Plant Propagation Workshop – February 10th, 2021 – Andrea Crook

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Andrea Crook

Methods:

(1) Rooting a cutting in water
(2) Using rooting hormones
(3) Soil surface method for succulents
(4) Regrowing kitchen vegetables
(5) Microgreens

Types of Cuttings

(a) Plants with root nodules (ex. ivy, spider plant)
(b) Soft stem (ex. basil, mint)
(c) Hard stem (ex. thyme, rosemary)
(d) Succulents (ex. jade, hen & chick, sedum)
(e) Kitchen vegetables (ex. "living lettuce", celery, carrot/beet tops, green onions, ginger/turmeric/garlic)

Equipment:

- Cutting knife
- Container for water rooting (1)
- Container with cover for hormone rooting (2)
- Container with soil for surface soil method (3)
- Rooting hormone (powder/gel/water)
- Water
- Soil

<u>Method 1: Rooting a cutting with water</u>
This is the simplest method and works with almost all plants, but some are faster than others.

Plants with root nodes such as ivy or soft stem plants such as basil or mint will root quickly in plain tap water and indirect (or intermittent) light. Simply cut the plant with a sharp knife on an angle (scissors may crush the stem) and place in water for 1-3 weeks. Once roots are 1" to 3" long, gently plant in soil and water well.

Hard stem plants can be rooted in water. I have had success with thyme, rosemary, and oregano, but it may take a long time for roots to form (4-6 weeks). Succulents may rot if placed directly in water.

Youtube video will be uploaded Feb. 16, 2021

<u>Method 2: Using rooting hormones</u>
This method works best for hard stem plants and is faster than water rooting. I typically use this method to propagate rosemary and thyme. It can be used for soft stem plants as well.

Please note, it will only work for plants that "branch". For example, mint and basil, create many side branches, not just a main stem. Parsley and cilantro, on the other hand, only have center stalks, no branches. This method will not work on plants like that.

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Rooting hormones can be purchased at most gardening centers/stores with gardening centers. I purchased my rooting gel at Rona and have previously purchased rooting powder at Canadian Tire. Both powder and gel work equally well. It is also possible to make a rooting hormone liquid from chopped up young budding willow branches, but I haven't tried it. This was the powder used in the workshop.

Start by preparing a container for the cutting. I typically use a clear plastic cup that I've poked holes in, so that I can watch the roots form. Make sure the container you use can drain. Fill with soil and make sure it is very wet. Poke a small hole in the middle for the cutting.

Have a container of water on hand. Carefully cut the plant with a sharp knife, dip in water, and then dip in powdered rooting hormone. Or, if using gel/liquid rooting hormone, cut the plant and dip the cutting into the gel/liquid.

Next, carefully place the cutting in the prepared hole trying not to knock of any of the rooting hormone. Gently water, and then cover with a clear container. You can use another plastic cup (without any holes), a Ziploc bag, or even wrap it with plastic. Then place it somewhere it will get light. I usually place it on one of my light tables.

Covering the cutting is extremely important. It will be more difficult for the cutting to draw moisture from the soil, so by covering it, the plant will absorb moisture from the moist air inside the container.

After about 1 week, start to uncover it partially (tip the cup partially over, but keep the majority covered), or uncover it for about an hour or so each day and gradually increase the amount of time it's uncovered. If the plant wilts after uncovering it, spray it with water and cover again. This is a gradual process.

Once you can see roots down the side of the container, transplant to a larger pot.

These were the thyme and rosemary plants I showed during the workshop. I don't have a video showing the actual rooting method, but will upload that this week.
https://youtu.be/9wEhDLfG8HE
https://youtu.be/q1nlqT0ytUk
https://youtu.be/ARSxFVQaqJM

Thyme propagated from cuttings - has moss!
Add description

Transplanting Thyme that was started from a cutting
Add description

Transplanting Rosemary
This rosemary was grown from cuttings and is now being transplanted into a larger pot.

Method 3: Succulents placed on soil surface

Succulents are unique plants because each leaf maintains its own water supply. If a leaf falls off and lands on moist soil, it will start forming a new plant at the broken end of the leaf.

