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POLLEN MORPHOLOGY OF TRIBE ANDROSACEAE (PRIMULACEAE)

© 2021 D. A. Britskii^{a,#} and V. V. Grigoryeva^{a,##}

^a Komarov Botanical Institute RAS Prof. Popova Str., 2, St. Petersburg, 197376, Russia

#e-mail: dmibri@mail.ru
##e-mail: mikhailov_val@mail.ru

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The pollen morphology of 26 species of Androsace, 7 of Douglasia, 6 of Primula, 1 of Vitaliana and 1 of Pomatosace was examined using the light and scanning electron microscope with respect to the taxonomy of the tribe Androsaceae. The pollen grains of Androsaceae are radially symmetrical, isopolar, 3-colporate, subspheroidal, elliptic or prolate, small or medium-sized (ranging in size from 10.3 µm in Androsace to 28.8 µm in Vitaliana), with perforate, microreticulate, rugulate-perforate, microverrucate exine. The shape in polar view is trilobate, almost circular or triangular, the shape in equator view is almost circular, elliptic or rectangular. The colpi are long and narrow, the endoapertures are circular or lalongate. The palynological data do not agree with the systems of Androsace. It seems to be difficult to differentiate sections of Androsace, except for the section Megista. The palynological data supports the inclusion of Douglasia, Pomatosace and Vitaliana in Androsace. The pollen morphology of most Androsace is unique within Primulaceae. However, pollen of some species of Androsace (A. gmelini, A. henryi, A. rotundifolia) is similar to that of some Primula (for example, P. darialica, P. farinifolia, P. forbesii, P. longiscapa, P. malacoides, P. zeylamica).

Keywords: Androsace, Douglasia, Vitaliana, Pomatosace, Primula, Primulaceae, pollen morphology

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