Characterization of Calcium Oxalate Biominerals in *Pereskia* **Species (Cactaceae)**

Paula V. Monje and Enrique J. Baran*

Centro de Química Inorgánica (CEQUINOR, CONICET/UNLP), Facultad de Ciencias Exactas, Universidad Nacional de La Plata, C. Correo 962, 1900 La Plata, Argentina. E-mail: baran@quimica.unlp.edu.ar

* Author for correspondence and reprint requests

Z. Naturforsch. **64 c**, 763–766 (2009); received June 29, 2009

Calcium oxalate druses were isolated from the stems and leaves of six Pereskioideae family members and investigated by infrared spectroscopy, showing that in all samples the biomineral was present in the form of whewellite, $CaC_2O_4 \cdot H_2O$. As *Pereskia* is thought to represent the "ancestral" condition of the leafless stem-succulent cacti, these results suggest that the biomineralization of calcium oxalate in Cactaceae represents a primitive characteristic of the group and also support a close genetic relationship between *Pereskia* and *Opuntia*.

Key words: Pereskia, Biominerals, Whewellite, Infrared Spectroscopy