

PRELIMINARY OBSERVATIONS ON SOME COMMONLY REPORTED
FRESHWATER *NITZSCHIA* HASSALL SPECIES FROM RIVERS IN THE USA

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With over 300 taxa reported from the continental USA, species of the diatom genus *Nitzschia* Hassall are commonly reported in the freshwater diatom flora. However, there are very few taxonomic studies of *Nitzschia* species from the flora, and only 15 species have been described as new from USA localities; most of the reported species are those originally described from other continents and dealt with in common European floras. We reviewed the commonly reported *Nitzschia* species from studies on rivers in the USA, to better circumscribe the species present in the USA flora, and to provide aids in the identification of the species present. We have treated over 50 of these species, and present LM and SEM observations, comparison with type material, nomenclatural notes and have attempted to verify the species reported. We conclude the *Nitzschia* flora has more endemic species than previously recognized, and that some commonly reported, cosmopolitan taxa cannot at this time be verified in the USA flora. Many of the *Nitzschia* species described from U.S. localities by authors such as Sovereign, Hohn and Hellerman and Camburn have not been identified in recent surveys. None of the common *Nitzschia* taxa described by Friedrich Hustedt previously recorded could be verified as present in the U.S. flora. Taxa such as *Nitzschia dissipata* var. *oligotrphenta* are actually indicators of low nutrient conditions. Eight new species of the genus are described. Additional work is required to more fully understand the *Nitzschia* species occurring in the USA freshwater diatom flora.

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