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The IPM Scout

Silver reflective mulch has been used in some parts of the country to reduce virus infection of summer squash. The bright color of the mulch repels aphids which carry the viruses. In 1998, I compared silver reflective mulch to standard white on-black mulch. We laid three rows of each color plastic and planted a single row of pumpkin seedlings in the middle. The number of plants with virus symptoms was recorded three times and fruit were harvested three times. HMX8691 and 8692 are tolerant of zucchini yellow mosaic virus, but this virus did not show up in 1998. Only papaya ringspot virus was found. It is the most common mosaic virus on squash and pumpkin in South Carolina.

Cultivar	% Virus* on Silver	% Virus on White	Mean
Autumn Gold	0	33.3	16.67
Conn. Field	0	37.5	18.75
Spookie	0	25.0	12.50
HMX6687	37.5	0	18.75
HMX6688	25.0	12.5	18.75
HMX6689	25.0	12.5	18.75
HMX8691	37.5	12.5	25.00
HMX8692	0	12.5	6.25
Average	15.62	18.23	

*Percent of plants infected with virus.

Overall, there was no difference in the number of plants with virus symptoms grown on silver or

white mulch. Also, there were no great differences among the eight cultivars in virus infection. For five of the eight cultivars, plants grown on silver mulch produced more marketable fruit than plants grown on white mulch. However, because these plots were not replicated, these differences are not reliable enough to recommend using silver instead of white mulch. Silver mulch costs \$130 per 4,000-ft roll, whereas black mulch costs half as much, \$150 per 8,000-ft roll, and white-on-black mulch is priced at \$150 per 4800-ft roll. As I have seen in other trials done in Charleston, the average fruit weight tends to be on the low side of the expected size range for most cultivars. Handle lengths did not differ much, although Spookie, Connecticut Field, and HMX6687 had the longest handles.

Cultivar	Weight on Silver (lb)	Weight on White (lb)	Fruit Number on Silver	Fruit Number on White
Autumn Gold	88.8	84.5	14	13
Conn. Field	97.4	0	8	0
Spookie	45.7	68.7	14	24
HMX6687	186.5	101.1	19	11
HMX6688	44.7	0	15	0
HMX6689	109.4	9.0	9	1
HMX8691	135.8	73.1	16	8
HMX8692	25.8	86.0	3	12
Average	91.8	52.8	12.3	8.6

Cultivar	Average Handle Length (in.)	Average Fruit Weight (lb)
Autumn Gold	3.1	6.4
Conn. Field	3.9	12.2
Spookie	3.7	3.1
HMX6687	3.7	9.5
HMX6688	3.3	3.0
HMX6689	3.3	10.6
HMX8691	3.3	8.8
HMX8692	3.2	7.9

Cultivar Corner



There are many new pumpkin varieties on the market this season. Holmes Seed Company (Canton, OH; 330 492-0123) is featuring **'Longface'** with a distinctive elongated fruit shape. This is a hybrid semi-bush plant, with early fruit (95 days to maturity) in the 20-25 lb range.

'Howdy Doody' is a new hybrid cultivar which, according to Holmes, "combines all the traits you have been asking for- mid-size, dark orange, thick flesh, on a semi-bush plant." The 17-20 lb fruit have a "dark sturdy handle that is tough to break." 115 days to maturity (long-season).



Harris Seeds (Rochester, NY; 800-544-7938) has a new hybrid variety called **'Lil' Ironsides'** that gets its name from its tough hard shell. The fruit are dark orange, smooth, weigh 2 lb. and have dark handles. 'Lil'

Ironsides' reportedly has tolerance to general fruit rots, Fusarium, and Phytophthora fruit rot. However, seeds will not be available until the first of June 1999.



Johnny's Selected Seeds (Albion, ME; 207-437-4395, fax: 800-437-4290) is featuring **'Valenciano,'** a new pure white pumpkin. It has a me-

dium-sized, flattened shape with smooth white skin that is slightly ribbed. It is a *C. maxima* cultivar rather than *C. pepo*.

'Pik-a-Pie' is a new hybrid pie pumpkin with dark orange fruit and large, dark green handles from Rupp Seeds, Inc. (Waseon, OH; 419-337-1941). The 4- to 5-lb. fruit are "excellent for the school trade." Plants are the semi-bush type and fruit mature in 85 days.



