

Updates to some names used for microalgal taxa in Australia

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Day *et al.* (1995) compiled the first comprehensive check-list of the non-marine algae in Australia. This list forms the basis for part of the Australian National Species List (NSL), which will have a complete list for the algae at a later date). Some of the names require nomenclatural validation prior to inclusion in the NSL. The nomenclatural status of a parasitic dinoflagellate is also clarified.

Synedra ulna var. delicatula (Ant.Mayer) A.D.Hardy ex R.A.Townsend, comb. nov.

Basionym: Synedra delicatula Ant.Mayer Kryptogamische Forschungen herausgegeben von der Kryptogamenkommission der Bayerischen Botanischen Gesellschaft zur Erforschung der heimischen 1(4): 197, 212, 1919.

Notes: The invalid designation "Synedra ulna var. delicatula (Ant.Mayer) unknown authority" is listed in AlgaeBase (Guiry & Guiry 2020) based upon a record in Day et al. (1995). This name first appeared in manuscripts compiled by Alfred Douglas Hardy (1870-1958) from 1931-1956 but is invalid as it appeared in a manuscript that did not meet the requirements for effective publication (ICN Arts 29, 30; Turland et al. 2018). The appropriate combination is validated here.

Tribonema bombycinum var. pallidum (Kütz.) R.A. Townsend, comb. nov.

Basionym: Conferva bombycina var. pallidum ('pallida') Kützing, Species algarum, p. 372, 1849. Notes: "Tribonema bombycinum var. pallidum (Kützing) unknown authority" appears in AlgaeBase as a name of uncertain status. Day et al. (1995: 256) list Tribonema bombycinum var. pallidum Kützing and Conferva bombycina var. pallidum Kützing and attribute the record to Entwisle (1994). The combination was not validated by Entwisle (1994) and is validated here.

Triploceras gracile f. *undulatum* (A.M.Scott & Prescott) R.A.Townsend, *comb. nov.* Basionym: *Triploceras gracile* var. *undulatum* A.M.Scott & Prescott *Records of the American-*

Australian Scientific Expedition to Arnhem Land 3: 27, fig. 3: 8, 1958.

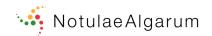
Notes: "Triploceras gracile f. 1" sensu H.U.Ling & P.A.Tyler appears in the freshwater literature of Australia (Ling & Tyler 1986: 55). Ling & Tyler remark, "This plant is identical to *Triploceras gracile* var. undulatum described by Scott and Prescott (1958a, p. 27, fig. 3: 8)" but the authors include only a numbered form. Such unnumbered forms have no status nomenclaturally and it seems appropriate to validate the name here pending further studies.

Hematodinium australe D.A.Hudson & J.D.Shields

This dinoflagellate was described parasitising crabs in Moreton Bay, Queensland. A very descriptive and useful account was provided (Hudson & Shields 1994, as *Hematodinium australis*). Since the name does not appear in INA and appears with minimal information in AlgaeBase we here clarify the status of the name.

Description and illustrations: *Diseases of Aquatic Organisms* 19: 111-113 figs 6-9 (Hudson & Shields 1994).

Type locality: Australia: Queensland: Brisbane: Moreton Bay, 153" 06' E, 27" 18' S (Hudson & Shields 1994).



- Type ("Hapantotype"): slide and an EM block deposited with the Invertebrate Section of the Queensland Museum, Accession Numbers G 211359, material from a crab, *Portunus pelagicus*, collected 21 March 1992 (Hudson & Shields 1994).
- Etymology: the specific epithet, *australe*, refers to the southern continent, Australia, the region in which the parasite was discovered (Hudson & Shields 1994).
- Notes: Although the Hudson & Shields (1994) do not mention the International Code of Zoological Nomenclature (ICZN), their use of the term "hapantotype" and the family name "Syndini[i]dae" provides internal evidence that they intended to use the ICZN. Accordingly, under ICN Art. 45 (Turland *et al.* 2018) this name is valid as it satisfies the requirements of the ICZN for validity. "Hapantotype" is a term not used in Botany but is employed in Zoology for a preparation or preparations consisting of directly related individuals representing distinct stages in the life cycle.

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