# Microgreens for Indoor Gardens

# Grow with USask



An excellent gardening project for any gardener is growing microgreens indoors. Microgreens are young, delicate plants that have only been growing for 2-3 weeks. They not only provide fresh greenery to your meal but they have high nutritional value: full of vitamins and enzymes.

Microgreens are often made up of the same plants that are found in salad greens but they are harvested at a much earlier stage: as soon as the cotyledons and first true leaves have emerged. Seeds that work well for producing microgreens include:

Seed Type	Days to Harvest
Cress (easiest to grow)	4
Barley, Oat or Wheat grass	6-9
Flax	5-6
Buckwheat	5-6
Sunflower	8-12
Vegetables: arugala, beans, beets, broccoli, cabbage, chard, corn, radish, lettuce, kale, kohl- rabi, pea, spinach, salad mix, turnip	7-15
Herbs: basil, chevril, coriander, cilantro, dill parsley, mustard, sorrel	7-10

Growing microgreens in your home is easy. Choose a large enough container or tray so that the seeds are only one layer deep and with at least 2-3mm between the seeds The container or tray should be 3-4cm deep and



Harvested sunflower

have some holes for drainage. If the tray or container has large drainage holes that allow the soil mix to drain out, line it with paper towel. In order to avoid harmful bacteria (i.e. salmonella) or disease contamination in your microgreens, purchase and use only seeds recommended and sold for sprouting. Microgreens can be grown in a soil or soilless base such as potting soil, coir (coconut peat), sieved compost or worm castings from your vermiculture. Fill the bottom of the tray 2-3cm deep with vour selected mix.

#### Equipment required

- Container: any small, shallow tray with drainage holes in the bottom; re-use any clean styrofoam food tray, pie plate or plastic clamshell container
- A tray or saucer larger than your container to protect vour furniture
- Potting medium: select one that does not contain soil - a mix of peat, perlite and vermiculite is ideal
- Plastic wrap or clear, plastic dome
- Spray bottle filled with water
- Scissors for cutting drainage holes if necessary

Do not use seeds that have been treated with a fungicide. Seeds labelled organic are a good bet but read the package carefully. Prior to seeding, soak the seed in water overnight. In the morning, drain them and sprinkle the seeds evenly on the tray. For best germination and growth, seeds should not overlap within the tray. Cover the seeds with 0.5cm of your mix, pressing the seeds and mix firmly into the tray. Cover the container/tray with clear plastic wrap or lid. Place the tray in a warm room, 20-25°C. Using a mister or light sprayer, ensure that the surface of the tray remains moist. As soon as the germinated greens are visible, remove the clear plastic cover. Continue to water the greens, ensuring that the tray remains moist but is not left in standing water.

Often grains such as barley, oat, wheat grass or even sunflowers are grown in trays that contain no soil or media. When growing microgreens in this manner, line the seedling tray with 2-3 layers of damp paper towel. Spread the soaked seeds over the damp paper towel. Cover the seeds with a plastic lid and/or damp paper towel. Remove the lid and covering paper towel when green leaves appear. Keep the seeds and paper towel moist throughout the germination and growing period. Unlike sprouts, microgreens need sunlight to grow. When grown indoors, they should be placed on a south facing windowsill, under a grow light or outside on your deck or patio in the summer. Some seeds (ex. sunflower) have hulls that will persist on the young plant once they have germinated. Mist the plants with a spray bottle; once moist, the hulls will naturally fall off.



### Harvest

The first leaves are called "seed leaves" or cotyledons. The second set of leaves are "true leaves". Both are edible. Once your micro-greens have their first true leaves and are at least 1" tall, they are ready to harvest. Microgreens are usually harvested when there are 4 or more leaves.

Cut the shoots just above ground level with scissors. Plan to use your microgreens fresh. However, if necessary, they can be stored in the fridge in an air tight container for several days. Roots and rooting media should be composted after harvest.

## Troubleshooting guide

Micro-greens are turning yellow or are leggy and long.	Not enough light. Move to a sunnier location or use grow-lights.
Dead leaves on plants.	Not enough water.
Fuzzy mold growing on micro-greens or the stems are turning black and falling over.	Fungal disease. Discard (put in your compost) and start over with fresh soil-less medium.
	Causes:  Using soil instead of soil-less potting medium.  Too much moisture or humidity. Take the lid or covering off the container. Don't allow the container to sit in water.  Not enough air circulation – are seeds sown too thickly? Try placing a fan in the room.

#### Fun ideas for kids

- Let kids choose what to grow. Try growing catnip for the family cat.
- Popsicle sticks make great labels for your container.
   Decorate using crayons or markers.
- Decorate the outside of the container before planting.
- Pretend your micro-green container is a tiny forest and make up a story about it.
- Take a picture of your micro-greens with your cell phone each day. See how much your crop has grown since it was seeded.
- Little kids love to harvest. Let them practice their scissor skills using blunt scissors.
- Make a Green Speckled Omelette: Use a plastic knife to finely chop a small handful of tender micro-greens like parsley or spinach. Use a fork to scramble one egg and one tablespoon of milk using in a deep bowl. Stir in the micro-greens. Microwave on high for one minute or until fully cooked. Serve with ham.