



## Newsletter

September 2022

### Microgreens

#### Nature's Superfood



For this month, we are providing information about a very popular green, known as microgreens. The pertinent data concerning these plants, including what they are and how to grow them, were referenced from the books located in the Scripps Ranch Library.

Therefore, further details can be gathered from the books listed at the end of the newsletter.

‘Microgreens are maybe the oldest food in the world. Our great, great ancestors knew why to eat them. We are just learning again.’ – Rob Baan, Koppert Cress

### **What are microgreens**

These are often confused with sprouts, which are a distinct and separate category of plant. It is easy to misunderstand what

are and the differences between microgreens and sprouts are explained in more detail in the next paragraphs.

In relation to size, microgreens are larger than sprouts but smaller than baby salad greens. From an anatomical perspective, the term, microgreen, refers to a plant that has produced at least two ‘true’ leaves after the cotyledons appear. Cotyledons begin as the part of the embryo within the seed of a plant. In dicotyledonous plants, they produce two kidney-shaped ‘seed’ leaves and are the first leaves to appear. However, true leaves are different and develop from the plant stem.

Sprouts are germinated seeds that are edible, and we can eat the seed, roots, stem and underdeveloped leaves. Also, they require dark, moist conditions in order to grow to maturity. Microgreens, by contrast, are plants that are grown in soil with high light conditions, normal humidity and good air circulation. They have a much bolder flavor than sprouts with a wider range of leaf shapes, textures, and colors. Thus, we can now understand the differences between sprouts and microgreens.

## Growing at home



Growing microgreens at home is the closest thing to personal salad bar as you can get. With a small amount of space like a kitchen windowsill, a tabletop of a spare room with average or bright light conditions, you can produce multiple crops. The leaves have high nutritional and biological values. By growing them at home, they can be harvested immediately for maximum freshness and peak nutrition.

Recent studies by researchers at the University of Maryland have determined that red cabbage microgreens contain forty times more vitamin E and six times more vitamin C than mature red cabbage. Cilantro microgreens have also been shown to have three times more beta carotene, a powerful antioxidant, than fully developed cilantro and can even exceed the amounts in carrots.

## How to use



Microgreens not only add color to your dishes like salad or any baked dish but are also useful as a garnish. It can increase taste in juices and smoothies too. Adding some wheatgrass or broccoli shoots to your smoothies will enhance the amount of nutrition in

your drink as well as in sandwiches, for example. Therefore, there are many ways to utilize these plants for daily meals.

## How to grow

All microgreens seeds should be untreated. If possible, buy seeds that have been

produced and packaged specifically for microgreen or sprout growing.

## Containers



Those that are shallow, lightweight, and portable, such as recycled food trays and food cans work well and are a sustainable choice. Another option is to utilize raised garden planters outdoors. As long as the containers used have adequate drainage, the plants should grow and there should be a successful yield.

## Soil

Edible shoots are tender seedlings that require a growing medium that will hold and transfer sufficient moisture and oxygen around the seed without waterlogging or drying out frequently. Using a seed-raising mix with pumice is a good option to grow microgreens. This can be found in any garden center or department store that has a garden section.

## Sowing the seeds

It is recommended that each microgreen plant has its own pot when growing. For example, cilantro microgreens should be grown in its own pot while red cabbage microgreens in another pot. Some of the few big seeds like peas, corn and wheatgrass need presoaking before sowing. But others, such as cress,



should not be soaked prior to planting. After harvesting, the microgreens can be eaten together or separately. Fill your containers with only 4 cm (1 1/2 inch) of soil, which will be enough.



Level out the soil and flatten down gently and sprinkle the seeds evenly over the surface. Be sure to give the planted tray a light pressing to settle your seed in the soil but not too firm to compact it. Sprinkle some sifted soil on top of the seeds to keep them moist and warm until they germinate. The seeds must be hydrated constantly since dry seeds will not develop. Covering the seeds creates a mini-greenhouse effect and promotes a humid environment.

After germination, the seeds require light to grow like other plants. Only the shoots should be cut, making sure to leave the bottom part intact to grow more greens.

Here are some microgreens that are easiest to grow, for the first-time growers: -  
Arugula, Corn, Cress, Kale

## Children and Microgreens

Cultivating microgreens in your home with your children is the best way to introduce them to the joy of gardening. It is suggested to grow micro peas and radishes first with the children due to the rapid growth of the plants. This yields quick results, so they are not going to get bored with the project. It can teach them about seed power, soil fertility, and role of water and light.



## Seed Library Pick- Plant- Beet

Beet is a plant in the amaranth family, the most well-known of which is probably the root vegetable known as beetroot or garden beet. Other varieties are leaf vegetable chard and spinach beet, which accentuate the leaf part of the vegetable instead of the root part. Beet cultivation, especially of leaf beets, dates to 2000 years BC in the Middle East, Mediterranean, India and later in China and Europe. Further, beets are known to possess antioxidants properties and are rich in vitamins B1, B2 and A. Beet or other leaf

varieties in this family like Swiss chard, sliver beet and spinach beet can also be developed for microgreens.

## Seed Library Pick- Recipe-Pear, Avocado, and Microgreen Salad



2 Asian Pears  
2 Avocados  
¼ cup (60 ml) Freshly Squeezed lemon juice  
4 cups microgreens of your choice  
½ cup sunflower seeds  
Spice mix as dressing

Peel and slice pears and avocados. Cover with lemon juice. Add microgreens and sunflower seeds. Add spice mix dressing. Toss gently and serve.

### References:

Gilbertie, S. (2015) "Cooking with Microgreens". Countryman Press.  
Hill, F. (2010) "Microgreens: how to grow nature's superfood". Firefly Books, LTD.  
There are multiple sources available at the Scripps Ranch Library that are not cited here.

We want you to share your pictures of your garden and experience, which can be helpful for other gardeners. Also we would like to invite ask your garden related questions and we will select few of them and try to answer it in next newsletter.

Your support will also ensure the long-term sustainability of this wonderful community project. We are now accepting cash and checks donations. Checks can be made out to:

"Scripps Ranch Friends of the Library"

Please place "Seed Library" in the Memo portion. For any questions, please contact Matt Beatty (MBeatty@sandiego.gov)  
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