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**Reinvestigation of diatom species described  
by A.I. Proshkina-Lavrenko from the Black Sea.  
Light and electron microscopic studies of the original samples**

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Diatom assemblages from the Black Sea were studied by A.I. Proshkina-Lavrenko during a few decades of the last century. She published two comprehensive books on planktonic and benthic diatoms respectively and numerous shorter papers. In these publications she described many new species and infraspecific taxa which were predominantly illustrated with line drawings or rarely with LM images.

The purpose of our investigations is analysis of original materials (samples and microscopic slides) from Proshkina-Lavrenko collection with modern LM and SEM techniques. We have been able to match the LM and SEM with numerous documentation described by Proshkina-Lavrenko. Included in the group of such taxa are species representing: *Amphora*, *Navicula* s.l., *Surirella*, *Mastogloia*, *Diploneis* and *Nitzschia*. Morphology and taxonomy of taxa from these genera are discussed in our contribution with special focus on *Amphora* and *Navicula* s.l. Numerous species described by Proshkina-Lavrenko and accommodated with the above genera were recently transferred to e.g. *Seminavis* D.G. Mann, *Parlibellus* Cox, *Fallacia* Stickle & D.G. Mann or *Haslea* Simonsen. Here we propose new combinations for the taxa described by Proshkina-Lavrenko, which were left unattended since their original publication. In addition we provide information on biodiversity (species richness) in samples of Proshkina-Lavrenko and illustrate ultrastructure of rare and interesting species from the Black Sea.

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