These plants are very easy to propagate. Simply break off a leaf (or even part of the plant) and lay it on moist soil ensuring that the bottom of the leaf is in contact with the soil, but not buried in it. You can mound the soil around it to ensure it has contact.

Keep the plant moist. Roots should start to reach out into the soil and small leaves will start to form at the base of the larger leaf. As it grows, the large leaf will gradually die off and the new plant will start growing.

Here's a video illustrating how hardy succulents are. These were the ones rescued and used in the workshop.

https://youtu.be/YHyM_UeD-ns

Succulents survive 4 months of neglect in a plastic bag

Add description

Further Youtube videos will be uploaded Feb. 16, 2021

Method 4: Regrowing kitchen vegetables

A surprising number of vegetables in your kitchen can easily be re-grown all winter. To start, consider vegetables that are already growing in your refrigerator. The easiest one to start with is living lettuce. These plants are typically packaged with a small root ball.

When first eating this lettuce, take leaves from the bottom and leave a few at the center top. If the root ball is dry, soak in water for a few days first. Then transplant into a pot and place under light.

If the lettuce was in an enclosed container, it may benefit from covering with a clear plastic bag (or some type of cover) to help it maintain moisture as it adjusts to its new growing conditions. Over the course of one week, gradually remove the cover to acclimatize the plant to drier growing conditions.

Some living lettuces come in plastic clam shells. You can re-use this as a growing container, just poke some holes in the bottom, then fill with soil.

I have a couple of videos up on re-growing living lettuce.

https://youtu.be/5wJLNA9xoko

https://youtu.be/1VYYuLbx2nE

Re-growing living lettuce #2

Add description

Re-growing living lettuce

Add description

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Method 5: Microgreens

Microgreens are fun! Although you can purchase microgreen seed mix, really, any leftover seeds from edible leafy plants will work. Typically, microgreen mixes contain: cilantro, beets, various types of lettuces, mustards, or kale. I've successfully made my own using leftover seeds such as kale, cilantro, arugula, and cress. You could even mix in onion seeds for a tasty change.

Any shallow container will work. In the workshop, I used a 2L milk jug I had cut in half the long way and poked holes in the bottom. Plastic clam shells from baby lettuce/spinach mixes work well too. Fill with about 1" of soil, make sure it's damp, sprinkle in your seeds, lightly cover with soil and press down, then put somewhere with light and watch them grow.

Here are some videos for it:
https://youtu.be/0bAMf04xNo8

Preparing a milk jug container for growing microgreens
Add description

https://youtu.be/rKqOLpyEXY0
https://youtu.be/sn_YtmRZBm4
https://youtu.be/417r218oBJs

Planting microrgreens #3
Add description

Planting microgreens #2
Add description

Planting microgreens
Add description

Important additional notes

Bugs & Diseases
Taking cuttings from plants that are outdoors can result in introducing bugs into your house/greenhouse. Make sure you wash the cutting very well. Depending on the cutting, this could be with a mild soap/insecticidal solution or by blasting it with a stream of water to dislodge any bugs.

A common disease with herbs is fusarium wilt. I have had issues with oregano from the grocery store. If you propagate a herb with fusarium wilt, it may grow up to a point, but then, the plant will stop growing

and the stem will start to turn brown. Eventually, the plant will wilt and die. Do not compost the soil or plant. It is infected and must be thrown away.

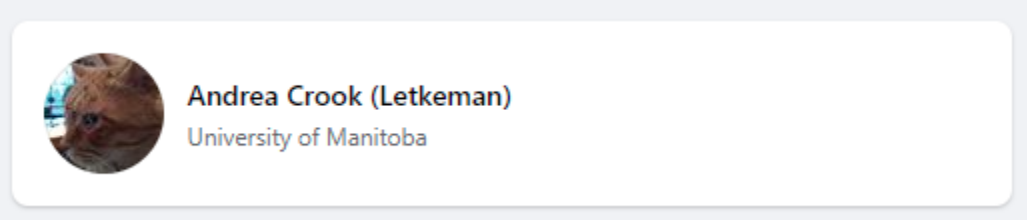
Remember, Growing conditions matter!

