

# What's in Season from the Garden State

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

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Pickling cucumbers are washed, dried, graded and packed by hand for the fresh market trade. Pickles are shorter than slicing varieties and have squared-off, blocky ends rather than tapered ends to increase the yield of pickle chips.



With an experienced eye, Charlie Muzzarelli Jr. sorts knobs, crooks and other off-grade pickles from the premium grade that will be sent to the fresh market (see side bar on page 2).

## What's Wrong with Kirby Cukes?

*Rick VanVranken, Agricultural Agent, Rutgers NJAES Cooperative Extension of Atlantic County and Jack Rabin, Associate Director for Farm Program, Rutgers NJAES*

It all started with an e-mail. "What's wrong with Kirby cukes?", demanded a Rutgers faculty member to a general inquiry e-mail distribution list at Rutgers.

The concern was that late last Fall, all of the small pickling cucumbers that could be found in several groceries were covered with small, water-soaked pits or lesions and would decay before they could be eaten.

Jack and I responded with a few suggestions that started a dialog about the Kirby name, but mostly lamented the lack of proper post-harvest handling of pickling cucumbers. Jack happened to work on a pickle farm in Cumberland County in his youth. He recalled the days when early season fresh market prices were high, that he would sort cukes otherwise heading to the Vlassic pickle factory in Delaware, pack them into baskets and deliver them to the Philadelphia Produce Terminal Market to be sold fresh. In that fresh market trade, they were called 'Kirbies', which in fact, is a misnomer.

My research led to an online article at *Practically Edible (Kirby Cucumbers)*. Published 02/18/2005. Updated 09/04/2007. Web Retrieved 11/11/2010 from <http://www.practicallyedible.com/edible.nsf/pages/kirbycucumbers>). It turns out that about ninety years ago, Norval E. Kirby developed several improved varieties of small, thin-skinned cukes for pickling. If you find an occasional reference in heirloom seed catalogs to the likes of Black Diamond, D. and B. Special, Dark Green, Dark Green Slicer, Earliest Black Diamond, Green Pack, Kirbys Stays Green, Stay Green or Sunny South, then you've found one of Kirby's varieties. Though they were replaced in commercial production in only about ten years by the National Pickling Cucumber variety, the Kirby moniker stuck to pickling cucumbers diverted to the fresh produce trade.

Today, when someone is looking for a Kirby cucumber, they're referring to a pickling type sold fresh, i.e. before they are brined. Pickling cucumbers are bred to have a short, blocky shape to increase the yield of 'chips'. They're also bred to have a small seed cavity and a thin cuticle or skin. Those traits allow the brine to soak through the pickle more quickly. Pickling types usually have a slight to pronounced curve, often with ridges, bumps, and small black or white spurs.

In the thirty-five years he's been farming, literally on the Atlantic-Cumberland County border, Charlie Muzzarelli Sr. told me only a couple of old timers still use the term 'Kirby'. Though his father, Delmo, used to call them 'Kirbies' when he was a boy, he has always sold 'pickles' at the Vineland Produce Auction. Of course, I didn't want to tell him that his wife, Rita, was the only person I had ever heard use the term, which is why I stopped at their farm when our colleague sent out that e-mail asking about his Kirbies.

As for those pitted lesions causing his concern, it turns out that thinner skin allows the pickling brine to soak in easier, but it's not tough enough to take the rough handling and cold storage to get it to grocers' shelves. Pickling cucumber varieties are bred to be picked fairly immature and to be packed in brine as soon as possible after harvesting with minimal handling. To get to the fresh market, they are

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New Jersey Department of  
Agriculture's Jersey Fresh  
Availability Report

Arugula	Kale
Baby Arugula & Baby	Leeks
Spinach	Mint
Basil	Nectarines
Beets	Parsley
Blueberries	Peaches
Cabbage	Peppers
Cantalopes & Melons	Radishes
Cilantro	Spinach
Collards	Squash
Cucumbers	Sweet corn
Dandelions	Swiss Chard
Dill	Tomatoes
Eggplant	Turnips
Escarole & Endive	White potatoes



*Tip: Buy pickling cukes very fresh, very young (immature), and store them in some kind of shrink wrap, cello, or bag to prevent desiccation.*

*Cukes not making the grade: Knobs usually have one end larger than the other due to poor pollination. Crooks are too crooked, almost curled. These off-grades may go to other markets or to a pickle broker (who sends them to the processor), and otherwise inedible ones go back to the field to be turned back into the soil.*



*Packing line workers at Muzzarelli Farms in Atlantic County carefully arrange a layer of pickles to top off a premium packed bushel basket headed for the wholesale market.*

*Charlie Muzzarelli Sr. puts up a perfect pickle pack to sell fresh to wholesale buyers, as well as direct to consumers at his family's farm market.*

*Continued from page 1*

washed, dried, sorted, packed into baskets, boxes or crates, shipped to market and put on display. At every step, they are bumped and/or squeezed which can cause bruising. To add insult to injury, cucumbers should not be stored below 50°F, but most refrigerated storage in the fresh produce chain is set closer to 40°F which causes cold injury. Also, for potential brining by the consumer, pickles are not waxed like regular slicing cucumbers, further exacerbating desiccation in the fresh market chain.

Charlie said he's never heard any complaints about post-harvest problems, which further supports the thought that the further from the grocery the more likely there will be either cold/desiccation/bruising damage. Regardless, a pickling cuke destined for wholesale undergoes a lot of handling. After going over the washing/grading line, they're dumped almost two feet into a bushel basket (research has shown a drop more than 8" will cause bruising on a potato), a top layer is neatly arranged, and then a lid is squeezed on tight to reduce potential bounce bruising in transit (and give the buyers that 'full' package they demand), but there can be a whole lot of crushing within and between those stacked bushels.

Pickling cucumbers sold direct at local farm markets are more likely to be in top notch condition. The time between harvest and sale is less, as is the distance transported, not to mention they don't undergo the rigorous packing for wholesale markets.

If you prefer a crispy pickler, a 'Kirby', for your salads more than a standard slicing cucumber and the quality at the local grocery is lacking, Jack says the best bet is to get them straight from farmers, like Charlie and Rita Muzzarelli, as soon after harvest as possible and before they get too banged upon the way to the store. If that's not possible, he also recommends searching for a farmer or store selling Israeli Beit Alpha cukes. Usually sold five on a plastic wrapped tray and about four inches long, they look like miniature Dutch greenhouse cucumbers. Developed and grown for decades in Israel, the Beit Alpha cucumber is parthenocarpic, requiring no pollination and producing no seeds. In Jack's words, they "are some of the tastiest on this earth." Luckily for cucumber fanciers, American farmers have recently started to grow them too.

*Rick Van Vranken also shared this information with his listening audience in his Facts from the Farm radio broadcast on Ed Hitzel's 'Table for One' Radio Show – WOND 1400 AM in Atlantic County.*

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