


LET'S EXPERIMENT: GREENHOUSE IN A JUG

From the Garden of: Kathy Luoma, UMN Extension Master Gardener & PowerUp Ambassador

Grow veggies at home without a garden by turning any clear plastic jug into a mini greenhouse! Your greenhouse in a jug gives seeds a chance to germinate (sprout) when the light and temperature are just right.

SUPPLIES



Plant seeds in winter & spring to garden all year!

CLEAR JUG or CONTAINER + SOIL + SEEDS* + WATER = GREENHOUSE

*Best seeds for March & April: kale, lettuce, peas, radish, spinach, broccoli
 *Best seeds for late April: tomatoes, peppers, eggplants, summer squash, cucumbers

OTHER SUPPLIES NEEDED



HAVE ADULTS HELP!

- BOX CUTTER OR CUTTING TOOL
- SCREWDRIVER OR KNIFE
- PLANT LABEL (PLASTIC PLANT LABEL, WOODEN STICK)
- DUCT TAPE
- PERMANENT MARKER

INSTRUCTIONS



1. Clean your container, throw away cap.
2. Poke drainage holes in container bottoms using a knife or screwdriver.
3. For milk/water jugs, cut a horizontal line from one side of handle around to the other side, leaving a hinge. Do not cut off the entire top.
4. Pre-moisten soil to a muddy consistency in a large tub. Mix well.
5. Fill containers with moistened potting mix, just below the cut line of the jug. Lightly level.
6. Plant seeds according to package depth directions. If seeds are tiny, cover with a sprinkle of potting mix to ensure good seed-to-soil contact. **Tip:** you can plant the seeds closer than recommended and then divide them as small plants.
7. Make a plant label for each container with permanent marker.
8. Place labels near edge of containers with print facing toward the outside of container so you can see what each veggie is.
9. Close container and seal jug with duct tape (torn into 6-inch lengths). **Remember:** there should be no cap on the container.
10. Label the outside of containers with a permanent marker.
11. Place outside on the south side or sunniest area of your home. Snuggle containers together and wait for snow and rain to insulate and water them.

LET'S EXPERIMENT: GREENHOUSE IN A JUG

PART 2 - CARING FOR YOUR VEGGIES

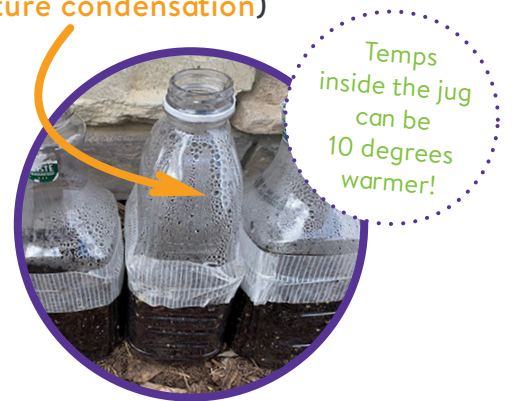
From the Garden of: Kathy Luoma, UMN Extension Master Gardener & PowerUp Ambassador

Seeds are planted. It's spring... now what?

When the snow melts and the days get longer and warmer, it is time to check on your greenhouse jug often because they need more care!

WHEN TEMPERATURE IS OVER 20 DEGREES:

1. Put your greenhouse jug outdoors in a sunny spot and let nature take over!
2. Every 5 days or so, check your jug for water droplets (**moisture condensation**) on the inside and soil color.
 - If the soil looks light brown and dry, add water.
 - Once seedlings have sprouted, pay attention to nighttime temperatures. If temperatures go below 20 degrees, put a towel over the top of the jug. Remove it when temperatures rise in the daytime.



WHEN DAYTIME TEMPERATURE IS 50-60 DEGREES:

1. Unseal the jug and flip open the tops, so the seedlings don't get too hot!
2. Cover them back up at night. They do not need to be resealed, just flip the top back on.
3. Continue to watch the baby seedlings grow and keep them watered. Do not let them dry out, but try not to over water them either.



CLOSED



OPEN

LET'S EXPERIMENT: GREENHOUSE IN A JUG

PART 2 - CARING FOR YOUR VEGGIES

From the Garden of: Kathy Luoma, UMN Extension Master Gardener & PowerUp Ambassador

THINNING YOUR PLANTS:

It is easy to plant too many seeds, especially with tiny seeds. If there are too many seedlings, they will compete for light, water, and nutrients.

A SEEDLING is a young, small plant.




That means it is important to “thin” seedlings by carefully pinching off stems in crowded areas of the jug, leaving the strongest ones standing.

TRANSPLANTING YOUR PLANTS:

You can transplant (that means to plant again or replant) all plants to a larger container, a raised bed, or garden bed to help them live a long life. The only plants that do not like to be moved once planted are root vegetables, like beets, carrots, parsnips, turnips, and rutabagas.

Don't have space to transplant? Or want to keep the seedlings in the greenhouse jug?

-  1. Cut the top off the greenhouse once the temperature is not likely to go below 32 degrees, which is freezing.
2. Leave the plants in the jugs and enjoy your plants while small:
 - Harvest and eat leafy vegetables such as spinach, kale, and lettuce when the leaves are small and tender.
 - Pea shoots and pods are edible.
 - Broccoli may even produce a small head.



Note: The plants should continue to grow until they get rootbound (that means the roots have taken over the pot and the plant is no longer getting enough air, water, and nutrients due to lack of soil).