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Eat your Veggies!!!!!

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Microgreens – A New Specialty Crop

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The term microgreen represents a category of salad greens harvested at the first true leaf stage. The young tender two inch tall greens are used to enhance the color, texture, or flavor of salads or to garnish a wide variety of main dishes. One of the best descriptive terms used for microgreens is “vegetable confetti” for a salad. Based on size or age of salad crop categories, the youngest would be sprouts, next micogreens, and third baby greens.

The crops used for microgreens usually do not include lettuces because they are too delicate and wilt easily. Those used have value in terms of color, like red or purple; unique textures; or distinct flavors. In fact, microgreens are often marketed as specialty mixes such as “sweet”, “mild”, “colorful”, or “spicy”.

Certain crops are easy to germinate and grow quickly. These include: cabbage, beet, kale, kohlrabi, mizuna, mustard, radish, swiss chard, and amaranth. There are as many as 80 to 100 crops and varieties of those crops that have been reported to have been used as microgreens. Others that have been used include: carrot, cress, arugula, basil, onion, chive, broccoli, fennel, lemongrass, popcorn, buckwheat, spinach, sweet pea, and celery. Growers should evaluate various crop varieties for their specific value as a microgreen. Many seed companies are very knowledgeable on the crops and varieties to grow and many offer organic seed.

The commercial marketing of microgreens is mainly targeted toward restaurant chefs or upscale grocery stores. Prices generally reported for microgreens are in the range of $30 to $50 per pound. The product is packaged in clamshell plastic containers holding up to one-pound, but often in 4 to 8 ounce clamshells.

Microgreens may be grown by individuals for their own use at home. Growing small quantities at home is relatively easy, however, growing and marketing high quality microgreens commercially is much more difficult. Having the right mix at the perfect stage for harvest is one
of the most critical production strategies for success. The time from seeding to harvest varies greatly from crop to crop, so choosing the right mix of seeds, or seeding the various crops singularly then mixing after harvest, will be critical to success.

Microgreens can be grown in a standard loose soilless germinating media. Many mixes have been used successfully with peat, vermiculite, perlite, coconut fiber, and others. Partially fill a tray with media of choice to a depth of one-half to one or two inches depending on irrigation programs. Overhead mist irrigation and is generally used in this media system.

An alternative production system uses one of several materials as a mat or lining to be placed in the bottom of a tray or longer trough. These materials are generally fiber-like and provide an excellent seeding bed. The mat may be sufficient alone for certain crops or may require a light topping with a media after seeding. Seeding may be done as a broadcast or in rows. Seeding density is difficult to recommend and most growers indicate they want to seed as thick as possible to maximize production, but not too thickly as crowing encourages stretching and also increases the risk. Most crops require little or no fertilizer as the seed provides adequate nutrition for the young crop. Some longer growing microgreen crops may benefit from a light fertilization.

Microgreens are ready for harvest when they reach the first true leaf stage, usually about two inches in height. Time from seeding to harvest can vary greatly by crop from 7 to 21 days. Production in small trays will likely require harvesting with scissors. This is a very time consuming part of the production cycle and is often mentioned by growers as a major drawback. The seeding mat type of systems has gained popularity with many growers because they facilitate faster harvesting. The mats can be picked up by hand and held vertically while an electric knife or trimmer is used for harvesting the microgreens from the mat to fall into a harvest container. Harvested microgreens are highly perishable and should be washed and cooled as quickly as possible. Wash the microgreens using good handling practices for food safety. Microgreens are usually packed in small plastic clamshell packages and cooled to recommended temperatures for the crops in the mix.
Side view of young microgreens grown in soilless media.
Mixture of harvested microgreens showing color and texture for a salad topping.