

## Corrections to the nomenclature of genus *Diatoma* (Bacillariophyta: Fragilariaceae)

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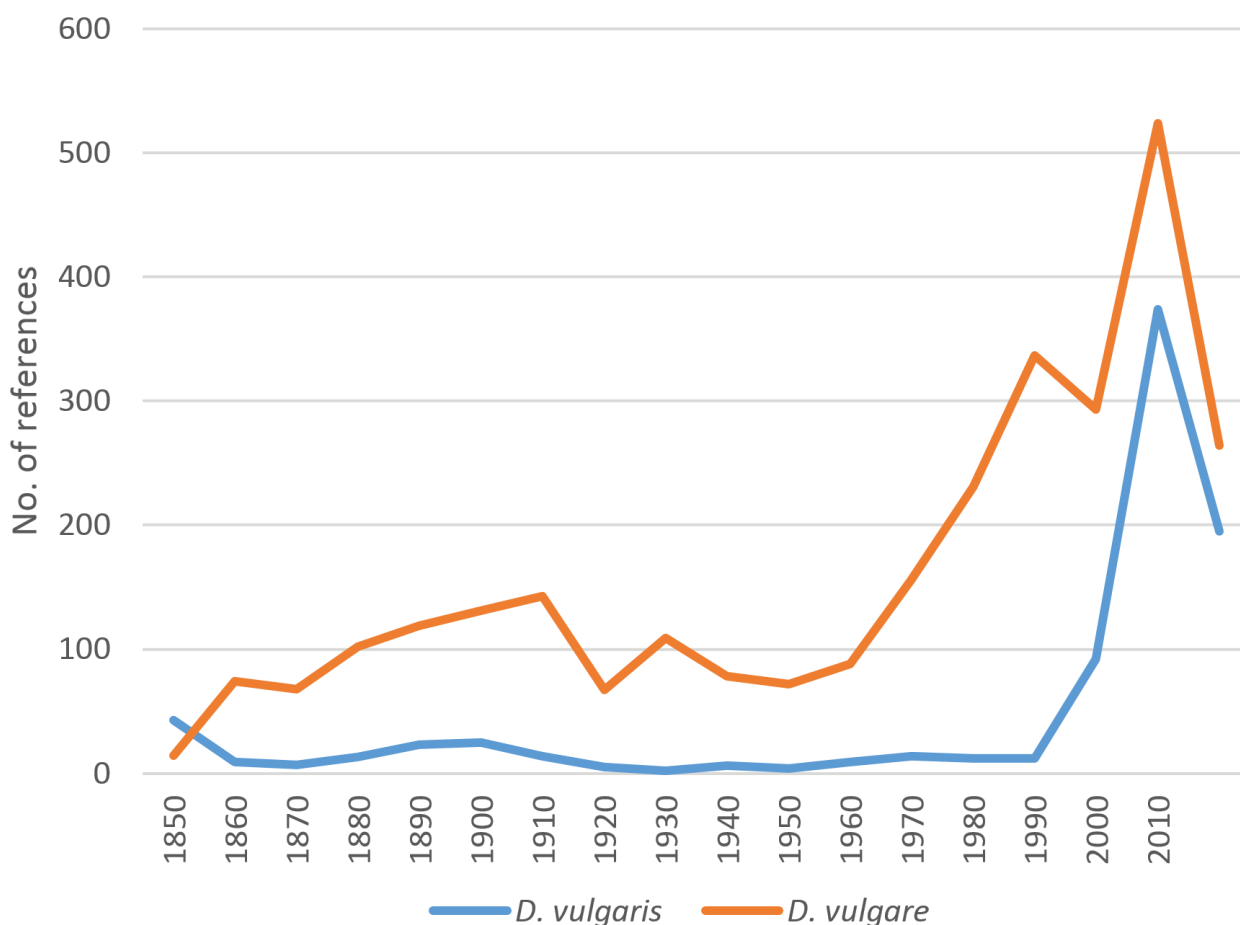
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Within plants, algae and fungi, the rules of nomenclature (ICN, McNeill *et al.* 2012) require that adjectival specific—and infraspecific—epithets agree grammatically (gender concordance) with the generic name. Epithets not conforming to this rule, although validly published, are to be corrected (ICN art. 23.5) without change of the author citation or date. Despite that the original spelling of these epithets is generally to be retained (art. 60.1), improper Latin terminations are always to be changed to accord with, among others, the mentioned art. 23.5 (art. 32.2).

