

**SUCCINATE DEHYDROGENASE AND ACID PHOSPHATASE ACTIVITY
IN *PHASEOLUS LUNATUS* TESTA**

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Succinate dehydrogenase (SDH) and acid phosphatase (AcP) activity in *Phaseolus lunatus* seed testa are demonstrated in enzyme tests, and uptake and transport of vital and indicator dyes such as methylene blue (MB), Congo red (CR) and tetrazolium (TZ) in the seed testa are examined by light and transmission electron microscopy. SDH activity was observed in the vascular bundles (endotesta) and in some cells in endo- and mesotesta. AcP activity was located near cell walls in both meso- and endotesta. In the vascular bundles there was very little AcP activity. Vital and indicator dyes were conducted from the exotesta (hilum) to endotesta. Vesicle mobilization was observed in the mesotesta. Strong enzyme activity in the meso- and endotesta and vesicle mobilization in the mesotesta suggest the potential active role of testa strata in imbibition and the initial nutritional stage of germination.

Key words: *Phaseolus lunatus*, Congo red, succinate dehydrogenase, acid phosphatase, methylene blue, testa, tetrazolium.