

ONIONS

Planting guide, Crop Tips and Spray Guide





ONIONS PLANTING CALENDER

J	AN	/AUG March	n/ Oct April	/Nov May	/ Dec	Jan, Apr, I	May, June
		Seedlings in nursery for 6 - 8 weeks Plough land thoroughly & make beds Transplant at 10 x 10 cm Fertilizer DAP at 50 kg per acre-Drench transplants with insecticide	1st top- dress 50kg CAN per acre Spray DI Grow Green Weeding Pest & disease control	2 nd top- dress 50kg NPK 17:17:17 per acre Pest & disease control	Harvesting begins 75 – 90 days after trans- planting Sorting & Grading Yields 25 – 30 tons/acre Marketing	Peak de for Or	

- Choose varieties that have long storage periods to reduce initial cost of production.
 - Choose varieties that give bulb sizes according to target markets
- Work backwards from when there is peak demand to prepare activities preceding the peak period

Crop Tips -ONIONS

- Seed selection –This depends on your market for big bulbs choose hybrid, for medium size choose opvs.
- Prepare nurseries
- Raise beds that are 1 meter by 5-8 mtrs long
- Mix farmyard manure with the soil and leave for at least two days before sowing seeds.
- Water the nursery well on the day of sowing the seeds.
- Mix the seeds with a seed dresser like Apron star or marshal.
- Sow the seeds in the nursery and cover very lightly with grass.
- Drench with Actara and ridomil to prevent early damping off and keep away the soil pests.

Water the nurseries daily either in the morning and evening or in the evening.



The Syngenta Onions Spray Programme

	Pests / Diseases	Weeks 0-6	Weeks 7-20 Mid Season	Weeks 21-30	Week 31+ Harvesting	Usage Rate		
Category		Early Season		Late Season		15-20 Mg/ Knapsnok sprayer		
Seed Treatment	Ě	(i) Apron'Star				10g / 500gm of seed	N/A	N/A
Insects / Pests	Aphids		\	● Engeo' 〉		8ml	5	7
	Leaf miners Red spider		>			25ml	7	7
	mites Onion thrips		Pegasus'	⊗ Vollam Targo′		20ml	7	7
Fungal Diseases	Damping off Downy mildew White tip	RidomilGold* Drench				50gm	3	14
2,000,000			√ Revus'			20ml	7	7
				RidomilGold*		50gm	3	14
	Purple blotch Rust Neck rot		© Score¹	>		20ml	7	10
				• Thiovit jet		80gm	3	7
	Powdery Mildew			(S Ortiva'		20ml	3	10
Grass Weed Control		(apply whe	silade Forte* n weeds are between 8 loaf stage)			150ml	N/A	N/A



Land preparation

Drips

- o use raised beds of at least 1 meter. The length depends on the size of the land.
- Mix FYM thoroughly on the beds

Furrow/Basin

- Prepare basins that are 1 metre by 2 meters at least 1 month before transplanting
- Mix FYM thoroughly



Nursery preparation



Nursery management

- Before sowing, the media should be thoroughly watered.
- Depth of sowing should be proportional to seed size. Onion seed should be sown on top without drilling holes and then covered with a thin layer of media. This should be followed with a light shower.
- Watering the nursery daily is very important
- Three weeks after germination spray ridomil gold, a starter, an insecticide (profile, karate) to make sure the nursery is healthy.
- Repeat the sprays after every 10-14 days.
- Reduce watering on the seventh week to enable the onions start hardening and preparing them for transplanting shock.

TIP: Use foliar sprays which are phosphorous based. This helps in boosting the roots and makes it easy for nutrient uptake. Use an organic growth hormone like CitiShooter to have the onion nursery grow in uniformity



Teina Seedlings | farm management | crop nutrition

Transplanting

- This should be done on the eighth week when the onions are 15cm long
- Seedlings should be transplanted at right stage (when pencil thickness is reached).
- Should be planted at the same depth as originally in the nursery.
- Application of DAP during transplanting helps the onions establish their root system.

TIP: Should be transplanted early in the morning or preferably late in the afternoon. If the onions are longer than 15cm, cut the tip and soak in Optimizer or CitiShooter to reduce the transplanting shock







Week 9(weeks in the field)



- Continue watering the onions
- Drench the onions with Karate to avoid cut-worms
- Mix with ridomil gold and a starter
- Using a plant hormone helps the plants improve nutrient uptake. (Optimizer/DI grow green)



SEEDLINGS | FARM MANAGEMENT | CROP NUTRITION

- Start weeding the onions
- Weeding prevents the onions from competing for nutrients and keeps insects away
- Should be done regularly and as necessary to avoid competition and curb pests and disease.
- Introduce thrips traps in the onion field to start protecting the onions. This reduces your cost of production

TIP: The cheapest and most reliable way to weed is to use a selective herbicide



Thrips

≪Collect and destroy the damaged leaves and twigs and uproot the diseased plants.

