

EVIDENCE OF PROTANDRY IN *Aa* RCHB.F. (ORCHIDACEAE, CRANICHIDEAE)

DELSY TRUJILLO*, THASSILO FRANKE & REINHARD AGERER

Department Biology: Organismic Biology, Systematic Botany and Mycology,
Ludwig Maximilians Universität München, Menzinger Str. 67. 80638 Munich, Germany

* Corresponding author: delsytrujillo@gmail.com

Protandry has been described in orchids since Darwin (1862) as a strategy to promote cross-pollination. Three different forms of protandry have been reported in tribe Cranichideae: downward movement of the labellum in *Spiranthes* species, upward movement of the column in *Sauroglossum elatum* Lindl. and *Manniella* spp., and downward movement of the column in *Prescottia stachyodes* (Sw.) Lindl. In the present work, through longitudinal and transverse sections of flowers of different developmental stages, we reported column movement of *Aa erosa* (Rchb.f.) Schltr. and the mechanism responsible for

the movement. Our result shows that in an early flower stage (male phase), the column of *Aa erosa* is straight. The gradual cell death of the dorsal side of the column and size increase of the cells of the ventral side cause the column to bend downward to almost 90° representing the female stage. Some authors have suggested self-pollination in *Aa*. But flies exploring inflorescences of *Aa* species have been observed in the field by the author. This observation plus the evidence of protandry in *Aa erosa* could discard self-pollination as the only strategy of pollination in this genus.