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MICROMORPHOLOGY OF POLLEN GRAINS OF THREE CULTIVARS OF *PRUNUS ARMENIACA* L.

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Pollen grains of various cultivars of *Prunus armeniaca* L. produce striated sculpture of the exine. These grains are included in the trizonocolporate class. In polar view, pollen grains have a triangular outline, while in equatorial view an elliptical outline. The exine of grains forms a pattern of striae characteristic for a given taxon. Flowers of various *P. armeniaca* cultivars produce pollen grains with the polar (P) and equatorial (E) length ranging 31-60 μm and 24-36 μm, respectively.

The aim of this study was to determine the micromorphology of pollen grains of three *P. armeniaca* cultivars – *'Harcot', 'Early Orange'* and *'Wczesna z Morden',* using light and scanning electron microscopy.

A comparative study of the morphological characteristics of pollen grains was carried out to determine their size, shape and exine ornamentation. Observations of pollen grains were performed under a light microscope (Nikon Eclipse 400) and a scanning electron microscope (SEM) (Tescan Vega II LMU).

In terms of their size, pollen grains of the studied *P. armeniaca* cultivars were classified as large. Their shape was determined to be prolatum. In equatorial view of pollen grains, the striae run along the polar axis. These structures in the exine are arranged parallel to each other, can be branched or arched. The width of striae ranges from 0.27 μm (*'Early Orange'*) to 0.62 μm (*'Harcot'*). The largest distances between the striae were found in pollen grains of *'Harcot'* (0.33 μm), whereas much smaller distances were observed in *'Early Orange'* and *'Wczesna z Morden'* (0.13-0.14 μm). In pollen grains of *P. armeniaca* the tectum is perforated. In an area of 10 μm^2, the tectum forms 4-9 perforations with a pore diameter of 0.1-0.6 μm.