Hands Health Head Heart Hands Health Rhode Island 4-H Head Heart Hands

The Instant Garden: Micro Greens and Shoots

This garden is ready to eat in only 1 week! Because these plants are harvested in the cotyledon stage, the seedlings are tasty, tender and highly nutritious! Youth learn about seed germination, plant growth, plant needs. They can also learn about trying new things, responsibility, critical thinking and plants in our diet.

Materials and Supplies:

Soilless potting mix for starting seeds
Clear plastic recycled containers with covers (such as those for salad mix, berries or bakery items)
Seeds (radish, cress, tatsoi, peas, nasturtium, corn, etc) See resource list
Mist Bottle
Craft Sticks
Pencil
Permanent marker
Scissors
Plastic tray (if containers have holes)

Doing the Project

1. Moisten and fluff the soilless mix in a small tote prior to starting the project with your group. Very dry peat mixes can take hours to become evenly moist, so plan ahead.
2. Add about 1-1.5 inches of soilless mix to the recycled plastic container. Add water using the mist bottle if the mix feels and appears dry. If the mix is so wet, that there is standing water, carefully dump off the excess or punch holes through the bottom of the container for drainage.
3. Generously sprinkle seeds all over the soil surface so that the seeds are almost touching but not on top of each other. Since the seedlings will be harvested in about a week's time, normal spacing is not necessary. Gently press the seeds into the soil with your hand.
4. Sprinkle about ¼ inch of soilless mix on top of the seeds, press lightly with hand. Gently mist and apply the plastic cover or a piece of plastic wrap.
5. Keep containers in a warm area of your room. Sunlight is not important at this time but warmth is very important.
6. Check soil moisture daily. Condensation should build up on the inside of the cover to create a humid environment perfect for germination. If condensation does not build, check to see if the soil is dry. Add water slowly with a mist bottle until the soil is moist to the touch.

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7. Seeds should begin to germinate in 2-4 days. Once sprouts appear, move containers to indirect sunlight. Remove covers when seedlings are tall enough to touch them. Monitor the soil moisture daily. Because of the dense seeding, the soil may dry quickly.

7a. While waiting for your delicious little seedlings to sprout, try a seed dissection lesson using big dry lima beans. Just soak overnight, then they will be ready for dissecting the next day. You could also start bean seeds in small zip bags with wet paper towel or in small recycled containers like TicTac boxes . Attach the bags to a sunny classroom window for all to observe the germination process. Small plastic containers can be kept in pockets or made into necklaces, where body heat aids in germination.

8. Seedlings are ready to eat when they are approximately 1-1.5 inches tall. Snip the stems with scissors and eat raw! Eat them by themselves, in a salad or in a sandwich. Seedling are rich in nutrients.

9. Micro greens and shoots are only tasty for a short time, less than a week, so eat quickly. Then toss the soil and roots into the compost pile and start a new batch.

Additional Info:

- Corn shoots are super sweet and delicious, before the leaves unfurl. Try growing them in the dark which will keep them tastier longer as well as being blanched.
- If mold develops on the soil or seedlings, discard and start over. The environment may have been too cool, so find a warmer spot for your seeds to germinate.

Resources:

Articles:

Martha Stewart Living "Half Inch Garden" http://www.marthastewart.com/953512/half-inch-garden

Micro Greens: A New Specialty Crop , Danielle D. Treadwell, Robert Hochmuth, Linda Landrum, and Wanda Laughlin, UFL : http://edis.ifas.ufl.edu/hs1164

Micro Greens, Johnny's Seed Co.: http://www.johnnyseeds.com/assets/information/micro-greens-brochure.pdf

Seeds:

Burpee's Seed Co : www.burpee.com

Johnny's Selected Seeds: www.johnnyseeds.com

Search online for more seed sources.

Also, your URI 4-H Program Coordinator can be contacted for more resources:
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