# Supporting text (Text S1) to:

# Phylogenetic Interrelationships of Ginglymodian Fishes (Actinopterygii: Neopterygii)

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# List of material examined

**Institutional abbreviations.** AMNH, American Museum of Natural History, New York, USA; BGS.GSM, British Geological Survey, London, UK; BSPG, Bayerische Staatssammlung für Paläontologie un Geologie, München, Germany; GMPKU, Geological Museum of Peking University, Beijing, China; GZG.V, Geowissenschaftliches Zentrum der Georg-August-Universität, Göttingen, Germany; IGM, Instituto de Geología, Universidad Nacional Autónoma de México; JM, Jura-Museum Eichstätt, Germany; MB, Museum für Naturkunde, Leibniz-Institut für Evolutions- und Biodiversitätsforschung an der Humboldt-Universität, Berlin, Germany; MHIN-UNSL-GEO, Museo de Historia Natural de la Universidad Nacional de San Luis, San Luis, Argentina; MHNH, Muséum d’histoire naturelle, Le Havre, France; MMP, Museo Municipal de Ciencias Naturales de Mar del Plata, Argentina; MNHN, Muséum National d’Histoire Naturelle, Paris, France; NHMUK, Natural History Museum, London, UK; NMB, National Museum, Bloemfontein, South Africa; NMC, Naturkunde-Museum Coburg, Coburg, Germany; SMF, Senckenberg Forschungsinstitut und Naturmuseum, Frankfurt am Main, Germany; SMNS, Staatliches Museum für Naturkunde, Stuttgart, Germany.

*Araripelepidotes temnurus* (Agassiz, 1841) [1]: BSPG 1965-I-132; MNHN BCE-334, 335, 336, 399, and 340; and detailed high quality photogrphas of AMNH 11813, 11832, 11833, 12716, 11614.

*Atractosteus spatula* (Lacépède, 1803) [2]: based on Grande [3].

*Callipurbeckia minor* (Agassiz, 1833) [4] (*Lepidotes minor*): BGS.GSM 27975 (neotype), MBf. 1617–9, NHMUK PV P.1118, P6343, P.8047, P.29398, P28399, 19006, 21349, 21974, 36080, 41157, 44848, 48255, 48341.

*Dentilepisosteus laevis* Wenz and Brito, 1992 [5]: based on Grande [3].

*Isanichthys palustris* Cavin and Suteethorn, 2006 [6]: based on Cavin and Suteethorn [6].

*Lepidotes elvensis* (de Blainville, 1818) [7]: MNHN JRE-250, 251, 254, 545 (holotype).

*Lepidotes gigas* Agassiz, 1832 [8]: BSPG AS-I-625, 1940-I-8, MBf. 1372, 1495, 1519, MNHN HLZ-32, NHMUK PV P.14539.

*Lepidotes semiserratus* Agassiz, 1836 [4]: NHMUK PV P.3528, P.3528a, P.7410, 35556, 62939.

*Lepisosteus* *osseus* (Linnaeus, 1758) [9]: based on Grande [3].

*Luoxiongichthys hyperdorsalis* Wen et al., in press [10]: BSPG 2010-I-131.

*Macrosemimimus fegerti* Schröder et al., 2012 [11]: JME ETT-854 (holotype), JME ETT-67, 77, 172, 244, 853, 888, 978, 1351; *Macrosemimimus* *lennieri* Sauvage, 1893 [12]: MHNH 7267 (holotype of *Lepidotes lennieri*) and *Lepidotes* *toombsi* Jain and Robinson, 1963 [13]: NHMUK PV P.2518 (holotype), P.34511.

*Macrosemius rostratus* Agassiz, 1844 [4]: BSPG 1986-XV-119 and Bartram [14]; *Macrosemius fourneti* (Thiollière, 1858) [15]: BSPG AS-I-768 (holotype) and Bartram [14].

*Masillosteus kelleri* Micklich and Klappert, 2001 [16]: based on Micklich and Klappert [16] and Grande [3]; *Masillosteus janeae* Grande, 2010 [3]: based on Grande [3].

*Neosemionotus puntanus* Bocchino, 1973 [17]: MMP 1114 (holotype); MHIN-UNSL-GEO-V8, V64, V68, V183–185, V187–191.

*Notagogus denticulatus* Agassiz, 1839 [4]: BSPG AS-I-768 (holotype), 1967-I-303, 1986-XV-120 and Bartram [14]; *Notagogus decoratus* Eastman, 1914 [18]: BSPG 1986-XV-119 and Bartram [14].

*Obaichthys decoratus* Wenz and Brito, 1992 [5]: based on Grande [3]; *Obaichthys* *africanus* Grande, 2010 [3]: BSPG 1993-IX-320 (scales).

*Paralepidotus ornatus* (Agassiz, 1833) [4]: BSPG 2003-XXIX-218, 2003-XXIX-632, 2007-I-62 and Tintori [19].

*Pliodetes nigeriensis* Wenz, 1999 [20]: MNHN GDF-1274, 1275 (holotype), 1276–78, 1285, 1288.

*Propterus microstomus* Agassiz, 1834 [4]: AS-VII-268 (holotype), AS-I-637, 2011-I-139 and Bartram [14]; *Propterus elongatus* Wagner, 1863 [21]: BSPG AS-I-767 (holotype), 1963-I-173, 1964-23-145, 1986-XV-121, 2011-I-138 and Bartram [14].

*Sangiorgioichthys aldae* Tintori and Lombardo, 2007 [22]: based on Tintori and Lombardo [19]; *Sangiorgioichthys sui* López-Arbarello et al., 2011 [23]: GMPKU-P-1568 (holotype), GMPKU-P-1357–9, 1472, 1558, 1567-8, 1609, 1636, 1642, 1656, 1661, 1695, 1707, 1973, 1995.

*Scheenstia decoratus* (Wagner, 1863) [21] (*Lepidotes decoratus*): BSPG AS-VI-3 (holotype); *Scheenstia degenhardti* (Branco, 1885) [24] (*Lepidotes degenhardti*): MBf1499 (holotype); *Scheenstia laevis* (Agassiz, 1837) [4] (*Lepidotes laevis*): MNHN-CRN 61; *Scheenstia mantelli* (Agassiz, 1833) [4] (*Lepidotes mantelli*): NHMUK PV 2397, 2401, 2456 (holotype), 3036–7, 3048–49, 3517–8, 4916, P.6336, P.6344–5, P.6348c, P.6362, P.6933, P.7333, P.11832–3, P.14451; *Scheenstia maximus* (Wagner, 1863) [21]: SMF P.2386 (neotype), P.325; *Scheenstia zapi* López-Arbarello and Sferco, 2011 [25]: JME-Scha 80 (holotype).

*Semiolepis brembanus* Lombardo and Tintori, 2008 [26]; *Semiolepis* sp. NHMUK PV P.10943

*Semionotus bergeri* Agassiz, 1832 [10]: BSPG AS-I-512, 1960-I-25, 1960-XVI-2; GZG.V.010.001 (lectotype), GZG.V.010.002-4, MB f. 1518 (4 specimens); NMC 1264, 15128a–b, 15129; SMF P6108; *Semionotus capensis* Woodward, 1888 [27]: BSPG 1908-I-502, MB f. 12240 (9 specimens), photographs of several specimens in the NMB; *Semionotus elegans* (Newberry, 1888) [28]: Olsen and McCune [29].

*Tlayuamichin itztli* López-Arbarello and Alvarado-Ortega, 2011 [30]: IGM 6716 (holotype), IGM 6717–20.

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