

Opinion 2425 (Case 3700) – *Diplodocus* Marsh, 1878 (Dinosauria, Sauropoda): *Diplodocus longus* Marsh, 1878 maintained as the type species

International Commission on Zoological Nomenclature

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Abstract. The International Commission on Zoological Nomenclature has declined to use its plenary power to replace the type species of the sauropod dinosaur genus *Diplodocus* Marsh, 1878 with *D. carnegii* Hatcher, 1901.

Keywords. Nomenclature; taxonomy; Dinosauria; Sauropoda; DIPLODOCIDAE; *Diplodocus*; *Diplodocus longus*; *Diplodocus carnegii*; U.S.A.; Upper Jurassic Morrison Formation.

Ruling

- (1) The International Commission on Zoological Nomenclature has hereby ruled that the type species fixation for *Diplodocus* Marsh, 1878 be maintained.

No names are placed on Official Lists or Indexes and the issue is left open for subsequent workers to follow the precepts of the Code or to make new proposals to the Commission.

History of Case 3665

An application to replace the type species of *Diplodocus* Marsh, 1878 was received from Emanuel Tschopp (*Dipartimento di Scienze della Terra, Università di Torino, Via Valperga Caluso 35, 10125 Torino, Italy; GeoBioTec, Faculdade de Ciências e Tecnologia (FCT), Universidade Nova de Lisboa, Caparica, Portugal; Museu da Lourinhã, Rua João Luís de Moura 95, 2530–157 Lourinhã, Portugal*) and Octávio Mateus (*GeoBioTec, Faculdade de Ciências e Tecnologia (FCT), Universidade Nova de Lisboa, Caparica, Portugal; Museu da Lourinhã, Rua João Luís de Moura 95, 2530–157 Lourinhã, Portugal*). After correspondence the Case was published in BZN 71 (3): 17–23 on 31 March 2016 (Tschopp & Mateus, 2016). Three comments in support of the Case were published in BZN 73 (2–4): 127 (Woodruff, 2017), BZN 73 (2–4): 128 (Lucas, 2017), and 73 (2–4): 134–135 (Taylor, 2017). Three comments in opposition to the Case were published in BZN 73 (2–4): 129–131 (Mortimer, 2017), 73 (2–4): 132–133 (Demirjian, 2017), and BZN 74: 47–49 (Carpenter, 2017).

The Case was sent for vote on 1 January 2018 (VP 4). A greater than two-thirds majority of Commissioners voted AGAINST the Case (4 For, 16 Against, 1 Abstain).

Decision of the Commission

At the close of the voting period on 31 March 2018 the votes were as follows:

Affirmative votes – 4: Ballerio, Bouchard, Grygier and Winston.

Negative votes – 16: Aescht, Alonso-Zarazaga, Dmitriev, Evenhuis, Halliday, Harvey, Kojima, Kottelat, Krell, Lamas, Pape, Rheindt, Rosenberg, Welter-Schultes, Yanega and Zhang.

Abstained – 1: Zhou.

No votes were received from Bogutskaya, Bourgoin, Kullander and Pyle.

Voting AGAINST, Aescht stated that the nomenclatural status of a name should be respected as fixed once and for all in the original publication where the name is founded. There are discrepant views on the diagnosability of the holotype of *Diplodocus longus*, not justifying an exception from the principle above.

Voting AGAINST, Dmitriev commented that changing of the type species because a better preserved specimen is available does not help to stabilise the nomenclature of the group. The authors agree that *Diplodocus longus* definitely belongs to the genus *Diplodocus*. There is no evidence that the stability of the group is insecure.

Voting AGAINST, Halliday noted that the poor condition of the holotype of *Diplodocus longus* does not threaten the taxonomic concept of the genus *Diplodocus*, so no nomenclatural action is required.

Voting AGAINST, Kojima observed that the application (Tschopp & Mateus, 2016) did not clearly mention that keeping *Diplodocus longus* Marsh, 1878 as the type species of *Diplodocus* Marsh, 1878 disturbs stability or universality or causes confusion of the name *Diplodocus*.

Voting AGAINST, Rheindt echoed the opinion of other comments made as he pointed out that there is copious disagreement from the community indicating that the holotype of *Diplodocus longus* is not as indeterminate as the submitting party might suggest. Various proponents of this Case suggest that problems may arise in the future if the *longus* holotype is shown to fall outside of our concept of *Diplodocus*. However, this day has not arrived, and the Commission cannot be asked to change type species on a precautionary basis in cases where problems of stability have not yet surfaced.

References

- Carpenter K (2017) Comment (Case 3700) – Opposition against the proposed designation of *Diplodocus carnegii* Hatcher, 1901 as the type species of *Diplodocus* Marsh, 1878 (Dinosauria, Sauropoda). Bulletin of Zoological Nomenclature 74: 47–49.
- Demirjian VD (2017) Comment (Case 3700) – On the proposed designation of *Diplodocus carnegii* Hatcher, 1901 as the type species of *Diplodocus* Marsh, 1878 (Dinosauria, Sauropoda): application should be rejected based on new data. Bulletin of Zoological Nomenclature 73 (2–4): 132–133.
- Hatcher JB (1901) *Diplodocus* (Marsh): its osteology, taxonomy, and probable habits, with a restoration of the skeleton. Memoirs of the Carnegie Museum 1: 1–63.
- Lucas SG (2017) Comment (Case 3700) – Support for designating *Diplodocus carnegii* Hatcher, 1901 as the type species of *Diplodocus* Marsh, 1878 (Dinosauria, Sauropoda). Bulletin of Zoological Nomenclature 73 (2–4): 128.

- Marsh OC (1878) Principal characters of American Jurassic dinosaurs, Part I. American Journal of Science (Series 3) 16: 411–416.
- Mortimer M (2017) Comment (Case 3700) – A statement against the proposed designation of *Diplodocus carnegii* Hatcher, 1901 as the type species of *Diplodocus* Marsh, 1878 (Dinosauria, Sauropoda). Bulletin of Zoological Nomenclature 73 (2–4): 129–131.
- Taylor MP (2017) Comment (Case 3700) – Support for *Diplodocus carnegii* Hatcher, 1901 being designated as the type species of *Diplodocus* Marsh, 1878. Bulletin of Zoological Nomenclature 73 (2–4): 134–135.
- Tschopp E, Mateus O (2016) Case 3700 *Diplodocus* Marsh, 1878 (Dinosauria, Sauropoda): proposed designation of *D. carnegii* Hatcher, 1901 as the type species. Bulletin of Zoological Nomenclature 73 (1): 17–24.
- Woodruff C (2017) Comment (Case 3700) – Support for the proposed designation of *Diplodocus carnegii* Hatcher, 1901, as type species of *Diplodocus* Marsh, 1878. Bulletin of Zoological Nomenclature 73 (2–4): 127.