Abstract
Discrepant and incomplete interpretations of fruits of Pterodon have been published, especially on the structural interpretation of the pericarp portion that remain attached to the seed upon dispersal. The present work clarified these doubts and analyzed ultrastructural aspects of the Pterodon emarginatus diaspores using light and transmission electron microscopes. Cell divisions are prevalent among the initial phases of development, and the subadaxial and adaxial meristems form the fibrous inner mesocarp and the endocarp composed of multi-seriate epidermis, respectively. At the median mesocarp, numerous secretory ducts differentiate between the lateral bundles, by lytic process. After lysis of the central cells and the formation of the lumen, the ducts show unistratified secretory epithelium with dense cells; oil droplets are observed on the secretory epithelium and the subadjacent tissues. At maturity, the uniseriate exocarp and the outer mesocarp slough off in an irregular fashion, leaving the diaspore composed of a papery and brittle wing linked to a seed chamber that includes the median mesocarp composed of lignified cells, bordering vascular bundles and many secretory ducts whose epithelial cells develop large vacuoles that accumulate oleoresins. The Pterodon emarginatus fruit is a cryptosamara.

Keywords
Pterodon emarginatus, development, fruit, secretory duct, resin, ultrastructure.