

Vojtěchová K., Kobrlová L., Schönswetter P. & Duchoslav M. (2023) Disentangling the taxonomic structure of the *Allium paniculatum* species complex in central and eastern Europe using molecular, cytogenetic and morphological tools. – Preslia 95: 119–163.

Supplementary Material S1. – Anatomical structure of the leaf blades of the taxonomic groups studied and the transverse cross section of the leaf of *Allium marginatum*, showing sunken stomatal apparatus in the cuticle layer.

The anatomical structure of leaf blades was similar among taxonomic groups (Figs 8, 9). Epidermal cells were isodiametric or slightly wider than high or slightly higher than wide. Above the epidermal cells there was a very thick layer of cuticle interrupted only by the front stomatal cavity. A few epidermal cells over the ribs were larger in *A. fuscum* and *A. marginatum*. In *A. paniculatum* and *A. podolicum* these cells were of normal size, due to their almost non-ribbed outline. The layer of cuticle over the ribs was also much thicker. The guard cells of the stomata were slightly sunken below the epidermal cells. Guard cells were smaller compared to epidermal cells (approximately half to two-thirds of the height of epidermal cells), with conspicuous outer cuticular lips (Fig. 9).

The palisade tissue formed a compact ring of 1–3 layers of elongated cells; the number of layers varied between specimens and was not specific for any taxonomic group (Fig. 8). Spongy mesophyll cells were circular to elliptical, in several layers, enlarging inward but breaking up to form a large central cavity. Laticifer cells were intraparenchymatous, very numerous, thin-walled, and isodiametric/circular in outline. Vascular bundles were arranged in one ring in the spongy mesophyll, the xylem was facing inward in the leaf, and the phloem was facing outward. Vascular bundles were oval to elongated, varying in size, consisting mainly of alternating large and small ones. Larger vascular bundles were observed on the abaxial side of the leaf compared to the adaxial side, with the largest vascular bundle always located in the centre of the abaxial side of the leaf. In plants with a ribbed outline (*A. fuscum*, *A. podolicum*), one larger bundle was in each rib. The numbers of bundles varied both within and between taxonomic groups.

Transverse cross section of the leaf of *Allium marginatum* (below) shows sunken stomatal apparatus in the cuticle layer, with developed cuticular ridge around the entrance to the front stomatal cavity (population no. 16).

