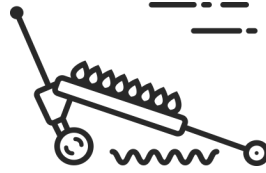


# GROWER'S NOTES

BY PAPERPOT CO.



## Onions

### CROP & PAPERPOT DATA:

<b>PAPER CHAIN POT</b>	6"
<b>ROWS PER 100' X 30" BED</b>	5
<b>TRAYS PER 100' X 30" BED</b>	4
<b>KWIK KLIK™ TOP PLATE</b>	<b>Plate:</b> Paperpot (264 holes) / <b>Thickness:</b> 3mm / <b>Hole Diameter:</b> 3mm
<b>SEEDS PER CELL</b>	3 (+/-)
<b>SEED PER 100' X 30' BED</b>	3000 seeds (+/-) *Always round up when placing seed orders to ensure having enough
<b>RECOMMENDED CULTIVARS</b>	Sierra Blanca (fresh variety), Red Carpet (storage variety)
<b>GERMINATION</b>	72 hours at 80°F
<b>DAYS TO TRANSPLANT</b>	45 days (+/-) *time from seeding to transplanting in the field
<b>DAYS TO MATURITY</b>	110 days (+/-) *time from seeding to being ready for harvest
<b>HARVEST WINDOW</b>	14 days (+/-) *time crop is at ideal stage for harvest after reaching maturity
<b>TOTAL DAYS IN FIELD</b>	79 days (+/-) *DTM + harvest window - days to transplant
<b>HARVEST UNIT</b>	Pound
<b>TARGET CROP YIELD</b>	350 lb (+/-)
<b>PRICE PER UNIT</b>	\$3 *depending on local market pricing
<b>REVENUE PER BED</b>	\$1050 *depending on local market pricing

### SUGGESTED TOOLS:

<b>SEEDING</b>	Kwik Klik™ Drop Seeder, Paperpot Germination Trays, Paper Chain Pots
<b>TRANSPLANTING</b>	Paperpot Transplanter
<b>TILTHING</b>	Power Harrow or Precision Depth Roller (With no tractor: Tither)
<b>AERATION</b>	Meadow Creature Broadfork
<b>SHAPING</b>	Bed Preparation Rake
<b>WEED CONTROL</b>	Flame Weeder
<b>CULTIVATION</b>	Collinear Hoe, Wire Weeder

## BED PREPARATION

- Broadfork the bed to aerate and loosen the soil.
- Smooth and shape the bed with a bed preparation rake, removing any debris.
- Onions will do best with a fresh application of fertilizer prior to planting. Here are two options:
  - 1) Layer on 1" of compost, enough to mostly cover the native soil.
  - 2) Sprinkle on a combination of alfalfa meal and pelleted chicken manure.
- If layering compost, do not till in hopes of smothering any surface weed seed.
- If adding amendments, till the top 1-2" of soil to mix in amendments.
- Irrigate for 10-14 days\*, allowing any weed seed in top layer of soil to germinate.
- Flame weed the bed when the cotyledons of the weed seeds have emerged.

## SEEDING

- Prepare trays with 6" paper chain pots, and fill with potting mix.
- Install Paperpot bottom plate and specified top plate into Kwik Klik™ (KK) Drop Seeder.
- Pour seed onto top plate and rotate until 3 seeds fills each hole.
- Position the KK Drop Seeder over the tray, ensuring the holes are lined up with the cells, and click to drop the seeds.
- Water the trays, then place in germination chamber for 72 hours at 80°.
- Transfer the trays to greenhouse tables after germination.
- Trim 1" off the top of the onions at 4 weeks, and then again at 1 week before transplanting.

## TRANSPLANTING

- Onions starts are ready for transplanting at about 7 weeks old and 6" tall (+/-).
- Storage onions are planted once in Spring; fresh onions can be planted though out the season.
- Thoroughly water trays before heading to the field for transplanting.
- Using the Paperpot Transplanter, plant the five rows of onions.
- There should be 6" between rows, and 3" from the outer rows to the edge of the bed.
- Reference <https://paperpot.co/learn/> for instructional videos if needed.

## IRRIGATION

- Water the beds thoroughly with overhead irrigation, or four rows of drip.
- Frequent shallow waterings will support rapid growth and better onion flavor.

## CULTIVATION

- 10-14 days after transplanting, cultivate using a collinear hoe or wire weeder.
- Consistent weeding is crucial for onions as they will not form a canopy over the soil as they mature, unlike other closely spaced crops.
- If thrips or onion fly are an issue, onion crops should be covered with insect netting.

## HARVEST

- Fresh onions can harvested with the tops on and bunched in the field (if selling by the bunch).
- Storage onions should be harvested when the tops begin to die off (during dry weather).

## WASHING AND PACKING

- Fresh onions: using a Washdown Gun sprayer over a root wash table, spray clean the onions until all soil is thoroughly cleaned off. Transfer the fresh onions to totes, and store at 35°.
- Storage onions: place on nursery tables in a single layer and allow to cure for 2-3 weeks. A space with controlled ventilation, temperature and humidity is ideal. When the collars are dry, the stems can be cut and the onions can be stored in mesh bags or boxes. Store at 46° (+/-).