Plants need six things to thrive:

1. Container: ceramic, plastic, paper, container-less
2. Growth Medium: soil, seed starting mix, hydroponics
3. Moisture: water, domed covers, plastic wrap/bags
4. Light: some type of grow light. Light from a window (even south-facing) is typically not enough for vegetables, but is usually ok for house plants
5. Temperature: heating mats, temperature-controlled area, although some plants may prefer cold
6. Air Circulation: fans, brush the tops of the plants with your hands to strengthen the stems

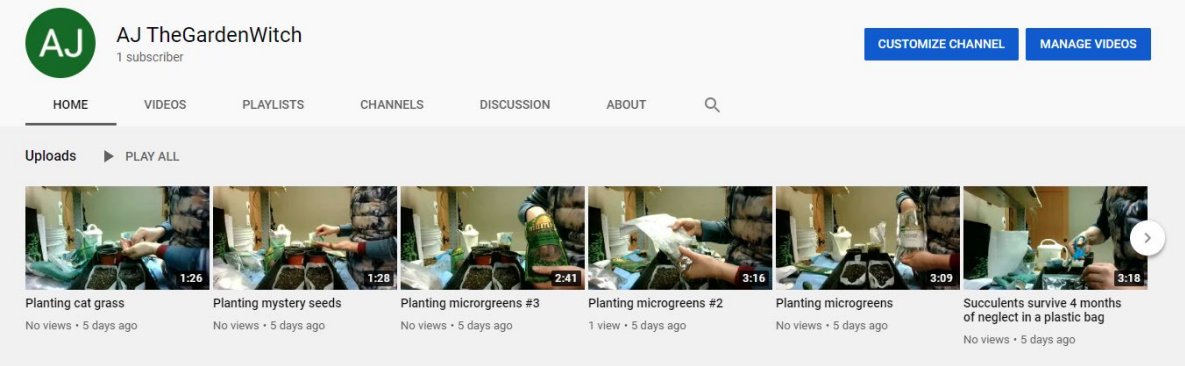
CONTACT

Andrea Crook
Best place to contact me is Facebook. I am happy to answer any plant/gardening questions you may have.



I have a youtube channel: AJ TheGardenWitch at: AJ TheGardenWitch - YouTube or https://www.youtube.com/channel/UCVEdqUfVP0bN-Y6f3gSk-Vw

This has lots and lots of plant propagation videos. I still have another 50 to upload, so check back regularly.



I can be reached at my old email: andrea_letkeman@hotmail.com, but am not checking it regularly, so Facebook messages are better.

Additional seed planting videos include the following seed starting ones as well as several transplanting and a few garden tours. I will be documenting all the seeds/transplants/cuttings I'm starting this

growing season. If you are interested in more tutorials or even participating in a facebook/youtube live session or another zoom session, please let me know. Planned dates for seed starting are as follows: Feb. 27/28, Mar. 6/7m, Mar. 20/21, Apr. 3/4, Apr. 17/18, and May 1/2. Send me a message if you'd like to join in.

VID 20200429 172955

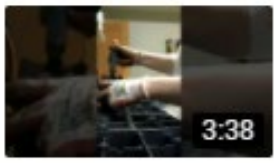
Planting sweet peas

Planting marigold seeds

In this video I discuss planting marigold seeds, demonstrate planting some saved seed, and discuss different types of marigolds.

Planting nasturtium seeds

In this video, I discuss how to prepare nasturtium seeds for planting by filing/sanding to "scar"/remove part of the seed coat, then soak for 24 hour...



Preparing soil and filling containers for planting seeds.

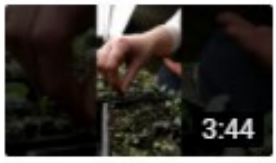
Add description

Choosing containers to start seeds in/transplant into

In this video, I talk about different types of pots for growing seedlings in.

Picking basil for pesto

In this demo, I'm pinching off the tops of basil plants to collect the leaves for making pesto. By pinching off the top, I'm encouraging the plant to produce...



Planting kale seeds

In this video I plant some kale seeds, discuss different types of kale, and show some two week old seedlings.

Planting basil seeds

In this video I demonstrate how to plant basil seeds.