolev (1989)                 |
| <i>Arctonautilus spatiosus</i>             | 21.3           | Tainoceratidae   | N Siberia            | Temperate               | Triassic     | Early Anisian, <i>Grambergia taimyrensis</i> Chron, <i>Karangatites evolutus</i> SubChron | Sobolev (1989)                 |
| <i>Articheilus luxuriosum</i>              | 27             | Mosquoceratidae  | South Ural           |                         | Permian      | Artinskian                                                                                | Ruzhencev & Shimansky (1954)   |
| <i>Aturia cubaensis</i>                    | 4              | Hercoglossidae   | Chile                | Subtropical or Tropical | Cenozoic Era | Eocene–Miocene                                                                            | Nielsen <i>et al.</i> (2009)   |
| <i>Aturia</i> sp.                          | 5              | Hercoglossidae   | Cosmopolite          | Subtropical or Tropical | Cenozoic Era | Paleocene–Miocene                                                                         | Ruzhencev & Shimansky (1954)   |
| <i>Basleonautilus</i> sp.                  | 20             | Aktubonautilidae | Timor                |                         | Permian      | Basleo beds (~Artinskian)                                                                 | Ruzhencev & Shimansky (1954)   |
| <i>Cenoceras obesum</i>                    | 20             | Nautilidae       | France, Calvados     | Subtropical or Tropical | Jurassic     | Late Bajocian, <i>Niortense</i> Chron                                                     | Chirat & Rioult (1998)         |
| <i>Cenoceras</i> aff. <i>bradfordensis</i> | 14             | Nautilidae       | France, Calvados     | Subtropical or Tropical | Jurassic     | Late Bajocian, <i>Garantiana</i> Chron                                                    | Chirat & Rioult (1998)         |
| <i>Cenoceras</i> aff. <i>clausum</i>       | 20             | Nautilidae       | France, Calvados     | Subtropical or Tropical | Jurassic     | Late Aalenian, <i>Concavum</i> Chron                                                      | Chirat & Rioult (1998)         |
| <i>Cenoceras</i> aff. <i>fuscum</i>        | 12             | Nautilidae       | France, Calvados     | Subtropical or Tropical | Jurassic     | Late Bajocian, <i>Parkinsoni</i> Chron                                                    | Chirat & Rioult (1998)         |
| <i>Cenoceras boreale</i>                   | 18.1           | Nautilidae       | NE Russia, N Siberia | Temperate               | Triassic     | Early Carnian                                                                             | Sobolev (1989)                 |
| <i>Cenoceras fuscum</i>                    | 48             | Nautilidae       | France, Calvados     | Subtropical or Tropical | Jurassic     | Late Bajocian, <i>Parkinsoni</i> Chron                                                    | Chirat (1997)                  |
| <i>Cenoceras</i> gr. <i>obesum</i>         | 17             | Nautilidae       | France, Calvados     | Subtropical or Tropical | Jurassic     | Late Bajocian, <i>Niortense</i> or <i>Garantiana</i> Chron                                | Chirat & Rioult (1998)         |
| <i>Cenoceras</i> sp. 1                     | 18             | Nautilidae       | France, Calvados     | Subtropical or Tropical | Jurassic     | Late Aalenian, <i>Concavum</i> Chron                                                      | Chirat & Rioult (1998)         |
| <i>Cenoceras</i> sp. 2                     | 15             | Nautilidae       | France, Calvados     | Subtropical or Tropical | Jurassic     | Late Bajocian, <i>Garantiana</i> Chron                                                    | Chirat & Rioult (1998)         |
| <i>Cenoceras</i> sp. 3                     | 16             | Nautilidae       | France, Calvados     | Subtropical or Tropical | Jurassic     | Late Bajocian, <i>Parkinsoni</i> Chron                                                    | Chirat & Rioult (1998)         |
| <i>Cimomia angustus</i>                    | 20.4           | Hercoglossidae   | India                |                         | Cretaceous   | Albian–Cenomanian                                                                         | Wani <i>et al.</i> (2011)      |
| <i>Condraoceras ellipsoidale</i>           | 16             | Liroceratidae    | South Ural           |                         | Permian      | Artinskian                                                                                | Ruzhencev & Shimansky (1954)   |
| <i>Cooperoceras</i> sp.                    | 60             | Tainoceratidae   | N America            |                         | Permian      | Lower Permian                                                                             | Ruzhencev & Shimansky (1954)   |
