

Starch accumulation during early seedling growth of fenugreek (*Trigonella foenum-graecum* L. Leguminosae)

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Fenugreek seed is a leguminous seed which retains its endosperm at maturity. The endosperm is degraded completely following seed germination, i.e., protrusion of the radicle. About 92% of endosperm dry weight is composed of galactomannan which is the major polymeric carbohydrate food reserve in the seed. Mature fenugreek seeds do not store starch. However, starch accumulation occurs in the embryo following germination and coincides with the "grand" period of galactomannan mobilisation from the endosperm. Experiments with embryos isolated from imbibed seeds before germination and then incubated in the absence of the endosperm (i.e., without galactomannan reserve) showed that the initiation of starch accumulation is not dependent on the mobilisation of galactomannan from the endosperm.