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Lake Ontario Fruit Program

Cooperative Extension in Wayne, Orleans, Niagara, Monroe, and Oswego Counties



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Raspberry & Blackberry Harvest & Postharvest Handling 2012 Craig Kahlke, Lake Ontario Fruit Team

Brambles (raspberries and blackberries) are the most delicate of the small fruit we harvest in the Northeast, so special care must be taken in their handling. Since nearly all of the bramble operations in our region are harvested by hand for the fresh market, training pickers becomes extremely important. Prior to harvest, workers should undergo a Good Agricultural Practices (GAPs) training, in which they are instructed on proper hand-washing, personal hygiene, and subsequent harvest of produce with clean hands. They should only take breaks and eat lunch in designated area(s) outside the harvest area, and should not eat or smoke while in the field. Hand-washing is mandatory when returning to the fields to continue harvest. Only potable drinking water should be brought into the picking area. An operation that is strictly pick-your-own (PYO) should provide hand-washing facilities prior to entrance to the field. Signage should also be provided similar to the worker dos and don'ts above.

Workers should be instructed to only pick undamaged berries with good appearance, and harvested fruit should not be exposed to direct sunlight. Finger pressure will damage berries, so observe pickers and train them to pluck brambles delicately. Do not pick the berries when they are wet. One-half pint containers are the traditional size for brambles, and wide, shallow containers are better than deep ones. Overripe berries will crush lower berries in the container if it is too deep.

As most raspberries and blackberries produced in the Northeast are consumed quickly, these operations should harvest fruit as close to peak ripeness as possible. The theory here is that whether PYO or a small roadside stand or farm market, consumers will pick or buy the fruit, promptly refrigerate them, and consume them within 2-3 days. Thus storage life is not a serious consideration, so fruit should be harvested at or near peak ripeness and flavor. If the operation plans on retailing the fruit to local or regional supermarkets, more care must be taken in harvest, postharvest handling, and stage of fruit at harvest. In this case, fruit may sit a while or suffer a break in the cold chain, reducing storage and shelf-life. Therefore, it is best to harvest fruit slightly under-ripe. These brambles will be firmer and consequently hold up better in the long-term, with some sacrifice of flavor. 31-34°F is ideal. Pallets of fruit should be transported in refrigerated trucks leaving space for cold air movement along the walls, floor, and ceiling. If berries are covered with plastic, berries should be allowed to warm only when they are ready to display to customers, allowing condensation buildup on the outside of the plastic wrap.

Whichever the type of operation, berries will likely need to be harvested at least every other day. Regardless of the final market destination, brambles will have longer storage and shelf-life if they are harvested early in the morning and promptly cooled. Early in the day there is less heat buildup in the fruit and they will cool quicker than fruit harvested at mid-day. Retail growers may want to consider setting up an inexpensive forced-air cooling system to more rapidly remove field heat from your fruit and therefore cool them much faster than traditional passive cooling. For more information on forcedair cooling, see the article <u>"Forced-air Cooling to Improve Berry Quality & Shelf-life"</u> in the May 21, 2010 (Volume 10, Issue 13) article of Fruit Notes. This article is also in the <u>New York Berry News, June</u> <u>10, 2010 (Volume 9, Number 6</u>) that can be found online at

<u>http://www.fruit.cornell.edu/nybn/archives.html</u>. Brambles picked early in the day, rapidly cooled, and kept in a cold chain can expect to have a maximum storage life of 5 days in our region.

Resources: Raspberry & Blackberry Production Guide for the Northeast, Midwest, and Eastern Canada, NRAES-35. 2008.