| <i>Cosmonautilus polaris</i>               | 8.6            | Clydonautilidae  | NE Russia, N Siberia | Temperate               | Triassic     | Early Carnian, <i>Neosirenites pentastichus</i> Chron                                     | Sobolev (1989)                 |
| <i>Cymatoceras karakaschi</i>              | 20             | Nautilidae       | Mangyshlak           | Subtropical or Tropical | Cretaceous   | Late Aptian                                                                               | Shimansky (1975)               |
| <i>Cymatoceras paralibanoiticum</i>        | 22.5           | Nautilidae       | Crimea, Donbass      | Subtropical or Tropical | Cretaceous   | Maastrichtian                                                                             | Shimansky (1975)               |
| <i>Cymatoceras patagonicum</i>             | 30             | Nautilidae       | Argentina            | Temperate               | Jurassic     | Tithonian                                                                                 | Cichowolski (2003)             |
| <i>Cymatoceras perstriatum</i>             | 32             | Nautilidae       | Argentina            | Temperate               | Cretaceous   | Hauterivian                                                                               | Cichowolski (2003)             |
| <i>Cymatoceras pseudoelegans</i>           | 25             | Nautilidae       | Crimea               | Subtropical or Tropical | Cretaceous   | Hauterivian–Early Barremian                                                               | Shimansky (1975)               |
| <i>Cymatoceras pulchrum</i>                | 20.5           | Nautilidae       | Crimea               | Subtropical or Tropical | Cretaceous   | Hauterivian–Early Barremian                                                               | Shimansky (1975)               |
| <i>Cymatoceras radiatum</i>                | 17.5           | Nautilidae       | Caucasus             | Subtropical or Tropical | Cretaceous   | Aptian                                                                                    | Shimansky (1975)               |
| <i>Cymatoceras renngarteni</i>             | 23.5           | Nautilidae       | Crimea               | Subtropical or Tropical | Cretaceous   | Hauterivian–Early Barremian                                                               | Shimansky (1975)               |
| <i>Cymatoceras sarysense</i>               | 30             | Nautilidae       | Crimea               | Subtropical or Tropical | Cretaceous   | Berriasian                                                                                | Shimansky (1975)               |
| <i>Cymatoceras</i> sp.                     | 20             | Nautilidae       | Crimea               | Subtropical or Tropical | Cretaceous   | Barremian                                                                                 | Shimansky (1975)               |
| <i>Cymatoceras</i> sp. 2                   | 25             | Nautilidae       | Sakhalin             | Subtropical or Tropical | Cretaceous   | Late Santonian–Early Campanian                                                            | Shimansky (1975)               |
| <i>Cymatoceras yabei</i>                   | 30             | Nautilidae       | NE Russia, Chukotka  | Temperate               | Cretaceous   | Cenomanian                                                                                | Shimansky (1975)               |
| <i>Digonioceras amoldi</i>                 | 30             | Nautilidae       | France, Calvados     | Subtropical or Tropical | Jurassic     | Middle Toarcian, <i>Bifrons</i> Chron                                                     | Chirat (1997)                  |
| <i>Digonioceras carlsoni</i>               | 30             | Nautilidae       | France, Normandy     | Subtropical or Tropical | Jurassic     | Middle Bathonian, <i>Progracilis</i> Chron                                                | Chirat (1997)                  |
| <i>Digonioceras excavatum</i>              | 36             | Nautilidae       | France, Calvados     | Subtropical or Tropical | Jurassic     | Late Bajocian                                                                             | Chirat (1997)                  |
| <i>Digonioceras</i> gr. <i>landmani</i>    | 45             | Nautilidae       | France, Calvados     | Subtropical or Tropical | Jurassic     | Late Bajocian                                                                             | Chirat (1997)                  |
| <i>Digonioceras landmanni</i>              | 32.5           | Nautilidae       | France, Calvados     | Subtropical or Tropical | Jurassic     | Late Bajocian, <i>Niortense-Garantiana</i> Chron                                          | Chirat (1997)                  |

