

Baby Corn— is it for you?

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Fresh baby corn is a flavorful, appealing addition to salads, pasta, soups and other favorite dishes. Marinated, it keeps several weeks in the refrigerator. Baby corn is a very immature ear of corn, so its nutrients are similar to those found in regular corn, but in lesser amounts. Harvest these secondary ears, which usually don't mature anyway, thus getting an additional product from your corn crop.

Chefs at area restaurants are beginning to utilize these unusual local vegetables, developing recipes and serving them to guests. When chefs and consumers use local produce, it strengthens and enhances the community in many ways. It keeps small farmers in business and supports the local economy; it preserves farmland and open space; it conserves natural resources by using less fuel in transportation and packaging; and it preserves the environment with responsible use of water, fewer farm chemicals and less air pollution.

Local farmers are producing delicious vegetable crops that are new to our area. Traditionally grown in Asia, sweet beans, pea shoots and baby corn have caught the attention of Northwest farmers. Certain varieties grow well in the west-side climate as demonstrated in WSU test plots managed by Carol Miles, Ph.D.

These are considered high value crops, benefiting the farmer by not only commanding a good price, but by utilizing side-products of two of the vegetables already grown—peas and sweet corn. In an effort to create demand for these fresh, hand-picked vegetables, WSU Cooperative Extension, with financial support from the King County Agriculture Commission, has developed consumer information brochures and recipe cards that are now available.

The brochures contain information on selecting, storing and preparing each vegetable, as well as nutritional information and tasty recipes. This series of Food from the Field brochures and recipe cards can be obtained by calling the WSU King County Extension office at (206)296-3900 or 1-800-325-6165 x 6-3900. They are also available on the web at: <http://agsyst.wsu.edu/vegtble.htm> (Hand them out to your customers!) These Asian vegetables are nutrient-dense, packed with beneficial phytochemicals and taste delicious.

Baby Corn *(excerpted from the new WSU bulletin by Carol Miles and Leslie Zenz.)*

Fresh baby corn has a crisp texture and a subtle, slightly sweet corn flavor. Although almost all the baby corn found in the United States is pickled or canned and imported from Asia, fresh baby corn is easy to grow in the Pacific Northwest. Baby corn is no longer a delicacy or specialty food reserved for salad bars and Asian restaurants; it is a locally produced delicious treat to eat raw or cooked in many recipes.

Baby corn's miniature size makes consumers think that it grows from dwarf corn plants, but the tiny ears of baby corn are simply immature ears from regular sized corn plants. Specialty varieties are available for baby corn production, but baby corn can also be harvested from many common corn varieties.

Growing Baby Corn

There are two different methods for producing baby corn. In the first method, baby corn is the primary crop, and a variety is selected and planted to produce only baby corn. In the second method, baby corn is the secondary crop in a planting of sweet corn or field corn, and the variety is selected to produce either sweet corn or field corn. The decision whether to grow baby corn either as a primary crop or as a secondary crop will influence variety choice, planting density, and fertilizer rates.

There are specialty varieties of corn, such as Baby Corn, that have been developed specifically for baby corn production. The plants of baby corn varieties tend to produce more ears per plant than other corn varieties. However, many common corn varieties will also produce quality baby corn.

Many other sweet corn and field corn varieties may also be suitable for baby corn production. Before planting a large-scale crop, plant a small test plot to determine your favorite variety. If baby corn is being produced as a secondary crop, the variety must fit the purpose of the primary crop, whether it be for sweet or field corn. Choose a variety that also has good baby corn ear characteristics. Ear quality—not quantity—should be your primary criterion.

Ear appearance. When selecting a corn variety for baby corn production, ear appearance is very important. Kernels should be uniform in shape and petite in size, with rows neatly aligned and ends evenly tapered. Baby corn ears should be 2-4 inches long and 1/3—2/3 inch in diameter at the base, or butt end.

Advantages of different varieties. There is no taste advantage to using sweet corn types instead of field corn types for fresh baby corn production. The immature ears are harvested before pollination and before any sugars have accumulated in the kernels. It may be advantageous, however, to use sweet corn types because they tend to be easier to hand-harvest. Sweet corn varieties have ears that are easier to break off from the stalk. The benefit to using field corn types is lower seed cost.

Culture. The optimum pH range for good corn growth is 5.8—7.0. If using manure, broadcast and thoroughly incorporate it prior to final field preparation. If growing baby corn less nitrogen will be needed than for full maturity sweet or field corn.

Planting. Prior to planting, plow and harrow soil as needed to form a smooth, level seed bed. Plant on well-drained soils to ensure an early planting and healthy crop growth; well-drained soils warm up faster and are less likely to have soil-borne diseases. Plant seed at a depth of 1-2 inches.