■Use yellow sticky traps at 15/ha to attract and kill insects.

■Bright blue or royal blue sticky board traps

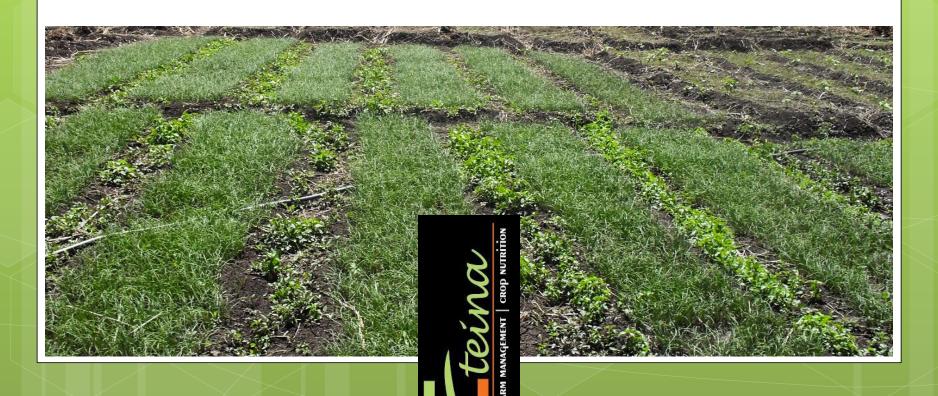




- Apply a nitrogen-based basal fertilizer like CAN to help the onion leaves to maintain the green effect.
- Boost it with a foliar spray like DI grow and green miracle.
- In case it is raining, mix a surfactant and sticker to reduce wastage due to the rains (integra, supergrow) works best.



- 2nd weeding is done to allow the bulb formation to start
- This is a very crucial stage as it determines your overall yield
- Scouting is important to establish types of pests and diseases on crop.
- Major pest problems with onions include thrips. Control with proper type and application of pesticide.
- Diseases on onions include: Downy mildew, purple blotch (Alternaria porri).
 Control through crop



Mulching

- This is recommended as it helps reduce moisture stress as well as weed pressure as a well as increasing and maintaining soil fertility.
- This also helps protect the bulbs from the direct sun and helps maintain its red colour







- Apply a potassium based basal fertilizer like NPK 17:17:17 to boost the bulbing.
- Using a potassium based folia spray like DI Grow red boosts the size uniformity of the onions

TIP: make sure the soil around the bulb is loose enough to enable the onion bulb to expand to your desired size.

Use a bulbing hormone like Osa Tuber to boost the uniformity

TIP: Apply the fertilizer after watering so that only the onion bulbs take up the nutrients.

WATER. WATER. WATER. WATER. WATER. During bulbing the onions require a lot of water







- Start looking for market for your onions
- But before that, make sure you limit the number of fruits per vine depending on your target market.
 Mostly 3 to 4 fruits per vine helps the fruits to be of good size and weight

IMPORTANT: STOP WATERING THE ONIONS AS THIS MIGHT MAKE THE MATURE BULBS START ROTTING.



Week 19 Harvesting

- Bulb onions reach maturity three to four months after transplanting to the field.
- During bulb ripening, watering should not take place.
- Bend bulb at the shoulder to enhance curing process before lifting from field.
- Only lift bulbs with dry leaves, which should be well-cured.



Week 20: Postharvest handling

- After harvesting, the curing process is important.
- Cut the leaf from the bulb, leaving less than half a centimeter of the neck.
- Dry the bulb in the sun as often as possible to ensure the neck heals completely.

Onion Curing

- Onions are cured in order to extend their shelf life. An onion bulb is a series of concentric swollen leaves still attached to a short stem or base. These are surrounded
- by scales that are attached to the tops. Curing of onion bulbs serves several functions:-
- First, it dries the outer two to four scales providing mechanical protection and giving an attractive appearance.
- It also dries those roots remaining attached to the bulb following undercutting and the neck left attached to the crown following topping, deterring disease infection.
- Lastly, curing encourages dehydration and sealing of wounds that may have occurred during bulb growth or mechanical damage.



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