| Species                                | Nauta size, mm | Family             | Location                     | Climate (if known)      | Period        | Age (Stage)                                           | Source                                      |
|----------------------------------------|----------------|--------------------|------------------------------|-------------------------|---------------|-------------------------------------------------------|---------------------------------------------|
| <i>Digonioceras</i> sp. 1              | 57             | Nautilidae         | France, Calvados             | Subtropical or Tropical | Jurassic      | Late Bajocian, <i>Parkinsoni</i> Chron                | Chirat (1997, 2001), Chirat & Rioult (1998) |
| <i>Digonioceras zittlii</i>            | 35             | Nautilidae         | France, Calvados             | Subtropical or Tropical | Jurassic      | Early Aalenian, <i>Opalinum</i> Chron                 | Chirat (1997)                               |
| <i>Epicymatoceras monstrum</i>         | 20             | Nautilidae         | Mangyshlak                   | Subtropical or Tropical | Cretaceous    | Late Maastrichtian                                    | Shimansky (1975)                            |
| <i>Eucymatoceras plicatum</i>          | 25             | Nautilidae         | Crimea, Caucasus             | Subtropical or Tropical | Cretaceous    | Barremian                                             | Shimansky (1975)                            |
| <i>Eurephoceras bouchardianum</i>      | 12             | Nautilidae         | Mangyshlak                   | Subtropical or Tropical | Cretaceous    | Cenomanian–Coniacian                                  | Shimansky (1975)                            |
| <i>Eurephoceras burundukajense</i>     | 8              | Nautilidae         | Crimea                       | Subtropical or Tropical | Cenozoic Era  | Danian                                                | Shimansky (1975)                            |
| <i>Eurephoceras clementinum</i>        | 20             | Nautilidae         | S India                      | Subtropical or Tropical | Cretaceous    | Middle Turonian                                       | Wani & Ayyasamib (2009)                     |
| <i>Eurephoceras delayi</i>             | 9.8            | Nautilidae         | UAS, S. Dakota               | Subtropical or Tropical | Cretaceous    | Maastrichtian                                         | Landman <i>et al.</i> (1983)                |
| <i>Eurephoceras moskvini</i>           | 22             | Nautilidae         | Crimea                       | Subtropical or Tropical | Cretaceous    | Early Barremian                                       | Shimansky (1975)                            |
| <i>Eurephoceras muniticeps</i>         | 20             | Nautilidae         | Crimea                       | Subtropical or Tropical | Cretaceous    | Early Barremian                                       | Shimansky (1975)                            |
| <i>Eurephoceras subplicatum</i>        | 30             | Nautilidae         | Antarctica                   | Temperate               | Cretaceous    | Campanian–Maastrichtian                               | Cichowolski <i>et al.</i> (2005)            |
| <i>Eurephoceras uzense</i>             | 18             | Nautilidae         | Mangyshlak                   | Subtropical or Tropical | Cretaceous    | Maastrichtian                                         | Shimansky (1975)                            |
| Gen. nov.? <i>A. austriacus</i>        | 43             | Nautilidae         | France, Calvados             | Subtropical or Tropical | Jurassic      | Early Pliensbachian, <i>Ibex</i> Chron                | Chirat (1997)                               |
| <i>Germanonautilus kyoanaii</i>        | 19             | Tainoceratidae     | N Siberia, NE Russia         | Temperate               | Triassic      | Norian                                                | Sobolev (1989)                              |
| <i>Germanonautilus popowi</i>          | 20             | Tainoceratidae     | N Siberia, NE Russia         | Temperate               | Triassic      | Late Carnian–Early Norian                             | Sobolev (1989)                              |
| <i>Germanonautilus sibiricus</i>       | 16.2           | Tainoceratidae     | N Siberia, NE Russia         | Temperate               | Triassic      | Early Carnian, <i>Neosirenites pentastichus</i> Chron | Sobolev (1989)                              |
| <i>Gyronautilus praevoltum</i>         | 18.2           | Gypoceratidae      | Far East                     |                         | Triassic      | Early Olenekian                                       | Zakharov & Shigeta (2000)                   |