From a philological point of view, the gender of genus *Diatoma* Bory (1824: 461) is not evident. Generic names derived from Greek which end in *-ma* (*-μα*) are neuter, unless this is a rendering of *-mê* (*-μη*) (Stearn 1973). Christensen (1991) agrees that, despite Greek words formed on *-ομα* are neuter, *Diatoma* comes from the Greek *Διατομή* (which means “incision” or “cut in half”), and these Greek words ending in *-ομη*—which gives *-oma* in Latin—are feminine. Nicolson (1994) states explicitly that *Diatoma* is feminine (see also Zabinkova 1965).



**FIGURE 1.** References to ‘*Diatoma vulgare*’ and ‘*Diatoma vulgaris*’ in the literature since original description (1824), based on Google Scholar and Google Books results.

Art. 62.1 states that “a generic name retains the gender assigned by nomenclatural tradition, irrespective of classical usage or the author’s original usage”. For *Diatoma*, the literature has used predominantly neuter combinations (Hartman 1967). For example, we have observed (fig. 1) that the use of the neuter ‘*Diatoma vulgare*’ has been much more frequent than the correct feminine ‘*Diatoma vulgaris*’ through the last decades. Although Bory did not designate a generic type, his use of ‘*Diatoma vulgaris*’ confirms that he treated *Diatoma* as feminine, although most subsequent authors did not follow this criterion. As Bory acknowledges (Fourtanier & Kociolek 1999), he adopted a designation used earlier (*Diatoma* de Candolle in Lamarck 1805: 48) for this genus of araphid diatoms, so that Kanitz (1887) superfluously published the substitute name *Neodiatoma* Kanitz (1887: 5) to which a few species were transferred. Noteworthy, *Diatoma* had been used earlier to designate the Rhizophoraceae *Diatoma* Loureiro (1790: 296), *nom. rej.* (≡ *Carallia* Roxburgh 1811: 8) and, despite de Candolle considering *Diatoma* as neuter, both Loureiro’s *Diatoma* and Kanitz’s *Neodiatoma* (Guiry & Guiry 2014) are commonly (and originally) treated as feminine. When Bory’s *Diatoma* was conserved against previous usages (Lanjouw *et al.* 1961: 208), the proposed conserved type *D. vulgaris* was intentionally corrected to ‘*D. vulgare*’, erroneously assuming that the original feminine form was wrong (Christensen 1991). Later (and current) editions of the *Nomina generica conservanda* corrected it to *D. vulgaris*. According to art. 14.11, “a name may be conserved in order to preserve a particular spelling or gender”, and, despite *Diatoma* Bory was not preserved for this reason (but to preserve nomenclatural stability), we consider that the publication of *D. vulgaris* as the conserved type of *Diatoma* Bory, *nom. cons.* [“*Diatoma* Bory, Dict. Class. Hist. Nat. 5: 461. 15 Mai 1824. Typus: *D. vulgaris* Bory (typ. cons.)”] confirms also the gender of *Diatoma* as feminine.

Therefore, we provide hereby a corrected list of commonly referred *Diatoma* taxa (with adjectival epithets) known to have been used recently with improper terminations. Other combinations may be corrected henceforth likewise:

- Diatoma moniliformis* (Kützing 1833: 580) D.M. Williams (2012: 260)  
*Diatoma vulgaris* Bory (1824: 461)  
*Diatoma vugaris* var. *brevis* Grunow (1862: 49)  
*Diatoma vulgaris* var. *producta* Grunow (1862: 49)  
*Diatoma vulgaris* var. *ovalis* (Fricke in Schmidt *et al.* 1874–1944: 268) Lange-Bertalot *et al.* (1991: 116–117)  
*Diatoma vulgaris* var. *linearis* Grunow in Van Heurck (1881: 50)  
*Diatoma tenuis* C. Agardh (1812: 15)

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