

عنوان مقاله:

Isolation, purification and identification of three diatom species (Bacillariophyceae) from Gomishan wetland (N. Iran) using phylogeny and silica cell wall ultra-structure analysis

محل انتشار:

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خلاصه مقاله:

Diatoms of Gomishan wetland (Golestan province, N. Iran), one of the most significant habitats in the eastern shore of the Caspian Sea, has been isolated, purified and identified during ۲۰۱۳. Using serial dilution and streaking on F/۲ medium, pure, monoalgal and axenic cultures of the isolates were prepared. The isolates were characterized and identified using micro-morphological studies on the prepared permanent slides followed by scanning electron-microscopy. To prove the identification results, the most reliable genomic sequence fragments were investigated using GenBank database. Thus, SSU was amplified and analyzed, phylogenetically. The morphology and sequence data of three isolates were assessed which indicated that, the results of phylogenetic analyses of SSU-based sequences can support the morphological studies data. Finally, the isolates were introduced as *Fallacia pygmaea*, *Halamphora coffeiformis* and *Navicula veneta*.

کلمات کلیدی:

Algae, Phytoplankton, pure culture, 18s rDNA

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