## **Turkish Journal of Botany**

**Turkish Journal** 

On the Taxonomy of Plantaginaceae Juss. Sensu Lato: evidence from SEM of the Seed Coat

of

Azza A. SHEHATA

**Botany** 

Botany Department, Faculty of Science, Alexandria University, Alexandria, Egypt

Mohammed Hesham A. LOUTFY

Biological Science and Geology Department, Faculty of Education, Ain Shams University, Roxy (Heliopolis) P.C. 1134 Cairo, Egypt



Abstract: SEM of the seed coat was studied in 41 taxa of the Plantaginaceae sensu lato. The study included 31 taxa of Plantago L. and 10 taxa that were formerly assigned to the Scrophulariaceae, representing the genera Antirrhinum L., Digitalis L., Linaria Mill. and Veronica L. The obtained data were analysed by the NT sys-PC program package using the UPGMA clustering method. The study showed that Veronica possessed certain affinities to Plantago species, thus giving extra support to earlier views that Plantaginaceae sensu stricto and Scrophulariaceae sensu lato are allied through Veronica. The study also favoured the paraphyly of Plantago subgenus Albicans sensu Rahn (1996) and the retention of P. camtschatica Link. subgenus Plantago L. and P. alpina L., P. crassifolia Forssk. and P. salsa Pall. subgenus Coronopus (Lam. & DC.) Rahn as distinct taxa. The monophyly of Plantaginaceae sensu lato was reassessed to a certain extent.



bot@tubitak.gov.tr

Scientific Journals Home Page **Key Words:** Plantaginaceae, Plantago, Scrophulariaceae, SEM, Seed coat, Taxonomy

Turk. J. Bot., 30, (2006), 71-84.

Full text: pdf

Other articles published in the same issue: Turk. J. Bot., vol.30, iss.2.