| <i>Gzheloceras biangulare</i>          | 16             | Gzheloceratidae    | South Ural                   |                         | Permian       | Artinskian                                            | Ruzhencev & Shimansky (1954)                |
| <i>Gzheloceras ellipsoidale</i>        | 15.5           | Gzheloceratidae    | South Ural                   |                         | Permian       | Artinskian                                            | Ruzhencev & Shimansky (1954)                |
| <i>Gzheloceras sholakensae</i>         | 17.7           | Gzheloceratidae    | South Ural                   |                         | Permian       | Sakmarian                                             | Ruzhencev & Shimansky (1954)                |
| <i>Gzheloceras uralense</i>            | 16.5           | Gzheloceratidae    | South Ural                   |                         | Permian       | Artinskian                                            | Ruzhencev & Shimansky (1954)                |
| <i>Hemilirocera inflatum</i>           | 15.8           | Liroceratidae      | South Ural                   |                         | Permian       | Artinskian                                            | Ruzhencev & Shimansky (1954)                |
| <i>Hemilirocera zhiltauense</i>        | 15.2           | Liroceratidae      | South Ural                   |                         | Permian       | Artinskian                                            | Ruzhencev & Shimansky (1954)                |
| <i>Heminautilus lallieri</i>           | 20             | Nautilidae         | Suez                         | Subtropical or Tropical | Cretaceous    | Aptian                                                | Chirat & Bucher (2006)                      |
| <i>Hercoceras mirum</i>                | 4.5            | Hercoceratidae     | Czech                        |                         | Devonian      | Upper Emsian                                          | Turek (2007)                                |
| <i>Hercoglossa danica</i>              | 10             | Hercoglossidae     | Crimea, Caucasus, Mangyshlak | Subtropical or Tropical | Cenozoic Era  | Danian                                                | Shimansky (1975)                            |
| <i>Hercoglossa obesianus</i>           | 22.2           | Hercoglossidae     | India                        |                         | Cretaceous    | Albian–Cenomanian                                     | Wani <i>et al.</i> (2011)                   |
| <i>Heurekoceras notabile</i>           | 14             | Gzheloceratidae    | South Ural                   |                         | Permian       | Artinskian                                            | Ruzhencev & Shimansky (1954)                |
| <i>Koninckioceras</i> sp.              | 36             | Koninckioceratidae | N America, Europe            |                         | Mississippian | Kungurian                                             | Ruzhencev & Shimansky (1954)                |
| <i>Leonardocheilus</i> sp.             | 45             | Mosquioceratidae   | South Ural                   |                         | Permian       | Artinskian                                            | Ruzhencev & Shimansky (1954)                |
| <i>Liroceras</i> (?) <i>korulkense</i> | 18             | Liroceratidae      | N America, Ural              |                         | Permian       | Sakmarian                                             | Ruzhencev & Shimansky (1954)                |
| <i>Liroceras</i> sp.                   | 9.5            | Liroceratidae      | South Ural                   |                         | Pennsylvanian | Pendleian                                             | Ruzhencev & Shimansky (1954)                |
| <i>Metacoceras dlilobatum</i>          | 20             | Tainoceratidae     | South Ural                   |                         | Permian       | Artinskian                                            | Ruzhencev & Shimansky (1954)                |
| <i>Metacoceras ariense</i>             | 24.5           | Tainoceratidae     | South Ural                   |                         | Permian       | Artinskian                                            | Ruzhencev & Shimansky (1954)                |
| <i>Metacoceras kruglovi</i>            | 23             | Tainoceratidae     | South Ural                   |                         | Permian       | Artinskian                                            | Ruzhencev & Shimansky (1954)                |
| <i>Metacoceras mcchesneyi</i>          | 9.5            | Tainoceratidae     | USA, Ohio                    |                         | Pennsylvanian | Pennsylvanian                                         | Wani & Mapes (2010)                         |
| <i>Metacoceras orthogonium</i>         | 17             | Tainoceratidae     | South Ural                   |                         | Permian       | Artinskian                                            | Ruzhencev & Shimansky (1954)                |
