

# **Study of species diversity of Euglenophyta in the southern Caspian Sea (Noshahr region) as an indicator of organic matter contamination**

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## **Abstract**

Awareness of the combination and diversity of the Euglenophytes leads to a clear picture about comments on the nutritional conditions of the lake. Euglenophyte live in fresh and salty waters. They are more abundant in waters with more organic matter. This study was conducted for one year and in the seasons of spring, summer, autumn and winter on the Iranian coast of the Caspian Sea in the Noshahr area before fish cages. Sampling was carried out at 5 stations at depths of 5 m, 10 m, 20 m, 50 m and 100 m. In the southern basin of the Caspian Sea, the species *E. proxima*, *E. caudata* and *E. polymorpha* were identified. . Some species of this

group are found in environments with high concentrations of organic matter and high temperatures that were observed in the southern Caspian Sea basin.

**Keywords:** Euglenophyte, heterotrophic, phytoplankton, Noshahr, Caspian Sea