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## Sucrose Metabolism in Stored Green Peas

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Changes in the sugar content and sucrose metabolizing enzymatic activities of stored green peas were studied. Green pea seeds were removed from their pods, and the pods without seeds or whole peas were stored at 1°C or 20°C. Their sucrose content significantly decreased, especially in seeds without pods stored at 20°C, but the stachyose and verbascose contents increased. Glucose and sucrose were the major components in the pods. The pod sucrose content significantly decreased, especially in pods with seeds stored at 20°C. Sucrose synthase (sucrose synthesis, sucrose cleavage) and invertase activities in the seeds decreased during storage, but sucrose phosphate synthase activity increased after 1 or 2 days of storage and then decreased. According to these results, we suggest that sucrose might be utilized not only in the synthesis of starch, but also in the synthesis of the raffinose family of oligosaccharides such as stachyose and verbascose.

**Keywords:** <u>oligosaccharide</u>, <u>storage</u>, <u>pea</u>, <u>sucrose phosphate synthase</u>, <u>sucrose synthase</u>, invertase

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