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# GREENHOUSE INSIDER



## Not Just For The Garden Anymore

Filling a niche market, greenhouse-grown baby squash appeals to chefs and consumers alike.

By Nicole L. Shaw and Daniel J. Cantliffe

**M**INI or “baby” vegetables were once only popular menu items for caterers or upscale restaurants. Now, however, they can be found on local grocery store shelves and at farmers’ markets. Many baby vegetables are simply standard varieties that are planted at high densities or harvested at an immature size, while others have been bred to be small.

The edible part of a summer squash is the young, immature fruit which can be eaten either raw or cooked. However, some recipes call for the entire squash blossom for added flavor and bright color. Currently, there are no grade standards set for baby squash, however, they should be considered a bite-size portion.

Since summer squash is harvested immature, the harvested size is based on cultivar selection and the destination. Zucchini types are about 6 to 8 inches long. Crookneck types are no more than 6 inches long, while patty pan/scallop types

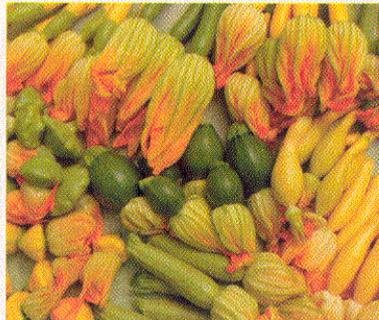


Photo courtesy of Nicole Shaw

**Because baby squash are delicate, growers must take care in the growing, harvesting, and handling of these crops.**

are about 4 to 6 inches in diameter.

Baby zucchini and baby summer squash in the market are about 4 inches long and patty pan/scallop types are about 1½ inches in diameter. Except for small regional markets (including farmers’ markets), most baby squash is grown in South and Central American countries and air-freighted to the U.S.

### Taking Care Of The ‘Baby’

Since baby squash are very delicate, much care must be taken in growing, harvesting, handling, and delivery of the product to meet the expected needs of the consumer.

A novel approach for baby squash production would be inside a greenhouse or protective structure. Plant density can be two to four times greater than the field, there is no damage from wind, rain, or blowing sand particles, insects can be controlled without harmful chemicals using biological control, and harvesting can be done every day to meet the demands of the market.

Trials were set up at the Protected Agriculture Project in Gainesville, FL, (2003) and Citra, FL, (2004) to test 18 squash cultivars for yield and fruit characteristics when harvested for the baby squash market (see Evaluating Baby Squash). Only one cultivar was listed for greenhouse production and only recently have the patty pan/scallop types been identified as suitable for baby squash production.

Plants were grown in 3-gallon plastic nursery contain-

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## Evaluating Baby Squash

After testing squash cultivars for yield and fruit characteristics, Florida researchers recommend several for greenhouse production.

Type	Cultivar name	Description	Seed Company
Zucchini	Bareket	Dark green	Hazera Genetics, Inc.
	Eight Ball	Round, green	Hollar Seeds, Inc.
	Gold Rush*	Deep yellow	Johnny's Selected Seeds
	Goldy*	Yellow	Hazera Genetics, Inc.
	Hurricane*	Medium green	Nunhems USA
	Sebring*	Yellow, PMR <sup>†</sup>	Hollar Seeds, Inc.
	Revenue	Medium green	Johnny's Selected Seeds
	Raven*	Dark green	Johnny's Selected Seeds
	Yellow summer	Seneca Supreme*	Straightneck
Sunray*		Straightneck	Johnny's Selected Seeds
Supersett*		Crookneck	Johnny's Selected Seeds
Yellow Crookneck		Crookneck	Johnny's Selected Seeds
Zephyr		Green blossom, end, straightneck	Johnny's Selected Seeds
Patty pan/Scallop	Butter Scallop*	Pale yellow	Johnny's Selected Seeds
	Patty Green Tint*	Light green	Johnny's Selected Seeds
	Starship*	Dark green	Johnny's Selected Seeds
	Sunburst*	Deep yellow	Johnny's Selected Seeds
Cousa	HA-187*	Mottled green	Hazera Genetics, Inc.
	Magda*	Pale green	Johnny's Selected Seeds

<sup>†</sup> PMR = powdery mildew resistant

\* recommended for greenhouse production

Source: Nicole Shaw, University of Florida

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ers using one-year aged pine bark mulch screened to 1 inch diameter particle size. Plants were irrigated using a fertilizer recipe for greenhouse cucumbers and trellised on individual twine using twist ties.

Plants were harvested 28 times in 2003 and 15 times in 2004; therefore, yields were slightly lower in the second season. The patty pan/scallop type cultivars produced on average 55 baby-size fruit per plant, the yellow-summer types produced about 40 fruit per plant, and the green and yellow zucchini types produced about 20 fruit per plant. Each fruit weighed about 1 ounce. Two cousa type cultivars were also grown and yielded about 30 baby fruit per plant. These squash can be grown as either a winter squash or harvested immature as a summer-type squash.

### Stamp Of Approval

These cultivars could be recommended for greenhouse production of baby squash: the green zucchini cultivars Hurricane and Raven; the yellow zucchini cultivars Gold Rush and Goldy; the yellow summer cultivars Sunray, Seneca Supreme, and Supersett; the patty pan/scallop cultivars Butter Scallop, Patty Green Tint, Starship, and Sunburst — due to their individual color patterns; and the cousa-types HA-187 and Magda.

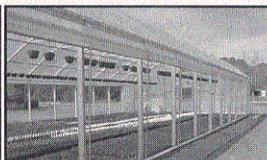
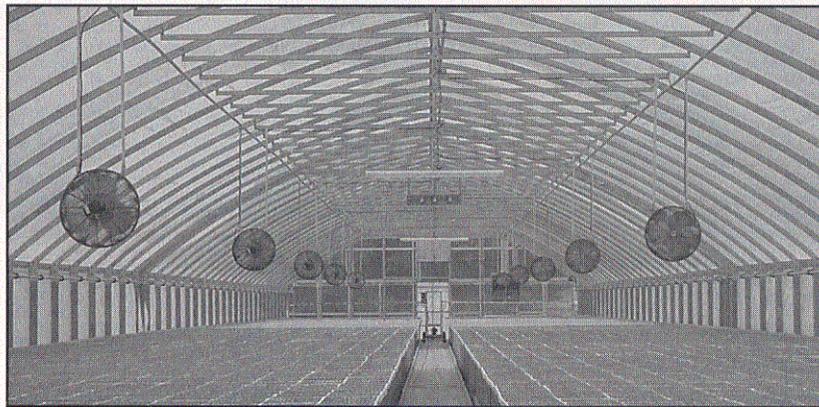
Powdery mildew was a severe problem in both years and not well controlled. Earlier applications with fungicides as well as better coverage may help prevent the disease. The cultivars Gold Rush, Sebring, and Hurricane were less susceptible to powdery mildew than the others grown.

Baby squash can be found in gourmet produce markets for \$5 to \$6 per pound. Currently, it sells in regional supermarkets in 8-ounce microwavable pouches for approximately \$7 per pound. Hydroponic greenhouse production of baby squash could increase market potential by adding product that can be harvested on a daily basis to target the demands of both a gourmet restaurant chef and a retail consumer.

For more information, go to [www.hos.ufl.edu/protectedag](http://www.hos.ufl.edu/protectedag).

*Cantliffe and Shaw are with the Horticultural Sciences Department, University of Florida; nshaw@ifas.ufl.edu.*

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