

Case 3166***Campanularia noliformis* McCrady, 1859 (currently *Clytia noliformis*; Cnidaria, Hydrozoa): proposed conservation of the specific name by the designation of a neotype**

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Abstract. The purpose of this application is to conserve the name *Clytia noliformis* (McCrady, 1859) for a well-known marine hydroid (family CAMPANULARIIDAE). McCrady's (1859) type material of *C. noliformis* is lost but the hydroid he described is now believed to have been a different species from *C. noliformis* auct. and perhaps conspecific with *C. hemisphaerica* (Linnaeus, 1767). It is proposed that a neotype be designated for *C. noliformis* in accord with usage during the past 100 years. The species *noliformis* as currently understood occurs circumtropically and is common on pelagic *Sargassum* and benthic substrates.

Keywords. Nomenclature; taxonomy; Cnidaria; Hydrozoa; CAMPANULARIIDAE; hydroids; medusae; *Clytia noliformis*; *Clytia hemisphaerica*.

1. McCrady (1859, p. 194) established the name *Campanularia noliformis* for the immature medusa and hydroid stages of a hydrozoan species from Charleston Harbor, South Carolina. The specific name is now generally combined with *Clytia* Lamouroux, 1812 (p. 184). The type material of *Clytia noliformis* is lost, probably having been destroyed during the American Civil War. None of McCrady's material has been found at the Charleston Museum (see Calder, 1983, pp. 10, 24) and none has been located at the Museum of Comparative Zoology, Harvard University, where McCrady was employed from 1873 to 1876 (see Calder, 1991, p. 67). No previous neotype designation has been made.

2. The original description of *Clytia noliformis* by McCrady (1859), which included an illustration (pl. 11, fig. 4) of a young medusa, provides little basis for differentiation of the species from several others of the genus. Based on current evidence it seems unlikely that McCrady's species and the hydrozoan known today as *C. noliformis* are the same species. One of us (Calder, 1991, p. 67) noted that

McCrary's description of the hydroid, including the gonotheca, more closely resembles *Clytia hemisphaerica* (Linnaeus, 1767, p. 1098, published as *Medusa hemisphaerica*) than *C. noliformis* auct. Moreover, in Charleston Harbor, South Carolina (the type locality of *C. noliformis*) hydroids corresponding with *C. hemisphaerica* (Linnaeus, 1767) were common to abundant in collections made between 1973–1981, often on the same substrates noted by McCrary (1859) for *C. noliformis* (see Calder, 1991, p. 67). *Clytia noliformis* auct. was never found in those collections.

3. Misuse of the name *Clytia noliformis* is long standing. Misidentification of McCrary's (1859) species, and misapplication of the name to the species of *Clytia* abundant on pelagic *Sargassum* in the North Atlantic, took place early in the 20th century (see Nutting, 1901, 1915; Wallace, 1909; Kingsley, 1910; Fraser, 1912, Stechow, 1925). The name *C. noliformis* has since been applied to a well-known hydroid species, also found on benthic macroalgae and invertebrates, differing from *C. hemisphaerica* in the shape of its hydrothecae and gonothecae, and probably different from that observed by McCrary (1859) (see, for example, Fraser, 1943, 1947; Mammen, 1965; Rees & Thursfield, 1965; Rees & White, 1966; Boero, 1981; Spracklin, 1982; Niermann, 1986; Calder, 1986, 1991, 1995, 1998; Stachowicz & Lindquist, 1997. A list of a further seven references demonstrating the current usage of *C. noliformis* is held by the Commission Secretariat).

4. Recognition of McCrary's species as *Clytia hemisphaerica* (Linnaeus, 1767) would mean the loss of the name *C. noliformis* as a junior synonym, and a new name would be needed for the taxon currently known as *C. noliformis*, resulting in confusion in the use of names. No synonym is available as a substitute name for *C. noliformis* auct. (see Calder, 1991, pp. 65, 68). Another name applied to the species, *Clytia simplex* Congdon, 1907 (p. 471), is an invalid junior secondary homonym of *Clytia simplex* (Browne, 1902, p. 282, published as *Phialidium simplex*). *Epenthesis folleata* McCrary, 1859 (p. 191), considered identical or questionably so with *C. noliformis* by some authors (see Brooks, 1883, p. 138; Vannucci Mendes, 1946, p. 549; West & Renshaw, 1970, p. 332), seems closer to *Clytia gracilis* (M. Sars, 1850, p. 138, published as *Laomedea gracilis*) or to *C. hemisphaerica* than to *C. noliformis* auct. (see Calder, 1991, p. 68). Reasons for not using other names were also provided by Calder (1991, p. 68).

5. In 1991 one of us (Calder, pp. 65, 68) recorded that an application to the Commission was required to conserve the widespread use of the name *Clytia noliformis* (McCrary, 1859). We propose the stabilization of the name in its current meaning by the designation of a neotype. In accord with Article 72.5.2 of the Code, the proposed neotype is a fertile hydroid colony deposited in the Centre for Biodiversity and Conservation Biology at the Royal Ontario Museum, Toronto, Canada, collection number ROMIZ B365. It was collected in Castle Harbour, Bermuda, on a dead octocoral, by Dale Calder on 1 October 1986. The hydroid colony is accompanied by 35 one-day-old medusae, released from the hydroid in the laboratory. Parts of the hydroid colony of the proposed neotype, as well as accompanying medusa stages, were illustrated by Calder (1991, p. 66, figs. 36a, d, e and f).

6. The International Commission on Zoological Nomenclature is accordingly asked:

- (1) to use its plenary power to set aside all previous fixations of type specimens for the nominal species *Campanularia noliformis* McCrady, 1859 and to designate as neotype the hydroid colony, collection no. ROMIZ B365, described in para. 5 above;
- (2) to place on the Official List of Specific Names in Zoology the name *noliformis* McCrady, 1859, as published in the binomen *Campanularia noliformis* and as defined by the neotype designated in (1) above.

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