## The study of diatoms in Noshahr Area in order to cage culture FatemehSadat Tahami\*1, Alireza Keyhansani², Mojgan Rowshan Tabari³, Ehteram al Sadat Alavi Tabari⁴, Marzie Rezaei⁵, Reza Gashtasbi⁶, Hossein Hassannia⁵

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## Abstract

The aim of this study was to identify and recognize the temporal and spatial variations of the diatoms in the Southern Caspian Sea region of Noshahr in order to assess the diversity, density and density of the diatomaceous branches as the most important branch of phytoplankton in the Caspian Sea ecosystem. Sampling was carried out in spring, summer, autumn and winter seasons in Noshahr station. In this station have choosen 5 stations and different depths of 5 m, 10 m, 20 m, 50 m and 100 m were sampled quarterly from the zero depth (level), 10 m, 20 m, 50 m and 100 m were by Niskin sampler. The dominant species include *Pseudonitzschia seriata Ahizosolenia fragilissima Stephanodiscos* sp. *Melosira varians Nitzschia acicularis Cyclotella menenghiniana*. highest species diversity was in the spring and gradually decreased in the summer, autumn and winter seasons.

**Keywords:** Phytoplankton, River, Caspian Sea, Diatome, Seasonal Diversity