



COMPARATIVE ANATOMY OF THE LIP SPUR AND ADDITIONAL LATERAL SEPAL SPURS IN A THREE-SPURRED FORM (F. FUMEAUXIANA) OF ANACAMPTIS PYRAMIDALIS

AGNIESZKA K. KOWALKOWSKA1,* HANNA B. MARGOŃSKA2, AND MAŁGORZATA KOZIERADZKA-KISZKURNO1

1Department of Plant Cytology and Embryology, University of Gdańsk, ul. Kładki 24, 80-952 Gdańsk, Poland 2Department of Plant Taxonomy and Nature Conservation, University of Gdańsk, ul. Legionów 9, 80-441 Gdańsk, Poland

e-mail: dokakow@univ.gda.pl

Received February 1, 2009; revision accepted December 12, 2009

Anacamptis pyramidalis shows great phenotypic variability. Additional lateral sepal spurs were observed in f. fumeauxiana. We used light and scanning electron microscopy to examine the anatomy of the lip spur and additional lateral sepal spur(s). The spurs have the same anatomical structure. We describe the features of the inner and external epidermis, report the presence of an appendix at the base of the additional spur, and discuss the evolutionary context.

Key words: *Anacamptis pyramidalis* (L.) L.C. Rich. f. *fumeauxiana* Marg. & A. Kow., anatomy, histochemistry,

light microscopy, scanning electron microscopy, lip spur, lateral sepal spur.