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**P14: Morphological variation within the *Placoneis elginensis* (W.Gregory) E.J.Cox species complex**

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Freshwater diatom species *Placoneis elginensis* (W.Gregory) E.J.Cox was originally described in 1856 as *Pinnularia elginensis* W.Gregory. Because it is often confused with other species, its distribution requires closer investigation. The *Placoneis elginensis* species complex includes taxa with elliptic-lanceolate to linear-lanceolate valve shapes and capitate to rostrate apices. At present, six taxa are known from this complex: *P. elginensis*, *P. paraelginensis* Lange-Bertalot, *P. abiskoensis* (Hustedt) Lange-Bertalot & Metzeltin, *P. ignorata* (Schimanski) Lange-Bertalot, *P. rostrata* (Ant.Mayer) E.J.Cox and *P. undulata* (Østrup) Lange-Bertalot. Most of these taxa are widely distributed and rarely found in high numbers. They can occur in habitats with different environmental conditions, but mostly, they prefer mesotrophic to eutrophic waters with medium electrolyte content. During observations of different habitats (lakes, ponds, streams, wetlands, peat bogs) throughout North Macedonia seven species were recorded. In Taor canal (near the city of Skopje), on mud, one new species from this complex was observed. It is characterized by elliptic-lanceolate valves with distinctly capitate apices, broad central area and distantly spaced striae (10–12 in 10 µm). All seven species are illustrated with LM and SEM and their morphological features are compared. Additionally, shape analyses of all species have been performed using software DiaOutline. For visualization and statistical evaluations, Principal Component Analyses (PCA), and Linear Discriminant Analyses (LDA) were used. Results showed that all analyzed species are significantly different with respect to the valve shape. Important separating features for the identification of species from this complex include valve shape, valve margin, shape of the valve apices and stria density.