For baby corn as a primary crop, space rows 36 inches apart and space seed 4 inches apart within the row. Plant population will be approximately 44,000 plants per acre. In the Pacific Northwest, plant baby corn in late April through early June. Floating row cover, an agricultural-grade fabric, can be used to protect emerging seedlings from bird damage. Using a row cover can result in a two-week advanced harvest. If you use a row cover, place it loosely over the newly seeded field and secure every 10 feet along all sides with soil. The row cover can be removed after corn plants reach a height of 4-6 inches. Removing the row cover facilitates weed-control activities.

Irrigation. Irrigation is necessary for growing baby corn in the Pacific Northwest. The seasonal water requirement for corn is 12 - 14 inches.

Weed control. As with any planting of corn, it is necessary to keep the weeds suppressed until the corn plants have reached a height of 2 feet. Early weed competition will delay corn maturity and reduce yield. To reduce weed germination and growth, plant a cover crop such as rye or buckwheat in the fall prior to spring corn planting. Mow the cover crop, if appropriate, before plowing it under in the spring. Mowing the cover crop reduces the size of the crop debris, making plowing much easier and speeding up decomposition processes. Cover crops have the added benefit of increasing soil fertility.

During the growing season, control weeds with mechanical cultivation between corn rows and hand cultivation within the row. Propane flaming can also be effective against weeds. At least two weedings will likely be necessary. As the season progresses and the plant canopy closes in, the demand for weed control will drop.

Harvest. Ears are ideal for baby corn if they are bite size: 2-4 inches long and 1/3— 2/3 inch in diameter at the base, or butt end. To meet these criteria, harvest ears 1 to 3 days after silks become visible. Harvest baby corn every 2-3 days. At this early stage of ear development, the ear can grow very quickly, becoming too large in just 4-5 days. Some field corn varieties may need to be harvested before the silks emerge. To best determine the appropriate time of harvest for a given variety in your area, harvest a few ears each day starting as soon as the ears appear on the stalk.

Harvest individual ears by hand. Each picking requires the same amount of time and labor that would be required to harvest hand-picked sweet corn. Most varieties should produce marketable ears for 3-4 weeks, though very early varieties may have a shorter harvest period of 2 weeks.

For baby corn as a primary crop, harvest all ears. A single planting may be harvested 9-12 times over a period of 3-4 weeks. The close in-row spacing results in more high-quality primary ears per acre. Most varieties will produce 2-3 ears per plant; however, quality of the third ear may not be adequate. Expected yield is approximately 8,500 pounds of unhusked baby corn ears per acre, or 1,140 pounds husked baby corn.

For baby corn as a secondary crop, harvest the second ear from the top of the plant for baby corn and allow the top ear to mature for sweet corn or field corn. This method allows growers to use the secondary ear which otherwise may not mature for sweet corn production or contribute greatly to silage yield.

After harvest, place the baby corn ears immediately into refrigerated storage with the husks intact to conserve ear moisture and preserve quality.

Marketing Baby Corn

Consider the decision to grow baby corn as a market crop carefully. First, consider if the venture will be profitable: find a market and determine the market value of the crop. Before planting baby corn on a large scale, plant a small plot to determine which corn varieties are best suited for baby corn production in your area, and become familiar with harvesting, storage, and marketing techniques.

Baby corn is sold in the husk to maintain moisture and ear quality. The small ears are very tender, and if the husks are removed before use, the ears may become damaged, discolored, and desiccated. Baby corn can be sold either by the ear or by weight.

Direct-marketing to restaurants and at farmers' markets are good places to begin selling baby corn. Local growers have a marketing advantage in that they are able to provide a fresh, tasty product for consumers who have not had the pleasure of experiencing fresh baby corn. For baby corn nutritional information and preparation tips, see the brochure *Baby Corn: Food From The Field* by Carol Miles.

Specialty seed for baby corn is available from, among others, Osborne Seed Company (Mount Vernon, WA), Nichols Garden Nursery, Territorial Seed Company, Gurney's Seed and Nursery Company, and Johnny's Selected Seeds. The series Farming West of the Cascades is a project of the WSU Food and Farm Connections Team, which is a group of Cooperative Extension faculty and staff seeking to promote and enhance sustainable, community-based food and fiber systems through research, education, and partnerships. The Team is supported by the WSU Center for Sustaining Agriculture and Natural Resources (CSANR). For more information about the Team or CSANR, visit their website at <http://csanr.wsu.edu/>, or call (253) 445-4514.

You may order copies of the somewhat more extensive Extension bulletin *Baby Corn* (PNW532)

and other publications from the WSU Bulletin office, 1-800-723-1763, or online at <http://caheinfo.wsu.edu>.

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