

# What's in Season from the Garden State

Biweekly Highlights from Cooperative Extension, a unit of Rutgers New Jersey Agricultural Experiment Station

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*With all that could possibly affect your fresh produce, why take a chance? Why not just buy the stuff in cans? As the saying goes, one bad apple won't spoil the whole bunch – and it's the seasonal treasures that make it worth the hunt. Shopping your local farm market or chain stores featuring local produce will improve your chances of finding fresh picked vine- or tree-ripened produce with minimal storage and shipping.*

*Some of the Jersey Fresh treasures you may find are the crispest cucumber, sweet corn so sweet you're tempted to eat it raw, the juiciest peaches and tomatoes that are soft and red, not pink and plastic.*

## When good produce goes bad

As with any shopping experience, consumers are sometimes disappointed with their purchases when they get them home. When this happens with food purchases, a customer becomes wary of that food outlet. The problem when this occurs with local produce is it may discourage a person from buying local foods if their melon turned to mush, their peach was mealy or they found a worm in their corn.

Consumers always face the risk of bad products or services, so, as with many of life's experiences, it can be a gamble. There are many factors along the way that affect the quality of fresh food by the time you purchase it: weather, insect and disease pressure in the field, a farm's handling and storage practices, shipping conditions and the retail outlet's storage and handling conditions. The further the food travels to you, and the more hands it passes through by the time it gets to you, can add to the equation.

Pete Nitzsche, Rutgers NJAES Agricultural and Resource Management Agent for Morris County provides some examples of what circumstances can cause fresh produce to lose some of its appeal.

Limp lettuce? According to Nitzsche, each produce item has a special optimal storage temperature, relative humidity and length of storage time. If you've experienced local produce that was a little limp, it may be due post harvest field heat. Produce picked later in the day requires more cooling because it retains more field heat than when picked in the morning. Many large growers have vacuum coolers that pull the heat out of the produce after harvest. Also, retailers often have misters in their produce departments to provide the humidity required to maintain crispness.

(Not so) sweet corn? Corn likes it cold (close to 32°F), otherwise the sugar turns to starch. After corn is purchased, it should be refrigerated and eaten as soon as possible. Conversely, tomatoes like it warmer (above 50°F) and can be left to ripen for a few days. A tomato that is orange-red will have more white tissue inside and won't taste as good as a tomato that ripens to its full red color. Tomatoes should not be left on a windowsill to ripen – the harvested fruit does not need sun; it will degrade flavor.

Mealy peaches? According to Win Cowgill, Rutgers NJAES Area Fruit Agent for Hunterdon County, large wholesale packers require growers to pick the fruit green before shipping to retailers; whereas peaches picked tree ripe are succulent and juicy. Cowgill recommends buying peaches from farm markets or chain stores that feature Jersey Fresh produce from local growers – avoid peaches with a PLU sticker.

Rotting produce in the fridge? Pete Nitzsche suggests washing produce before use, not before storing in the refrigerator. Produce stored in wet conditions will begin to rot.

*See next article on page 2*

# RUTGERS

New Jersey Agricultural  
Experiment Station

New Jersey Department of  
Agriculture's Jersey Fresh &  
Seafood Availability Report

Baby Arugula &	Melons
Baby Spinach	Mint
Basil	Nectarines
Beets	Parsley
Blueberries	Peaches
Cabbage	Peppers
Cantaloupes	Pickles
Collards	Potatoes
Cucumbers	Squash - yellow and
Dandelion	zucchini
Dill	Sweet corn
Eggplant	Tomatoes
Kale	Turnips
Leeks & Green	White Potatoes
Onions	



Butterfish	<b>Farm Raised Hard</b>
Ling	<b>Clams &amp; Oysters</b>
Lobster	Little-necks/Middle-
Scup (Porgies)	necks
Sea Scallops	Specials
(Day Boat)	Cherrystones,
Squid	Chowders, Top-
Sword Fish	necks
Whiting	Cape May Salt Half-
	Shelled Oysters
	Delaware Bay
	Oysters



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**Eww....There's a worm in my corn!**

*Kristian Holmstrom, Research Project Coordinator II, Vegetable IPM Program*

Nothing quite says "Summer," like fresh New Jersey sweet corn. But you're not the only one who likes it. Have you ever husked corn only to find a caterpillar in an ear? Well, there are several species of "worm" that like sweet corn, and two are very common. The first is the European corn borer or ECB. This small gray-brown caterpillar results from eggs laid by the adult female, a moth. The eggs are laid on the under side of corn leaves, and the caterpillars infest the corn stalk after hatching. Once the corn plant produces a tassel on top (where the pollen is produced) and the ear begins to develop on the side of the plant, the ECB larvae begin to move out of the plant and bore into the ears. This is why ECB larvae are frequently found at the bottom of the ear or right in the middle. The second common "worm" comes in a range of colors from yellow to black to green and even pink. It's usually found at the top of the ear and if it's large (an inch or so), it may have consumed the ear tip. This is the corn earworm or CEW. The adult female CEW moth lays her eggs on the corn silks, so the babies hatch and quickly go right into the ear from the top. You probably don't like seeing them, and the growers don't like selling corn with worms, so what do they do about it?

These pests are largely controlled with insecticides, but these materials are often very expensive to apply, and some of them eliminate insects that are not pests. Growers are reluctant to use them and are always looking for ways to reduce or eliminate insecticide treatments. When necessary, growers also try to use insecticides that target the pest only, and do not harm beneficial insects. How

do they accomplish this? Many New Jersey sweet corn growers participate directly in the Rutgers NJAES Cooperative Extension Vegetable Integrated Pest Management (IPM) Program. This program establishes 60-70 blacklight insect survey traps throughout the state each year. These traps allow Rutgers to monitor the activity of the adult (egg-laying) forms of ECB and CEW. Knowing the activity levels of these pests helps IPM staff to know when to check cornfields for ECB damage. This way, growers can treat fields only when ECB damage has reached economic levels, resulting in fewer, but more effective insecticide applications. Trap catch numbers of CEW adults tells IPM staff how frequently growers need to treat silking (the last stage prior to maturity) sweet corn. Conversely, growers are also told when they can avoid spraying altogether! Participation in the IPM program typically results in 30-40% fewer insecticide applications for worm pests than a calendar-based schedule. Additionally, IPM staff compile data from the trap network each week and use it to produce geographical maps of ECB and CEW adult activity throughout the state. This information is published in weekly newsletters that are available to the grower community, allowing farmers who are not direct participants to access pest information to their benefit.



*Top: Checking blacklight traps for insect counts. Below: IPM scout monitors cornfield for worm damage.*

So, the next time you go out on the back steps to husk sweet corn for supper, you can be assured that New Jersey farmers are doing all they can to provide a high quality crop in an economical and environmentally sound way. And as a consumer, you can do your part by cutting off the tip of the odd corn ear that might have a caterpillar in it. It's perfectly fine to eat, and what would summer be without the occasional worm?