

## General Considerations - Florida Greenhouse Vegetable Production Handbook, Vol 2<sup>1</sup>

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P. H. Jones<sup>2</sup>

Historically, greenhouse vegetable production has been located in northern latitudes. In North America, most commercial producers are located in the northern United States and in Canada where growers raise lettuce, tomatoes, cucumbers, and other crops primarily for spring and summer markets. Most of the greenhouses are located near their markets and emphasize production of very high quality, fresh produce. The cost of heating and low light levels combine to make spring production an expensive operation in northern latitudes where the winters are long and cold.

In contrast, Florida winters are mild and sunlight can be abundant, a fact that requires Florida greenhouse operators to ventilate for cooling as often as they heat. Because of its mild climate, production in Florida greenhouses takes place primarily during the winter and spring (Fig.1).

Summer production is difficult because of high temperatures and high humidities, so vegetable crops are produced in Florida greenhouses primarily from

September through May. Attempts have been made to produce year-round, but summertime ventilating costs are high while crop yields and quality are reduced. In spite of these difficulties, some growers feel that some good market potentials exist for summer greenhouse crops and they are willing to deal with the problems associated with summer production.

Because most greenhouse vegetable production has been in the North, much of the information from Extension, researchers, and greenhouse equipment manufacturers has been geared to northern climatic conditions. For instance, there is an abundance of information on heating systems with topics ranging from thermal screens for energy conservation to the design and operation of heating systems to handle snow loads. In contrast, there is little information on evaporative cooling systems, which are the mainstay of environmental control systems in the Florida vegetable industry. The purpose of this publication is to give the grower the background information needed to make reasonable design and installation

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  2. P.H. Jones, professor, Agricultural and Biological Engineering Department, Cooperative Extension Service, Institute of Food and Agricultural Sciences, University of Florida, Gainesville, 32611. The Florida Greenhouse Vegetable Production Handbook is edited by George Hochmuth, professor of Horticultural Sciences and Center Director, North Florida Research and Education Center and Robert Hochmuth, extension agent IV, North Florida Research and Education Center - Suwannee Valley, Cooperative Extension Service, Institute of Food and Agricultural Sciences, University of Florida, Gainesville, FL 32611.

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**Figure 1.** Greenhouse under construction.

decisions for greenhouse vegetable production in Florida.

### More Information

For more information on greenhouse crop production, please visit our website at <http://nfrec-sv.ifas.ufl.edu>.

For the other chapters in the Greenhouse Vegetable Production Handbook, see the documents listed below:

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