"Cherries Under Plastic" Bring Premium Prices

Growing cherry trees under plastic lets Molly Brumbley charge a premium for her crop. Her Haygrove high tunnels protect both the fruit and the customers who come to her family's pick-your-own fruit farm.

"We get a lot more rain than in most commercial cherry growing regions," says Brumbley. "We have a small acreage, so we wanted high density production. If you get a week of rain when the fruit is ripe, you'll lose the crop.

"You can basically design it yourself with leg height and width options," she says. "Mine is 900 ft. long with three 28-ft. wide bays. It's just shy of two acres. That's unusually long for a solid stretch of poly, but there happened to be a spot on the farm that was available and a good site for trees."

Fitting into the rest of the farm was important and a main reason Brumbley went with cherries in the first place. Her parents, Phil and Ruth Ann Johnson, have operated Walnut Springs Farm for the past 35 years. They still manage the strawberry plantings, a sister manages raspberries, and a cousin manages the blueberry portion of the business.

"Sweet cherries fill a niche for us in the picking year after strawberries finish and before raspberries start," explains Brumbley. "Cherries are always in demand because of their health benefits. People like the fact that they can pick good quality cherries, and their kids can run around, while it's pouring down rain."

Brumbley and her family planted 1,000 trees, digging holes and staking each tree. She only lost 10, thanks in part to the tunnel's protection.

"I think we got better root growth. They are well established and big enough to withstand disease," says Brumbley.

Over the past 7 years, she has thinned the covered orchard to about 860 trees. She also prunes them vigorously, keeping them short and open. Thinning and pruning gives the trees more light and better airflow for reduced disease and better spray penetration, when needed.

"We had a year with high temperatures and humidity, and the trees trapped the humidity," recalls Brumbley. "We had lots of brown rot problems. After that year we took the tops off the trees."

The tunnels offer plenty of room for a tractor and sprayer to go through the bays between rows of dwarf cherry trees. Brumbley credits the Haygroves for reducing the need to spray, yet making it easy to do so.

"We aren't organic, but we do limited spraying," says Brumbley. "Keeping direct moisture off the trees helps. We worked with consultants to pick the most dwarfing rootstock and varieties known for winter



Molly Brumbley grows cherry trees under plastic Haygrove high tunnels, which protect both the fruit and the customers who come to her family's pick-your-own fruit farm.

hardiness, bacterial canker resistance and survivability."

The Haygrove high tunnels were also designed for survivability. Steel hoops connect to ground anchored, 5-ft. tall posts that form sidewalls for each bay. Each 900ft. long bay is covered with a single sheet of plastic that leaves a space open near the gutter between bays. Netting over the open space and the ends keeps freeloading birds out.

Brumbley designed the Haygrove to handle high winds, adding additional wires to the system that holds down the plastic. "We've incorporated some high tensile fencing into our design," she says. "I went to the extreme when it comes to strength."

Even so, the long sheet of plastic is rolled back up and over the hoops of each bay before

hurricane season starts in the late summer. The manual process involves hiring locals to help with long poles with U-shaped ends. The job takes several hours a day for several days in a row. The long rolls of plastic are stored in the gutters between bays and under dark plastic covers to protect them from the sun.

"Haygrove tunnels were developed by farmers and have proven to be very well built," she says. "My setup has exceeded my expectations."

Contact: FARM SHOW Followup, Walnut Springs Farm, 3910 Blue Ball Rd., Elkton, Md. 21921 (ph 410 398-3451; molly@strawberryfarm.com; www. strawberryfarm.com).

Hops Growing Catches On Fast With Midwest Farmers

With more and more microbreweries and hobbyists making specialty beers, the need for hops is growing fast. Potential net profits of \$10,000 to \$12,000/acre make it an attractive specialty crop. But, James Altwies warns, don't jump in until you've heard the rest of the story and have done your homework.

"It's extremely challenging," he says. "The only crop that requires more labor is tobacco. If you are not willing to spend 20 hours a week on an acre of hops, this is not for you."

That said, Altwies – a horticulturist who loves a challenge – and his 41 contract growers in the Midwest, will grow about 50 acres of hops this year as part of Gorst Valley Hops, based in Wisconsin. Growers take at least a year to do their homework and prepare. Altwies provides the growing, processing and marketing expertise to make it a feasible crop.

These days most hops are commercially grown in the Northwest, but the region around southern Wisconsin was the top hops growing area back in the 1860's, with its rich, deep soil and ample water supply. "We can't compete with commodity hops grown in the Northwest. We want to supply hops to brewers that they can't get elsewhere," Altwies says.

He explains that hop cones are full of oils and compounds that preserve and add the bittering flavor and balance to beer. Gorst Valley Hops has chemists who work with breweries to redesign and custom blend hops specifically for them.

"It's horticulture, but using technology behind it to add value," Altwies says. He works with each grower to create a prescription for maximizing production on a specific piece of property.

Hops plants are herbaceous perennials that can grow more than 20 ft. tall on a trellis system. They climb up vertical 16-ft. strings of coir twine (made of coconut husk fiber) attached to cable, which is anchored to posts set every 50 ft. One acre accommodates about 1,200 hops plants, which are started with root cuttings from a mature plant. A surface drip irrigation system ensures plants receive enough water – as much as 20,000 gal./acre/week in July.

Late spring and early summer are especially busy, putting up the twine, pruning suckers on the ground and training the plants to climb the twine. There's also constant weeding and monitoring for pests, mildew and diseases that can wipe out an entire crop. Hops require 200 lbs. of nitrogen/acre applied at just the right time.

Harvest time is even more crucial.

"There are five days on either side of a perfect day to harvest. It's a flower, and it's critical to get the timing just right," Altwies says.

The plants are cut down and taken to a machine that separates out the flower (or seed cone), which contains about 80 percent moisture. They are dried to about 10 percent, and then taken to Gorst Valley to be stored and then processed into small pellets that are vacuum-sealed and frozen.

The gross value of mature plants (3 years and older) averages just over \$20,000/acre and the net is \$10,000 to \$12,000/acre.

Altwies emphasizes the importance of constant monitoring, weeding and proper watering and nutrient application to get a good yield – an average of 1,500 lbs. of dry flowers/acre.

Gorst Valley growers receive 70 percent of the sale of their hops. Gorst is paid for processing, technical, lab, marketing and other services. It also holds the food-handling license, which is required in Wisconsin.

Unless you grow just a few plants as a hobby to make your own beer, it makes sense to be part of a group of growers, Altwies says. Growers in his group come from a variety



Hops plants can grow more than 20 ft. tall on a trellis system. This year James Altwies and his 41 contract growers will raise about 50 acres of hops in the Midwest.



of backgrounds including dairy, cash crop, hobby and people who have never farmed. Most live in Wisconsin, but he has growers in Michigan, Minnesota, Illinois and Indiana.

As the market grows, Altwies hopes to expand in those states as well as Ohio. He offers Hops 101 workshops 3 or 4 times a year for people interested in growing for their own use or as a crop.

"There's no rushing into this," he advises. "Go into it with your eyes wide open."

Contact: FARM SHOW Followup, Gorst Valley Hops (ph 608 228-3117; www. gorstvalleyhops.com).