THAD Therapeutic Horticulture Activity Database

Activity: Propagation Goal: Cognitive Populations: All

TH Activity Plan – Rooting Spider Plants in Sphagnum Moss

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Materials

For each participant:

Mother plant(s) with enough plantlets for each participant

Clear cups or containers

Sphagnum moss petals

Scissors, pencils, watering can/squeeze bottle

Small dishes, trays or potting tidys

Plastic wrap or bags

Stick labels - one per pot

Gloves, wipes

ACTIVITY DESCRIPTION: Participant(s) will propagate spider plant(s) (Chlorophytum comosum) houseplant from cuttings.

THERAPEUTIC GOALS:

Cognitive/Intellectual: Learn houseplant names, plant part names & propagation techniques; practice using sequenced steps for horticulture tasks

Physical: Strengthen fine motor skills & hand eye coordination
Psychological/Emotional: Consider concepts of new beginnings
Sensory: Explore tactile sensory interactions from plant textures,
mixing soil with hands; address tactile sensitivities by
expanding tasks that involve work with hands

Social: Share tools & materials with fellow participants; propagate plants understanding their work/plants will be used by the program to benefit others

STEP-BY-STEP PROCESS:

- Pre-Session Preparation: Prepare 1-2 baby plants (plantlets) per participant. Choose plantlets with roots started already if possible. Have sphagnum moss petals & water ready. Pre-moisten sphagnum if containers have holes.
- **2.** Facilitator begins session by demonstrating the propagation procedure before participants begin.
- 3. Participants write their name, plant name and date on label.
- Place sphagnum moss petals into clear containers. If unable to source petals, cut sphagnum moss smaller with scissors. Have enough sphagnum to cover base of plant completely.
- 5. Add water to the containers that do not have holes.
- **6.** Push cuttings gently into the sphagnum.
- **7.** Place plastic over the top of the container without touching the plants and secure.
- 8. Place plants in filtered sunlight or under grow lights. If soil dries, add water. Plastic should help maintain humidity.
- **9.** In about one month plants should have roots and be able to transplant into soil.

APPLICATIONS FOR POPULATIONS: This TH activity is appropriate for most populations except where items may be put in mouths or where immune systems are compromised. (See safety notes below). For participants with cognitive deficits or developmental delays, some of the propagation tasks can be done ahead: pre-fill containers, have cuttings ready, pre-moisten sphagnum, have water ready, make labels. For participants with no cognitive challenges, they should be able to do the entire propagation process, help others in any of the above, assist in getting water, setting and cleaning up, and possibly snip cuttings (plantlets) directly off the mother plant(s).

Relating psychological health goals to the TH activity can involve discussing or introducing concepts of new beginnings for plants and people, this providing a starting point that may be important for people who are incarcerated, recovering from traumatic situations, or other. Social therapeutic goals can include, and be integrated into the new beginnings theme. Propagating spider plants that are to be used by other people in the program provides a community service opportunity for participants.

Learning propagation methods can support vocational, educational and therapeutic goals. In the intellectual/cognitive health domain, expanding horticultural knowledge learning plant names, plant parts, various propagation methods and plant care can be delivered and adapted by the facilitator for specific ages and both cognitive and physical abilities.

SAFETY CONSIDERATIONS: The facilitator is responsible for knowing poisonous and toxic plants and plant parts. Sphagnum moss has a pH level of 4.0-4.5 and is considered sterile. There have been cases where cutaneous sporotrichosis caused by fungus entering the human bloodstream through skin breaks has been associated with sphagnum moss. Protection with gloves and long pants is recommended, as well as masks if sphagnum is used in its dry form. Some participants need closer supervision using sharps and/or preventing ingestion of items. Alternative activities can be substituted without such potential safety concerns.

NOTES OR OTHER CONSIDERATIONS: This session or related sessions can investigate and practice other methods of plant propagation including layering, division, grafting and budding. This may be particularly relevant for programs with a vocational horticulture focus. The University of Maine Cooperative Extension's plant propagation online information provides basic information on horticultural best practices that can guide the facilitator. Other resource materials are readily available online as well.

REFERENCES/ RESOURCES:

Centers for Disease Control and Prevention. (2022). Sporotrichosis.

Columbia University. (2023). How to handle new beginnings, according to Columbia experts. Columbia News. https://news.columbia.edu/news/how-handle-new-beginnings-according-columbia-experts

Harli G. (2023). How to propagate spider plants the correct way from start to finish COMPLETE PROCESS.

[YouTube]. https://www.youtube.com/watch?v=iGaCOHzUv6A

Totemieier, C. (1989). Gardening; The two sides of sphagnum moss.

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Edits were made for THAD purposes in 2024.

TH Activity Plan form developed by Lesley Fleming, Susan Morgan and Kathy Brechner (2012), revised in 2024.