-A variety of sources indicate the seeds should not be under the soil, but instead on top of the soil.

<https://www.bhg.com/gardening/vegetable/herbs/how-to-grow-wheatgrass/>

-”A deep layer of 1-2 seeds deep on top of the soil”

-”Ready for consumption in about 6-8 days”

<https://www.badgerbalm.com/blogs/cultivating-good/diy-grow-wheatgrass#:~:text=Drain%20the%20water%20and%20put,cover%20the%20seeds%20with%20soil>.

-”You do not need to cover the seeds with soil”

<https://herbsathome.co/how-to-grow-wheatgrass-indoors/#:~:text=Wheat%20seeds%20need%20darkness%20to,humidify%2C%20and%20shade%20their%20seeds>.

-”Ready to harvest after 10 days”

Materials used:

[Potting Soil](https://www.menards.com/main/outdoors/gardening/lawn-plant-care/compost-soils-amendments/miracle-gro-reg-indoor-potting-soil-mix-6-qt/72776430/p-3289655539435356-c-1463608034794.htm?exp=false)

-6 qt.

-Fertilizer default good for 6 months.

-Nitrogen 0.21%

[Pot](https://www.menards.com/main/outdoors/planters-hanging-baskets/bloem-16-terra-cotta-plastic-ariana-self-watering-planter/20-56116/p-1642874322652912-c-10138.htm?exp=false)

-6 gal. capacity

-16” diameter

-Plastic

[Wheatgrass Seeds](https://www.amazon.com/Wheatgrass-Microgreen-Sprouting-OZ-Organic/dp/B01IIPD9II/ref=sxin_14_pa_sp_search_thematic?content-id=amzn1.sym.6630a0ac-0b43-4c44-aa9a-a6c59ce0024b%3Aamzn1.sym.6630a0ac-0b43-4c44-aa9a-a6c59ce0024b&crid=16A4HPU606J1U&cv_ct_cx=wheat+grass+seeds&dib=eyJ2IjoiMSJ9.gYkVZ61a5OuMy0WVs6psXgVnLaz4Uj97P0WI7r-e1tQu53cJj2OiM5ukQjgwxdNA2bAtrN1uSmOSCA2885FE-g.vPBQifMhIWiHLOhlhyVEC-KxdCPymvEInWGDURFOD1M&dib_tag=se&keywords=wheat+grass+seeds&pd_rd_i=B01IIPD9II&pd_rd_r=e412bdeb-ef2d-4e8f-87d6-77ed048eb34a&pd_rd_w=e6Q08&pd_rd_wg=Qw30Q&pf_rd_p=6630a0ac-0b43-4c44-aa9a-a6c59ce0024b&pf_rd_r=Y6SV15HSA3YDMY9RD3FE&qid=1709111207&sbo=RZvfv%2F%2FHxDF%2BO5021pAnSA%3D%3D&sprefix=wheat+grass+seeds%2Caps%2C103&sr=1-3-364cf978-ce2a-480a-9bb0-bdb96faa0f61-spons&sp_csd=d2lkZ2V0TmFtZT1zcF9zZWFyY2hfdGhlbWF0aWM&psc=1#customerReviews)

Notes: The full bag of potting soil was used with the pot. ~3 inches between the top of the soil and the top of the pot.

-(Maybe this difference might be problematic? I guess it doesn’t matter as long as we are consistent. Maybe later on try different pots to see if our calibration still holds up.)

Prep:

-Punch out all drainage holes from the pot.

-Dump the entire bag into the pot.

Procedure:

- Measure ⅓ cup of wheatgrass seeds.

-Sprinkle seeds on top of the soil in a layer about 1-2 seeds thick. The seeds do not have to cover the full surface area of the soil, just a portion in the middle preferably.

-\*\*\*Specific water irrigation setup

-\*\*\*Specific moisture sensor placement within the pot relative to the center’s seeds and relative to the water irrigation setup.

-Let set in a specified indoor controlled environment for 1 week per experiment.

-1 week at a time to allow for close to a full growth cycle while still having time to test ~4 times per month.

Measurements:

-Automatically recorded every 30 mins.

-Average of past 6 data points taken at 5 min increments (to avoid outlier data).

-Default moisture value 10/1: 825

NOTE: Compactness of the soil seems to affect moisture sensor data somewhat\*\*\*\*\*\*\*

First test:

-Let water run until the moisture sensor detects a significant change in moisture.

-Will have to define what is considered a significant change/ the threshold.

Second test: -Measure pump output and let run for a specified amount. Say like 100ml or something. Then relate this to sensor data somehow.