

A new *Gomphonema* (Bacillariophyceae) from Mediterranean streams

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A new benthic diatom species of the genus *Gomphonema* is described with light (LM) and scanning electron microscopy (SEM) observations. Valves have a clavate shape; striae are slightly radial, the central ones being shorter than the others. One stigma and two to four stigmoids are present in the central area. Only the central stigma is easily resolvable with LM. SEM analyses revealed that striae have double rows of bean-shaped areolae. The central stigma opens in the internal side of the valve as a slit in the central nodule, while the stigmoids located around the central area are only externally visible. In connective view, an uninterrupted line of puncta is present on the valve mantle.

This new *Gomphonema* was collected as part of the epilithic diatom assemblages of three calcareous and oligo-mesotrophic Mediterranean watercourses: Farfa stream (Central Italy), Bévéra and Paillon streams (South-Eastern France). This taxon seems to prefer alkaline waters with average to high electrolyte content. Along Farfa stream it was present throughout the whole year, more abundant in winter, with a maximum relative abundance of 4%, while in the French sites it was less than 2%. The most common diatom taxa associated were: *Achnanthydium minutissimum*, *A. pyrenaicum*, *Amphora pediculus*, *Cocconeis euglypta*, *C. pediculus*, *Cymbella excisa*, *Gomphonema olivaceum*, *G. pumilum* var. *elegans*, *Nitzschia fonticola*, *N. dissipata* and *Rhoicosphenia abbreviata*.