

(1234) Proposal to conserve the name *Acanthoceras* Honigm. (*Bacillariophyceae*) against *Acanthoceras* Kütz. (*Rhodophyceae*)

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(1234) *Acanthoceras* Honigm. in Arch. Hydrobiol. Planktonk. 5: 76. 16 Oct 1909 [*Bacillarioph.*: *Acanthocerat.*], *nom. cons. prop.*

Type: *A. magdeburgense* Honigm.

(H) *Acanthoceras* Kütz. in Linnaea 15: 731. Feb-Mar 1842 [*Rhodoph.*: *Ceram.*], *nom. rej. prop.*

Type: *A. shuttleworthianum* Kütz.

A recent paper (Edlund & Stoermer in J. Paleolimnol. 9: 55. 1993) noted the illegitimate status of the diatom *Acanthoceras* Honigm. as a later homonym of the red alga *Acanthoceras* Kütz. Kützing (in Linnaea 15: 731, 739. 1842) established *Acanthoceras* with the sole species *A. shuttleworthianum* Kütz., and later (Sp. Alg.: 684. 1849) added *A. echionotum* (J. Agardh) Kütz., *A. transcurrens* Kütz., and *A. oxyacanthum* Kütz. *A. shuttleworthianum* has long been treated as belonging to *Ceramium* Roth 1797, *nom. cons.* (J. Agardh, Spec. Gen. Ord. Alg. 2: 132. 1851; Silva in Taxon 8: 64. 1959; Dixon in J. Mar. Biol. Assoc. U. K. 39: 331, 375. 1960; Maggs & Hommersand, Seaweeds Brit. Isles 1(3A): 72. 1993). The other three species once assigned to *Acanthoceras* have been placed within the taxonomic synonymy of *C. echionotum* J. Agardh (DeToni, Syll. Alg. 4(3): 775. 1903). With the exception of *Centroceras* Kütz., the eight or so genera segregated from *Ceramium* by Kützing (in Linnaea 15: 727. 1842; Phycol. General.: 381. 1843; Sp. Alg.: 684. 1849) have never gained acceptance. When Norris (in Bot. Mar. 36: 389. 1993) recently proposed to narrow the generic limits of *Ceramium*, he made no attempt to resurrect *Acanthoceras* Kütz.

Honigmann (in Arch. Hydrobiol. Planktonk. 5: 71. 1909) described the unispecific freshwater diatom genus *Acanthoceras* based on *A. magdeburgense* Honigm. (including var. *latum* Honigm.). Honigmann's *Acanthoceras* was not immediately accepted by the scientific community; e.g., Schulz (in Bot. Arch. 24: 505. 1929), Hustedt (in Rabenh. Krypt.-Fl., ed. 2, 7(1): 367. 1930) and Huber-Pestalozzi (in Binnengewässer 16(2): 424. 1942) treated *A. magdeburgense* as a taxonomic synonym of *Attheya zachariasii* Brun.

West (in Trans. Roy. Microscop. Soc. London, ser. 2, 8: 147. 1860) erected *Attheya* based on the marine species *A. decora* T. West. Later, Brun (in Forschungsber. Biol. Stat. Plön 2: 53. 1894) described the freshwater taxon *A. zachariasii*. The only other freshwater taxa ever assigned to *Attheya* T. West were *A. lata* Wołosz. (in Kosmos (Lvov) 37: 134. 1912), nomenclaturally independent of *Acanthoceras magdeburgense* var. *latum* Honigm., and *Attheya zachariasii* var. *curvata* P. Rivera (in Bol. Soc. Biol. Concepción 47: 89. 1974).

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Simonsen (in *Bacillaria* 2: 55. 1979) recognized differences between *Attheya decora* and *A. zachariasii* and proposed reinstating *Acanthoceras* Honigm. as a unispecific freshwater genus, making the combination *Acanthoceras zachariasii* (Brun) Simonsen, and placing Honigmann's *A. magdeburgense* and var. *latum* in synonymy. Separation of *Acanthoceras* from *Attheya* is clearly supported by ecological and ultrastructural differences (Round & al., *Diatoms*: 338, 340. 1990; Crawford & al. in *Diatom Res.* 9: 27. 1994). *Acanthoceras* is currently held to be a cosmopolitan unispecific genus inhabiting eutrophic freshwater rivers, lakes and ponds (Krammer & Lange-Bertalot in Ettl & al., *Süßwasserfl. Mitteleur.* 2(3): 83. 1991). The freshwater habit and published descriptions of *Attheya lata* and *A. zachariasii* var. *curvata* suggest that they too belong within the circumscription of *Acanthoceras*. *Acanthoceras* Honigm. has gained general acceptance in spite of its illegitimate status (Round & al., *Diatoms*: 338 1990; Krammer & Lange-Bertalot in Ettl & al., *Süßwasserfl. Mitteleur.* 2(3): 83. 1991; Edlund & Stoermer in *J. Paleolimnol.* 9: 55. 1993; Greuter & al. in *Regnum Veg.* 129: 3. 1993) and provides the basis for the recently proposed, equally illegitimate family name *Acanthocerataceae* R. M. Crawford & Round (in Round & al., *Diatoms*: 657. 1990). Its status as a later homonym of *Acanthoceras* Kütz. has been recognized for some time (Farr & al. in *Regnum Veg.* 100: 5. 1979). We now propose that it be conserved. Recent discussions among diatomologists (Compère in *Hydrobiologia* 269-270: 515. 1993) support this proposal which, if accepted, will also legitimize the family name *Acanthocerataceae*.

The other option available to correct this situation is to publish a new genus and family name for this small diatom group. These transfers could be easily made as *Acanthoceras* Honigm. is considered unispecific by most. However, erecting a new genus and family would be in disagreement with the resolutions quoted in the Preface of the *Tokyo Code*, that displacing well established names for strictly nomenclatural reasons should be avoided.

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