



Polen, esporas y sus aplicaciones

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presented in SEM and TEM images, in an initial attempt to define differences in tapetum structure and secretory activity.

On the inner surface of tapetal cells, in anthers of both plant types, secretion in the form of drops was observed. Additional material was noted inside loculi of male sterile anthers in the form of granules or/and fibrils, which were often entwined around the microspores. This material probably represents substances generated by malfunctioning tapetum, as well as disturbances in the absorbance capacity of underdeveloped microspores.

In some sterile anthers three-dimensional SEM images revealed disturbances in callose deposition during the tetrad stage. It was also possible to estimate the density and distribution of cytomictic channels between cells of the generative tissue in early phases of development.

CONTRIBUCION AL ESTUDIO DE LA PARED DEL GRANO DE POLEN DE *Lycopersicum sculentum*

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En el presente trabajo se realiza un estudio a Microscopía Electrónica de Transmisión con anteras de tomate en diferentes estadios de su desarrollo para conocer la estructura de su pared celular.

La exina está compuesta por la endexina de mayor contraste y la ectexina de columnelas cortas, capa basal poco desarrollada y tectum muy desarrollado con ornamentación supratectal. Las zonas aperturales presentan una morfología aparentemente atípica, lo cual es frecuente en híbridos y poliploides.

OBSERVATIONS ON THE COLOURS OF FRESH POLLEN WITH THE LIGHT MICROSCOPE AND MACROSCOPE

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Pollen grains are frequently covered by a coating of tapetally derived lipidic material which often obscures both sculpturing and patterning of the pollen tectum. For pollen morphological analysis palynologists use the long-established and universally accepted acetolysis technique, which clears not only surface coatings but also removes the cytoplasm leaving only the acid-resistant pollen wall.

One result of acetolysis, largely ignored, is the loss of natural colour. Relatively few workers have addressed themselves to this subject. The present paper uses both light microscopy and macroscopy, to illustrate and draw attention to some of the interesting and potentially valuable information present in the pigmentation, not only of the external coatings and walls but possibly, also within the cytoplasm of unacetolysed pollen grains.