| <i>Metacoceras parartiense</i>         | 21             | Tainoceratidae     | South Ural                   |                         | Permian       | Artinskian                                            | Ruzhencev & Shimansky (1954)                |
| <i>Metacoceras subpiszovi</i>          | 29             | Tainoceratidae     | South Ural                   |                         | Permian       | Artinskian                                            | Ruzhencev & Shimansky (1954)                |
| <i>Metacoceras subquadratum</i>        | 27             | Tainoceratidae     | South Ural                   |                         | Permian       | Artinskian                                            | Ruzhencev & Shimansky (1954)                |
| <i>Metacoceras vagans</i>              | 8.5            | Tainoceratidae     | USA                          |                         | Pennsylvanian | Morrowan–Missourian                                   | Stephen & Staton (2002)                     |
| <i>Mosquoceras jakowlewii</i>          | 30             | Mosquioceratidae   | South Ural                   |                         | Permian       | Artinskian                                            | Ruzhencev & Shimansky (1954)                |
| <i>Mosquoceras simense</i>             | 38.5           | Mosquioceratidae   | South Ural                   |                         | Permian       | Sakmarian                                             | Ruzhencev & Shimansky (1954)                |
| <i>Nautilus belauensis</i>             | 29.5           | Nautilidae         | Philippines                  | Subtropical or Tropical | Cenozoic Era  | Recent                                                | Saunders & Landman (2010)                   |
| <i>Nautilus macromphalus</i>           | 26.4           | Nautilidae         | Philippines                  | Subtropical or Tropical | Cenozoic Era  | Recent                                                | Chirat (2001)                               |
| <i>Nautilus pompilius</i>              | 23             | Nautilidae         | Philippines                  | Subtropical or Tropical | Cenozoic Era  | Recent                                                | Saunders & Landman (2010)                   |
| <i>Nautilus praepompilius</i>          | 23             | Nautilidae         | Kazakhstan                   | Subtropical or Tropical | Cenozoic Era  | Late Eocene                                           | Saunders & Landman (2010)                   |
| <i>Neothrinoceras soshkinae</i>        | 25.5           | Thrinoceratidae    | South Ural                   |                         | Permian       | Artinskian                                            | Ruzhencev & Shimansky (1954)                |
| <i>Neothrinoceras uralicum</i>         | 20.5           | Thrinoceratidae    | South Ural                   |                         | Permian       | Artinskian                                            | Ruzhencev & Shimansky (1954)                |
| <i>Ophionautilus burtonensis</i>       | 35             | Nautilidae         | France, Calvados             | Subtropical or Tropical | Jurassic      | Late Bajocian, <i>Niortense-Garantiana</i> Chron      | Chirat (1997)                               |

| Species                                             | Nauta size, mm | Family            | Location                      | Climate (if known)      | Period          | Age (Stage)                                                                                       | Source                       |
|-----------------------------------------------------|----------------|-------------------|-------------------------------|-------------------------|-----------------|---------------------------------------------------------------------------------------------------|------------------------------|
| <i>Ophionautilus</i> ex gr. <i>catonis</i>          | 30             | Nautilidae        | France, Calvados              | Subtropical or Tropical | Jurassic        | Late Bajocian, <i>Parkinsoni</i> Chron                                                            | Chirat (1997)                |
| <i>Ophionautilus</i> sp. aff. <i>schwalmi</i>       | 40             | Nautilidae        | France, Calvados              | Subtropical or Tropical | Jurassic        | Early Pliensbachian, <i>Ibex</i> Chron                                                            | Chirat (1997)                |
| <i>Paleitalia karpinskyi</i>                        | 16             | Pseudonautilidae  | Crimea                        | Subtropical or Tropical | Cretaceous      | Early Barremian                                                                                   | Shimansky (1975)             |
