

PROPOSALS TO CONSERVE OR REJECT NAMES

Edited by John McNeill, Scott A. Redhead & John H. Wiersema

(2577) Proposal to conserve the name *Amphidoma* (*Dinophyceae*) as being of feminine gender and with a conserved typeUrban Tillmann¹ & Marc Gottschling²¹ Alfred Wegener Institut, Am Handelshafen 12, 27570 Bremerhaven, Germany² Department Biologie, Systematische Botanik und Mykologie, GeoBio-Center, Ludwig-Maximilians-Universität München, Menzinger Str. 67, 80638 München, GermanyAuthor for correspondence Marc Gottschling, gottschling@bio.lmu.deDOI <https://doi.org/10.12705/671.15>

(2577) *Amphidoma* F. Stein, Organism. Infusionsthier 3(2): 9, 20. Nov 1883, nom. & gen. fem. cons. prop.
 Typus: *A. nucula* F. Stein, typ. cons. prop.

In his seminal work, Stein (Organism. Infusionsthier 3(2): 9, 12, 13, 16, 19–21. 1883) introduced two generic names in the dinophytes ending with “-doma”, namely *Amphidoma* F. Stein and *Goniodoma* F. Stein, nom. rej. (Gottschling & Elbrächter in Taxon 64: 1051–1052. 2015; Wilson in Taxon 66: 742–744. 2017; Turland & al. in Taxon 66: 1236, 1238. 2017). The word’s ending, -doma, is derived from the Greek δῶμα (a house or a chamber of a house) presumably referring to the single cell’s container. The etymology was not provided by Stein (l.c.), but the alternative derivation from the Greek δόμα meaning gift is unlikely. The word δῶμα has the neuter gender (Sournia, Atlas Phytoplankt. Mar.: 78, 84. 1986; δόμα is neuter as well) as was discussed by Nicolson (in Taxon 43: 97–107. 1994), specifically referring in his Appendix (l.c.: 105) to *Amphidoma*. However, Stein (l.c.) adopted genders for the two names inconsistently: The combination *Goniodoma acuminatum* (Ehrenb.) F. Stein (perhaps influenced by the basionym, *Peridinium acuminatum* Ehrenb., being neuter), is in agreement with ICN Art. 23.5 (McNeill & al. in Regnum. Veg. 154. 2012), but he used the epithet “*acuminata*” in the feminine gender in *Amphidoma*. To the best of our knowledge, only this feminine interpretation of *Amphidoma* has been followed by all subsequent authors (except Sournia, l.c.), as all ten epithets of *Amphidoma* that are adjectival in form are feminine, whereas nine of the ten epithets of *Goniodoma* that are adjectival in form are neuter.

Following the guidelines specified by McNeill & al. (in Taxon 56: 249–252. 2007) and applying ICN Art. 14.11, we here propose to conserve the gender of *Amphidoma* as feminine. Acceptance of our proposal will maintain current usage (though incorrect and that ought to be corrected under ICN Art. 62.1) and therefore will assure nomenclatural stability. Rejection of the present proposal would require some ten changes of names in the dinophytes, with which the scientific community would be unfamiliar. The conserved feminine gender of *Amphidoma* would not be in competitive usage for

Goniodoma anymore, as *Scrippsiella* Balech is conserved against this latter name (Gottschling & Elbrächter, l.c.; Wilson, l.c.; Turland & al., l.c.). There are five other generic names ending in -doma, and our proposal is in agreement with the feminine gender being used for the angiosperm generic names *Chersodoma* Phil. (11 names), *Gyrodoma* Wild (1 name) and *Myrmedoma* Becc. (currently treated as a synonym of *Myrmephytum* Becc.), whereas only the two fungal generic names *Lecidoma* Gothl. Schneid. & Hertel and *Lepidoma* Link have species name correctly published as neuter.

Amphidoma is widely considered to have *A. nucula* F. Stein as its original type (e.g., Index Nominum Genericorum, <http://botany.si.edu/ing/>; Algaebase, <http://www.algaebase.org/>; Centre of Excellence for Dinophyte Taxonomy, http://www.dinophyta.org/index.php?option=com_content&task=view&id=148&Itemid=52; World Register of Marine Species – <http://www.marinespecies.org/>) on the basis that Stein (l.c.: 20) stated “... die Gatt. *Amphidoma* mit der allein sicheren Art *Amph. nucula* (Taf. IV, Fig. 21–24)” (the genus *Amphidoma* with only one certain species, *A. nucula*). However, Stein (l.c.) also included another new species, *A. acuminata* F. Stein, on plate 4 (fig. 25–26), of which he wrote: “Eine noch zweifelhafte Art mit nicht vollständig ausgebildetem Panzer” (a still doubtful species with not fully developed theca), but nevertheless accepted by him and validated by these illustrations under Art. 38.10.

Loeblich & Loeblich (in Stud. Trop. Oceanogr. 3: 16. 1966) designated *A. acuminata* as type of *Amphidoma*, and this first type designation must be accepted under ICN Art. 10.3, despite Stein’s doubt about the species. However, Loeblich & Loeblich’s (l.c.) decision is very unfortunate as *A. nucula* is much better documented and indeed, these authors appear just to have chosen the first name in alphabetical order. As *A. nucula* corresponds to the current concept of *Amphidoma* and as the recognition of *A. acuminata* as a member of *Amphidoma* is even doubtful, we are also taking the opportunity to propose that *A. nucula* be the conserved type of *Amphidoma*, confirming what many have long assumed. Rejection of this component of the proposal would weaken and destabilise the application of an important dinophyte generic name.