

Activity: Propagation Goal: Psychological/Emotional
Populations: All

TH Activity Plan – Herb Propagation from Seed

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Photo by D. Relf



ACTIVITY DESCRIPTION: Participants will grow herb plants from seed.

THERAPEUTIC GOALS:

Cognitive/Intellectual: Practice sequencing & decision-making skills; increase focus & concentration

Physical: Strengthen fine motor skills, practice hand-eye coordination

Psychological/Emotional: Strengthen sense of empowerment by nurturing plants & being responsible for their care

Sensory: Handle small seeds, moist objects with sensory inputs

Social: Create new plants as mechanism for social/group activity

STEP-BY-STEP PROCESS:

1. **Pre-Session Preparation:** Gather and set up planting supplies and prepare the workspace for planting activity. Add enough potting soil to soil bin for there to be ample soil for potting up participants' seeds in cell packs. Fill watering cans half full of water.
2. Facilitator begins session by passing around pictures of the herbs to the group and describing each plant, including its growth habit and sensory/herbal uses. Open up the discussion to the benefits of growing plants from seed, watching them grow from seed to tender seedling to mature plant for the garden.
3. Have participants pour small amounts of water onto potting soil in soil bin. Use scoop to work the water into the potting soil in order to premoisten it and make it workable for seed sowing. Soil should be moist but not wet or muddy. Add small amounts of water a little at a time, using scoops or hands to blend soil and water.
4. Use scoop to fill the cell pack with premoistened soil. Each cell pack should be filled just to the top. Tap each cell pack gently so that air pockets are removed and soil settles to the bottom. Do not pack in soil.
5. Place 2-3 seeds from the seed packet into each cell of the cell pack. Note: participants can select more than 1 different type of seed to plant in their cell packs, as resources permit, but avoid mixing seed together in the same cell. Use finger to gently press the seed into the soil. Sprinkle a small amount of soil over the seeds to lightly cover them.
6. Transfer planted cell packs onto prepared flat/tray.
7. Carefully water in the seeds with bottom soaking by using the watering can to add about ½-1 inch of water to the bottom of the tray.
8. Label seeds w/ name and date on the outside of the plastic bag.
9. Place 6-cell packs in a tray and place in a bread bag or miniature greenhouse, then place trays in an indoor location with a temperature

Materials

Herb seeds: dill, basil, chamomile, nasturtium
Printed pictures, picture on front of seed packets, or fresh cuttings/live plants of herbs
Potting soil or seed starting mix
Small scoops (1/2 cup or 1 cup size)
Soil bins or trays for holding potting soil
Watering cans or pitchers of water
cell packs (2-6 cell containers per participant)
Flats/trays for holding cell packs, preferably no drainage holes
Miniature greenhouse cover for flat or large clear trash bag/plastic, paper towel
Plant tags
Permanent markers, pencils
Gloves, wipes

about 70° F. Sunlight is not required until the seeds germinate. The trays should not be set in direct sunlight in a bag as they will overheat.

APPLICATIONS FOR POPULATIONS: Herb propagation from seed is a basic skill that most populations involved in gardening, school gardens or therapeutic horticulture programs will participate in. Incorporating therapeutic goals can target specific health domains where improvements are sought including the physical focus on strengthening hand & eye skills. Cognitive/intellectual goals can be adapted to include children, developmentally delayed individuals or others with cognitive challenges with therapeutic techniques allowing for the multi-step process. Therapeutic techniques allowing for adequate time and pace of activities should be adapted to their needs. All populations can benefit from practicing nurturing skills and creating new plants from seed, these providing positive emotional/psychological client outcomes. The activity can promote a sense of empowerment and can be discussed as such with groups/individuals dealing with deficits in this area or life experiences where their sense of control has been diminished. Concepts related to human development re taking responsibility, self-care and care of others (plants and humans), and stages of development may resonate with participants across populations. This activity lends itself to vocational horticulture programs teaching foundational horticulture knowledge and skills.

SAFETY CONSIDERATIONS: Before using coated seeds, double check that they are coated with non-pesticide materials like clay. Coated seeds that contain pesticides are labeled as such and can be found in the commercial horticulture industry; however, these types of seeds may be feasible to use under certain circumstances, such as some vocational programs, and must be handled according to package directions. For participants who have tendencies to put non-food items in their mouths, avoid using seeds from plants with toxicity.

NOTES OR OTHER CONSIDERATIONS: Recommended herb seeds - dill, basil, chamomile, thyme, rosemary, sage, chives, tarragon and nasturtium. Oregano started by seed may not be true to the type of seed planted, and flavor will vary. (Note that plant experts recommend propagating strong flavored plants by root division or cuttings to ensure best flavor). If mold appears increase air circulation by cutting a hole in the bag or removing it completely from mini greenhouse. The seedlings should only need a light sprinkle of water about twice a week. Humidity, temperature and size of containers will dictate watering requirements. Letting the potting media dry out a little before watering again is a good horticulture practice.

Refer to THAD *Watering Small Containers, Watering Cell Packs, Hardening Off Plants* activity plans.

REFERENCES/ RESOURCES:

High Mowing Organic Seeds. How to do a quick germination test at home.

<https://www.highmowingseeds.com/blog/how-to-do-a-quick-germination-test-at-home/>

Stivers, L. & DuPont, T. (2012). Seed and seedling biology. Pennsylvania State University Extension.

<https://extension.psu.edu/seed-and-seedling-biology>

University of Illinois Urbana-Champaign. (2020). Start herb seeds indoors. College of Agricultural, Consumer & Environmental Sciences Illinois Extension. <https://extension.illinois.edu/news-releases/start-herb-seeds-indoors#:~:text=Plant%20at%20least%20five%20seeds,moist%20during%20the%20germination%20period.>

Edits were made for THAD purposes in 2023.

TH Activity Plan form developed by Lesley Fleming, Susan Morgan and Kathy Brechner (2012), revised in 2023.