



# Microgreens

What They Are and How To Grow  
Them



# What are Microgreens

Microgreens are the young and tender edible seedlings harvested when the cotyledonary leaves have fully developed and the first true leaves emerge

Microgreens are loaded with nutrients, such vitamins, C, E, and K, lutein, and beta-carotene, oftentimes in concentrations much higher than those found in the mature leaves of the same plants.



Limitations to microgreen production include the potential to carry food borne pathogens and their short shelf life.

Turner, E.R., Luo, Y. and Buchanan, R.L. (2020), Microgreen nutrition, food safety, and shelf life: A review. *Journal of Food Science*, 85: 870-882.  
<https://doi.org/10.1111/1750-3841.15049>

# Common Varieties

Amaranth

Arugula

Beets

Basil

Cabbage

Celery

Chard

Cilantro

Cress

Fennel

Kale

Mustard

Parsley

Radish



# Seedling Identification!



# How to Grow Microgreens

1. Calculate seeding rate
2. Soak seeds if needed
3. Sow seeds on soil surface
4. Blackout Period
5. Harvest!





# Calculate seeding rate

**Seeding rate:** How densely to sow seeds

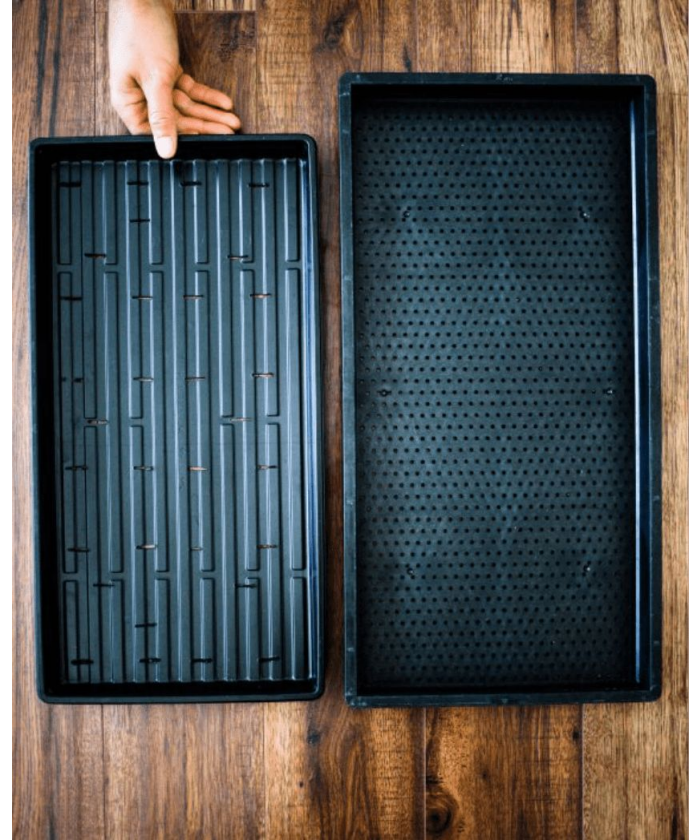
Examples:

1 oz per 1020 flat - Basil and Broccoli

2 oz per 1020 flat - Radish

9 oz per 1020 flat - Sunflower

12 oz per 1020 flat - Pea



# Soak seeds if needed

Seeds that need to be soaked...

- Peas
- Sunflower
- Beets/chard
- Wheat

Don't soak these...

- Basil
- Chia
- Arugula



# Sow seeds on soil surface

1. Lightly compress the soil to create a flat surface
2. Sow evenly and uniformly across the soil surface
3. Compress the soil some more to make sure seeds are secure





# Blackout period

**Blackout period:** A period of time where a flat-somewhat heavy object is placed directly on the soil surface (and seeds)

- Allows seedling roots to dig in and develop a good anchor
- Encourages germination and discourages fungal growth
- Prevents sunlight from reaching germinating seeds
- Length can vary

# Harvest!

- Keep microgreens in a bright location, but not too bright so the stems can lengthen
- Wait until the first true leaves begin to show
- Cut microgreens all at one slightly above soil surface
- Some microgreens can get a second cut (Peas)



