

GROWER'S NOTES

BY PAPERPOT CO.



Cilantro Microgreens

CROP DATA:

MICROGREEN PEA SHOOTS	Paperpot Trays (12" x 24")	Standard Trays (10" x 20")
RECOMMENDED CULTIVARS	Split seed cilantro	Split seed cilantro
DRY GRAMS PER TRAY	42g	32g
GERMINATION TIME (STACKED)	7 days	7 days
DAYS TO MATURITY	21-25 days *time from seed to harvest	21-25 days *time from seed to harvest
TARGET CROP YIELD PER TRAY	315 g (+/-)	240 g (+/-)
HARVEST UNIT	105 g of product (+/-) per clamshell	105 g of product (+/-) per clamshell
HARVEST UNITS PER TRAY	3 (+/-)	2.3 (+/-)
PRICE PER UNIT	\$14	\$14
REVENUE PER TRAY	\$42 (+/-)	\$32 (+/-)

**NOTE: All above crop data is courtesy of Scintilla Farms and is based on their actual numbers growing in Paperpot Germination Trays (scaled down by 24% to provide numbers for growers using 1020 trays)*

SUGGESTED TOOLS & SUPPLIES:

TRAYS	Perforated top trays nested into solid bottom trays (Paperpot trays or 1020's)
GROWING MEDIUM	80% peat moss, 20% perlite or vermiculite (nutrients/compost optional)
SEED SANITIZING	Sanidate 5.0 (1.6 oz to 5 gal. water), or Zerotel 2.0 (20 ml to 2 L of water), or 1:1 white vinegar and hydrogen peroxide
SHELVING	NSF Wire Shelving Racks: 60"x24"x72" fits four Paperpot trays per shelf, 48"x18"x72" fits four 1020 trays per shelf. *Add a 6th shelf to these 5-tier racks to fit five grow shelves, 12" between shelves.
LIGHTING	4' T5 LED Barina Lights - 3 per 24" deep shelf (2 per 18" deep shelf)
VENTILATION	Desktop computer fans (2 per shelf), or standing fan next to rack
HARVEST	Well sharpened kitchen knife
PACKAGING	Clamshells (or plastic bags), farm logo stickers
POST HARVEST	White vinegar, hydrogen peroxide, or Zerotel 2.0 (food grade hydrogen peroxide concentrate), 2 Liter pump spray bottle.

SOIL & TRAY PREPARATION

- The best growing medium consistency for microgreens is composed of fine particulates with even drainage. Too much drainage will lead to dehydrated crops, and too little drainage will lead to fungal issues.
- Clumpy mix can be loosened up by hand when adding to your filling bin. Mix with larger particulates can be sifted through a DIY sifter made from 1/4" wire mesh on a box frame. This can be placed over a wheel barrow or tote to sift our larger material that may inhibit germination.
- When filling trays with growing medium, make sure to spread it evenly in the corners and edges of the tray or microgreens in those areas will become dehydrated and tend to fall over.
- After spreading the growing medium evenly in the tray, use a custom wooden press, or an empty tray to tamp/press the soil, creating a smooth even surface.
- Spray down the growing medium with water prior to seeding.

SEEDING & GERMINATING

- Sprinkle the seeds evenly over the tray, then water generously.
- A top covering of vermiculite helps to improve and even out cilantro's germination rates. The abrasive vermiculite also helps to remove most of the seed hulls once the cilantro begins to grow. Mist down the vermiculite after spreading it to hold it in place.
- Seeded trays can be stacked up to six at a time, with an empty seventh tray at the top. Place a 14 lb paver on the top to weight down the trays, encouraging strong stems and vigorous growth.
- Germinating trays do well at 70° and can be stacked in racks with no lights.
- Cilantro stays stacked and covered for 7 days. Periodically misting the top layer of vermiculite during this time will help soften the seed hulls, encouraging them to fall off rather than stick.
- After unstacking the trays, give them a thorough top watering before they move to the light.

GROWING & WATERING

- Transfer the trays to the grow racks under the lights, nesting them into the solid bottom trays.
- 16 hours of light per day is recommended for microgreens.
- At this point, watering can be done by lifting the top tray by the thumbhole and pouring water straight into the bottom tray. Paperpot bottom trays have a line that provides a convenient reference point for how much water to add.
- Bottom watering should take place once every morning. If your growing medium does not retain its moisture as long, water once more in the evening.
- Depending on your preference, cilantro can be harvested after two weeks, yielding palm tree looking microgreens that still taste like cilantro, or after three to four weeks, when the frilly true leaves come out which many chefs like.
- Stop watering 24-48 hours prior to harvest to ensure crops are dry and free from excess moisture. This helps greatly to extend the shelf life of the microgreens.

HARVESTING & PACKAGING

- Wash hands thoroughly and/or wear latex gloves before handling greens for harvest.
- Sharpen the harvesting knife each time prior to harvest. To harvest, grab a handful of microgreens and cut just high enough above the growing medium to ensure there isn't any stuck on the ends of the greens.
- Carefully place the greens directly into the clamshells.
- Scintilla Farms tip: place the clamshells into the refrigerator with the lids open for the first 10-15 minutes to avoid build up of moisture (after which they can be closed). This can increase shelf life.

POST HARVEST & TRAY SANITIZING

- Dump the harvested tray's soil and root matter into bins or wheel barrows to be taken to compost.
- Rinse, then spray down the tops and bottoms of the trays with 20ml of Zerotel 2.0 to a 2 Liter pump spray bottle of water, or a 1:1 hydrogen peroxide, white vinegar solution. Allow trays to dry in a rack prior to being reused.