

## Specialty Melons

### Introduction

Specialty melons, some of which are also referred to as winter melons, have cultural requirements similar to the more familiar muskmelon or cantaloupe. Varieties of the types listed below have performed well in University of Kentucky research trials. The charentais melons have not performed well in Kentucky and normally split open in the field.

**CANARY** This oblong to egg-shaped melon has a bright yellow rind. The flesh is white to cream-colored or pale green with a sweet, mild flavor.

**CASABA** The deeply wrinkled skin is pale to bright yellow or greenish yellow, depending on the cultivar. The flesh is sweet and white, cream-colored, or pale yellow.

**GALIA** The netted skin is green to golden-yellow while the flesh is cream or green in color with a high sugar content.

**HONEYDEW** This familiar creamy yellow, smooth-skinned melon is round to slightly oval. The flesh is commonly green, however, some varieties may be orange or cream-colored.

**PIEL DE SAPO** An oval melon with non-netted skin and green mottling, the Piel de Sapo has white, very sweet flesh.

**SANTA CLAUS (CHRISTMAS)**

This melon's oblong shape and green-striped flesh gives it the appearance of a small watermelon. The yellowish-



HONEY ORANGE HONEYDEW

green flesh is mildly sweet, however, its crunch-crisp texture has not been well received by some consumers.

**SPECIALTY HYBRIDS** Some hybrids do not fit neatly into any of the standard specialty melon groups so they have been placed into this general category. Some of these cultivars have performed well in University research trials.

### Marketing

Kentucky fresh-market specialty melons are currently being grown on a very limited basis and sold at a few farmer's markets in Kentucky. There is also a small demand for specialty melons through southern Ohio marketing channels and Kentucky producers may be able to tap into this market. Local upscale restaurants and specialty groceries are also good possibilities for marketing high-quality specialty melons in Kentucky.

### Market Outlook

Melon consumption has increased steadily over the past 20 years, nearly doubling nationally since 1980. Kentucky wholesale melon producers have benefited from strong prices in recent years, but they face



competition from higher producing muskmelon and watermelon areas. A continued increase in demand, good marketing and sound production are likely to continue to make melons profitable.

Specialty melons currently fill a growing niche market of consumers who have increased fresh melon consumption and are willing to try something new. For growers marketing specialty melons directly to the consumer, such as through farmer's markets, it will be important to find ways for the customer to taste and experience the outstanding flavors of these new melons. Melon sampling at the point of purchase is one way to introduce the health-conscious consumer to the delicious spectrum of specialty melon varieties.

## **Production Considerations**

### *Site selection and planting*

Specialty melons can be grown on medium-textured soils but do best when grown on sandy or sandy loam soils that are well drained. Melons should not follow melons, other vine crops or peppers in the rotation for at least three years because of potential disease problems.

Since many specialty melons are later maturing varieties, transplanting, rather than direct-seeding is recommended. Using transplants helps to produce an earlier maturing crop that will often bring much higher prices. Transplants can be produced either in a greenhouse or hotbed.

In addition, black plastic mulch with drip irrigation is highly recommended for specialty melons. Plasticulture encourages faster growth and earlier maturity. It also results in higher yields. Transplants are normally set through plastic in Kentucky with a water wheel setter.

### *Pest management*

Bacterial wilt is the most serious disease threat to specialty melon production in Kentucky. In order to control this disease it is essential to control the cucumber beetles that carry the pathogen. It is crucial that plants be protected from cucumber beetle feeding from the day of seedling emergence

or from the day of transplanting with a systemic, soil-applied insecticide. Other diseases of concern are anthracnose, Fusarium wilt, downy mildew and powdery mildew.

### *Harvest and storage*

Unlike muskmelon, most specialty melons do not "slip" from the stem at maturity. They are hand cut from the vines at market maturity. Indicators of maturity vary depending on the cultivar and can include such characteristics as skin color and texture. Harvesting every other day will be necessary during periods of high temperatures.

Melons benefit greatly when field heat is removed either by hydrocooling or forced air cooling as soon after harvest as possible. The winter melons in the specialty melon group have excellent keeping quality and can be stored a month or more under refrigeration.

### *Labor requirements*

Labor needs per acre are approximately 15 hours for production when using transplants, 100 hours for harvest and 30 hours for grading.

## **Economic Considerations**

Production costs for specialty melons are similar to muskmelon, with potential for a greater seed expense for new or rare varieties. Total pre-harvest variable costs for trickle irrigated muskmelons are estimated at \$1,115 per acre with an additional harvesting and marketing cost of \$1,740 per acre. Total expenses, including fixed costs, are approximately \$3,210 per acre.

Since returns vary depending on actual yields and market prices, the following per acre returns to land and management are based on three different economic scenarios. Conservative estimates represent the University of Kentucky's statewide cost and return estimates for muskmelons. With proper marketing and higher per melon prices, specialty melon producers could expect as much as 20 percent to 30 percent greater returns to land, labor and management from specialty melon production than from muskmelon production.

<i>Pessimistic</i>	<i>Conservative</i>	<i>Optimistic</i>
\$(367)*	\$1,010	\$2,325

\*Parentheses indicate a negative number, i.e. a net loss.

### More Information

- Marketing Options for Commercial Vegetable Growers, ID-134 (University of Kentucky, 1999)  
<http://www.ca.uky.edu/agc/pubs/id/id134/id134.htm>
- Vegetable Production Guide for Commercial Growers, ID-36 (University of Kentucky)  
<http://www.ca.uky.edu/agc/pubs/id/id36/id36.htm>
- Cantaloupe Marketing Fact Sheet (University of Kentucky, 2005)  
<http://www.uky.edu/Ag/NewCrops/cantaloupe2005.pdf>
- Vegetable and Melon Enterprise Budgets (University of Kentucky, 2004) *interactive spreadsheets*  
[http://www.uky.edu/Ag/AGEcon/pubs/software/budgets\\_veg\\_melon.html](http://www.uky.edu/Ag/AGEcon/pubs/software/budgets_veg_melon.html)
- Cantaloupe and Specialty Melons (University of Georgia, 1999)  
<http://pubs.caes.uga.edu/caespubs/pubcd/b1179.htm>

- Diseases and Pests of Muskmelon and Watermelon, BP-44 (Purdue University, 2001)  
*Text only (no photos) available on the Web*  
<http://www.agcom.purdue.edu/AgCom/Pubs/BP/BP-44.html>

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- Muskmelons: Commercial Vegetable Production, MF-1109 (Kansas State University, 1998)

<http://www.oznet.ksu.edu/library/hort2/samplers/mf1109.asp>

- Plastic Mulches for Vegetables, MF-1091 (Kansas State University, 1993)

<http://www.oznet.ksu.edu/library/hort2/samplers/MF1091.asp>

- Producing Cantaloupes in Tennessee, PB-962 (University of Tennessee, 1999)

<http://www.utextension.utk.edu/publications/pbfiles/pb962.pdf>