Chapter 3. Variety Selection

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Selection of the variety to plant is one of the most important decisions the commercial vegetable grower must make each season. Each year seed companies and experiment stations release dozens of new varieties to compete with those already available. Growers should evaluate some new varieties each year on a trial basis to observe performance on their own farms. Plant only those that show real promise based on University of Florida, industry, or grower trials. A limited number of new varieties should be evaluated so that observations on plant performance, characteristics, and yields can be noted and recorded. It is relatively easy to establish a trial but very time consuming to make all the observations necessary to make a decision on adoption of the new variety for large scale production. Some factors to consider before adopting a variety are:

Yield: The variety should have the potential to produce crops at least equivalent to those already grown. Harvested yield may be much less than potential yield because of market constraints.

Disease Resistance: The most economical and effective means of pest management is through the use of varieties with genetic resistance or tolerance to disease. When all other factors are about equal, it would be prudent to select a variety with needed disease resistance or tolerance.

Horticultural Quality: Characteristics of the plant habit as related to climate and production practices and of the marketed plant product must be acceptable.

Adaptability: Successful varieties must perform well under the range of environmental conditions usually encountered on the individual farm.

Market Acceptability: The harvested plant product must have characteristics desired by the packer, shipper, wholesaler, retailer, and consumer. Included among these qualities are packout, size, shape, color, flavor, and nutritional quality.

During the past few years there has been a decided shift to hybrids in many vegetable crops in an effort by growers to achieve earliness, higher yields, better quality, and greater uniformity. Seed costs are higher for hybrids than for open-pollinated varieties because seed must be produced by controlled crossing of the parents of the hybrid. Most crop listings include hybrids designated (H), as well as open-pollinated varieties.

Variety selection is a very dynamic process. Some varieties retain favor for many years, whereas others might be used only a few seasons if some special situation, such as plant disease or marketing change, develops. Variety selection in Florida often requires special regional consideration due to the wide range of climatic variations of the peninsula.

This document is HS712, Horticultural Sciences Dept., UF/IFAS, Fla. Coop. Ext. Serv., Nov. 06