| <i>Paracenoceras hexagonum</i>                      | 25             | Paracenoceratidae | France                        | Subtropical or Tropical | Jurassic        | Middle–Late Oxfordian                                                                             | Chirat (1997)                |
| <i>Parametacoceras</i> sp.                          | 12.5           | Gzheloceratidae   | N America                     |                         | Pennsylvanian   | Cherokee shales                                                                                   | Ruzhencev & Shimansky (1954) |
| <i>Paranautilus asiaticus</i>                       | 20             | Liroceratidae     | NE Russia                     | Temperate               | Triassic        | Late Carnian–Early Norian                                                                         | Sobolev (1989)               |
| <i>Paranautilus smithi</i>                          | 23.3           | Liroceratidae     | N Siberia                     | Temperate               | Triassic        | Late Anisian, <i>Frechites nevadanus</i> Chron                                                    | Sobolev (1989)               |
| <i>Pararhiphaoceras alktastense</i>                 | 14             | Rhiphaeoceratidae | South Ural                    |                         | Permian         | Artinskian                                                                                        | Ruzhencev & Shimansky (1954) |
| <i>Pararhiphaoceras incallidum</i>                  | 14             | Rhiphaeoceratidae | South Ural                    |                         | Permian         | Artinskian                                                                                        | Ruzhencev & Shimansky (1954) |
| <i>Pararhiphaoceras tastubense</i>                  | 18             | Rhiphaeoceratidae | South Ural                    |                         | Permian         | Artinskian                                                                                        | Ruzhencev & Shimansky (1954) |
| <i>Parastenopoceras khvorovae</i>                   | 15.2           | Domatoceratidae   | South Ural                    |                         | Permian         | Artinskian                                                                                        | Ruzhencev & Shimansky (1954) |
| <i>Peripetoceras asselense</i>                      | 12             | Liroceratidae     | South Ural                    |                         | Permian         | Artinskian                                                                                        | Ruzhencev & Shimansky (1954) |
| <i>Phaedyrsmocheilus evolutus</i>                   | 16.7           | Tainoceratidae    | N Siberia                     | Temperate               | Triassic        | Late Olenekian, <i>Dieneroceras demokidovi</i> Chron, <i>Nordopliceras contrarium</i> SubChron    | Sobolev (1989)               |
| <i>Phaedyrsmocheilus involutus</i>                  | 13.15          | Tainoceratidae    | N Siberia                     | Temperate               | Triassic        | Late Olenekian, <i>Olenekites spiniplicatus</i> Chron, <i>Keyserlingites subrobustus</i> SubChron | Sobolev (1989)               |
| <i>Phaedyrsmocheilus nestori</i>                    | 20             | Tainoceratidae    | N Siberia                     | Temperate               | Triassic        | Late Olenekian, <i>Olenekites spiniplicatus</i> Chron                                             | Sobolev (1989)               |
| <i>Phaedyrsmocheilus ornatus</i>                    | 15.5           | Tainoceratidae    | N Siberia                     | Temperate               | Triassic        | Late Olenekian, <i>Dieneroceras demokidovi</i> Chron, <i>Bajarunia euomphalus</i> SubChron        | Sobolev (1989)               |
| <i>Phaedyrsmocheilus subaratus</i>                  | 12.3           | Tainoceratidae    | N Siberia                     | Temperate               | Triassic        | Late Olenekian, <i>Olenekites spiniplicatus</i> Chron                                             | Sobolev (1989)               |
| <i>Proclydonautilus pseudoseimkanensis</i>          | 6.2            | Clydonautilidae   | NE Russia, N Siberia          | Temperate               | Triassic        | Early Carnian, <i>Neosirenites pentastichus</i> Chron / <i>Sirenites yakutensis</i> Chron         | Sobolev (1989)               |
| <i>Proclydonautilus seimkanensis</i>                | 5              | Clydonautilidae   | NE Russia, N Siberia          | Temperate               | Triassic        | Norian, <i>Pierostirenites obrucevi</i> – <i>Otapiria ussuriensis</i> Chrons                      | Sobolev (1989)               |
| <i>Pseudocenoceras archiacianum</i>                 | 10             | Nautilidae        | Moldavia                      | Subtropical or Tropical | Cretaceous      | Cenomanian                                                                                        | Shimansky (1975)             |