Rupp Seeds is also offering **'PMT Peek a Boo,'** a powdery mildew-tolerant version of Peek a Boo. Another small pumpkin, this cultivar produces fruit that are "medium deep orange" and 3.5-4 lb. The plant is a semi-bush type and fruit mature in 95 days.

'Gold Fever' is a new Rupp pumpkin bred for the shipper market. The dark orange fruits average 15-17 lb. apiece with "outstanding" handles. This hybrid cultivar yields more fruit per acre than larger-fruited varieties. Vines are somewhat restricted; Rupp's recommends 6-7.5 ft between rows and 4 ft between plants. 90 days to maturity.

Another promising introduction was **'Snack Jack,'** a new cultivar that most of the seed catalogues are carrying. It is unique in that it produces hull-less seeds ideal for roasting. Unfortunately, there was a crop failure, so there are no seeds available this season.

Market Window

The **Alabama Pumpkin Association** will have its second annual meeting and seminar on Saturday, March 6, 1999, at the Botanical Gardens in Birmingham, AL, from 9:00 a.m. to 3:00 p.m. Anyone interested in commercial pumpkin production, both novice and seasoned growers, will find this meeting worthwhile. Speakers are from Auburn University, Clemson University, and the University of Georgia. Cost is \$10 per person which includes lunch. For more information contact Dwight N. James at (256) 383-4831 or Dr. Joe Kemble at (334) 844-3050.

The **Mid-Atlantic Pumpkin School** will be held on Wednesday, March 3, 1999, starting at 8:00 a.m., at the Bridgeport Holiday Inn, Bridgeport, New Jersey (exit 10, Interstate 295). Speakers are from the mid Atlantic region from New York to Maryland. Topics include varieties, irrigation, no-till, disease and

insect control, and post-harvest handling. Registration is \$35 per person and must be sent before **February 22, 1999**. To check on registration after this date, contact Michelle Infante, Rutgers Cooperative Extension of Gloucester County, (609) 863-0110.

The **new world record** for the heaviest pumpkin was set on October 3, 1998, at the Port Elgin Pumpkin Fest, Port Elgin, Ontario. Canadian grower Gary Burke of Simco, Ontario, produced a pumpkin weighing 1,092 pounds. This beat the previous world record of 1,061 pounds set in 1996 by Nathan Zehr of Lowville, NY.

(Thanks to Danny Dill, Howard Dill Enterprises, for sending this note.)



Ask the Great Pumpkin

Q: In the last issue of **SC Pumpkin News** there was a photo labeled “black rot” on pumpkin. To me, the disease looks more like anthracnose and this is what I have been calling these symptoms. Have I made the wrong diagnosis or did you print the wrong picture?



GP: I agree, this photo may not be typical of black rot on pumpkin fruit because it shows so very many small lesions instead of a few large lesions. The black discoloration around the point of infection is typical of *Didymella bryoniae* growing on

fleshy fruit. With anthracnose, you should see masses of salmon pink conidia (spores) in the lesions, if the fruit is held at high humidity for 24-48 hours. *D. bryoniae* conidia are clear and will not show up like those of the anthracnose fungus.

Q: Is there any research or recommendations concerning no-till or minimum tillage pumpkin production?

GP: In New York, a Cornell weed scientist and a former Extension agent have worked out a system using winter rye. It is grown to 30 in. high in the spring, then killed with herbicide to leave a thick straw mulch. Pumpkin seed is planted with a modified no-till corn planter. The benefits are clean fruit and “satisfactory weed control.” Contact Dr. Robin Bellinder, 607-255-7890; e-mail: rrb3@cornell.edu. for more information.

In Ohio, results of no-till seeding into cover crop residues were not as promising. A cover crop of spring wheat, planted on April 17, gave the highest total fruit per acre. (Pumpkins were seeded on July 3). The spring oats cover had the most weeds. Overall, no-till was not recommended, based on the results of this field trial in 1997. Contact Brad Bergfeld, Ohio State Extension, Hillsboro, OH, 513-393-5776 for more information.

Next issue (Apr. '99): Results of the 1998 spacing and fertility trial; how to grow pumpkin transplants in the greenhouse.

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