Rapid and Simple Method for the Observation with Scanning Electron Microscopy of *Blumenbachia Insignis* Schrad.

Oppedisano, M.A.1*, Cardinali, F.J. 2-3, Thevenon, M.A 2, Burgos Herrera, G 2

Blumenbachia insignis Schrad. (Ortiga macho) is a species native to Argentina, used in folk medicine as anti-rheumatic by way of infusions of its aerial organs. A scarce morpho-anatomic information on its seed and fatty acid content is available.

The plant tissues involve a careful processing to be observed with SEM, spending a considerable time for fixing, dehydration and drying, as well as the use of specific and expensive reagents.

The objective of this work is to report a simple methodology for the observation with SEM of samples maintained in FAA, in order to obtain morpho-anatomic information of the seed, and to know the content of fatty bodies.

Dry whole seeds of *Blumenbachia insignis* Schrad. were preserved in FAA, and processed using the rapid method of inclusion in paraffin. Cuts were made in a Minot microtome, and mounted on slides to be de-waxed. The slides were glued on aluminium supports for metallization, and observed with SEM. The applied protocol allowed to obtain excellent images of seed, embryonic and reserve tissues, and a clear observation of cell walls and lipid bodies of different sizes.

The speed and economy of the procedure facilitated the morpho-anatomic characterization of this species.

¹ Laboratorio de Microscopia Electrónica, Universidad Nacional de Mar del Plata. Argentina

² Laboratorio de Botánica, Facultad de Ciencias Exactas y Naturales, Universidad Nacional de Mar del Plata. Argentina.

³ Laboratorio de, Fisiología VegetalFacultad de Ciencias Agrarias, Universidad Nacional de Mar del Plata. Argentina.

^{*}Corresponding author: microsc@mdp.edu.ar

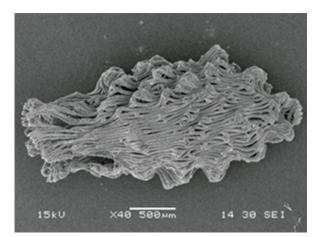


Fig. 1. Whole seed view.

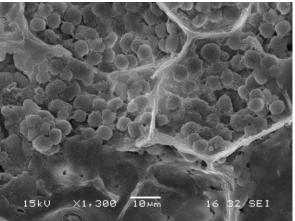


Fig. 2. Endosperm parenchymal cells with abundant lipid bodies and conspicuous cell walls