| <i>Pseudocenoceras?</i> <i>supervacuum</i>          | 20             | Nautilidae        | Gissar Range                  | Subtropical or Tropical | Cretaceous      | Albian                                                                                            | Shimansky (1975)             |
| <i>Pseudotemnocheilus kossvae</i>                   | 20             | Tainoceratidae    | South Ural                    |                         | Permian         | Artinskian                                                                                        | Ruzhencev & Shimansky (1954) |
| <i>Pseudotemnocheilus posttuberculatum</i>          | 22.5           | Tainoceratidae    | South Ural                    |                         | Permian         | Artinskian                                                                                        | Ruzhencev & Shimansky (1954) |
| <i>Rhiphaoceras humile</i>                          | 12             | Rhiphaeoceratidae | South Ural                    |                         | Permian         | Sakmarian                                                                                         | Ruzhencev & Shimansky (1954) |
| <i>Rhiphaoceras venustum</i>                        | 18             | Rhiphaeoceratidae | South Ural                    |                         | Permian         | Artinskian                                                                                        | Ruzhencev & Shimansky (1954) |
| <i>Rhiphaeonautilus curticosatus</i>                | 13.7           | Rhiphaeoceratidae | South Ural                    |                         | Permian         | Artinskian                                                                                        | Ruzhencev & Shimansky (1954) |
| <i>Rutoceras</i> sp.                                | 51.5           | Rutoceratidae     | N America, Europe             |                         | Devonian        |                                                                                                   | Ruzhencev & Shimansky (1954) |
| <i>Sholakoceras bisulcatum</i>                      | 12             | Rhiphaeoceratidae | South Ural                    |                         | Permian         | Sakmarian                                                                                         | Ruzhencev & Shimansky (1954) |
| <i>Sholakoceras</i> cf. <i>S. pleuronautiloides</i> | 12.2           | Rhiphaeoceratidae | Italy                         |                         | Permian         | Wordian                                                                                           | Mapes <i>et al.</i> (2007)   |
| <i>Sholakoceras privum</i>                          | 14             | Rhiphaeoceratidae | South Ural                    |                         | Permian         | Artinskian                                                                                        | Ruzhencev & Shimansky (1954) |
| <i>Sholakoceras transforme</i>                      | 13.5           | Rhiphaeoceratidae | South Ural                    |                         | Permian         | Sakmarian                                                                                         | Ruzhencev & Shimansky (1954) |
| <i>Sibyllonautilus artus</i>                        | 16             | Tainoceratidae    | N Siberia                     | Temperate               | Triassic        | Ladinian                                                                                          | Sobolev (1989)               |
| <i>Teicheria similis</i>                            | 20             | Hercoglossidae    | Crimea, Turkmenia, Kazakhstan | Subtropical or Tropical | Cenozoic Era    | Danian                                                                                            | Shimansky (1975)             |
| <i>Titanoceras</i> sp.                              | 68             | Domatoceratidae   | N. America, Europe            |                         | End Missisipian |                                                                                                   | Ruzhencev & Shimansky (1954) |
| <i>Tomponautilus setorymi</i>                       | 20             | Liroceratidae     | NE Russia                     | Temperate               | Triassic        | Induan, <i>Concavum</i> – <i>Nielseni</i> Chrons                                                  | Sobolev (1989)               |
| <i>Xenochelilus ulixis</i>                          | 20             | Pseudonautilidae  | Crimea                        | Subtropical or Tropical | Cretaceous      | Hauterivian–Early Barremian                                                                       | Shimansky (1975)             |