BEST FARMER PRACTICES

ONIONS

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08 ONIONS

ECOLOGICAL REQUIREMENTS

Onions require fertile well drained soils with well distributed rainfall. The dry spell is needed at maturity.

1. RAISING SEEDLINGS

The nursery beds should have a **width of 1m** at most and well decomposed manure, **TSP** or **DAP**. at a rate of **20kg per square meter**.

The nursery should be irrigated regularly and the weeds, pests and diseases should be managed.

2. FIELD PREPARATION

The field should be set for trans-planting prior to the introduction of seedlings from the nursery. **Manure** or compost should be applied **1-2 weeks** before the transplanting of the onions from the nursery to enable its complete breakdown.

3. TRANSPLANTING SEEDS

Seedlings are transplanted after **6-8 weeks** after sowing in the nursery or after attaining **3-5 leaves**.

The seedlings are planted at a depth of **2.5-3cm** following a spacing of 30cm between rows and 8-10cm within rows.

The field should be well irrigated before transplanting.

TSP can be applied at a rate of **80kg per acre**

The seedlings should be pulled out carefully to avoid causing them damage

The onion sets shouldn't be buried more than **one centimeter** into the soil when planting.

4. WEED MANAGEMENT

Weeds should be kept out of the field since they can hinder the growth of the crops through outcompeting them for water, nutrients and light

Unearthing, which is the removal of excess soil around the bulb to enable it to expand or develop well, is done during the second and subsequent weeding

5. TOP DRESSING

It should be split into two that is;

*The first top dressing should take place **30 days after** transplanting following a rate of **40kg per acre** of **CAN**.*

*The second top dressing should take place **45 days after** transplanting following a rate of **80kg per acre** of **CAN**.*

PEST

ONION THRIPS

MANAGEMENT

Maintain an adequate supply of water since water stressed plants are more prone to thrips damage.

Maintain weed free plots

Remove the heavily infected plants from the field.

Neem extracts can be sprayed on the plants.

PEST

ONION FLIES

The onion fly maggots are *white cream* in colour.
They eat lateral roots causing tunnels in the taproots which makes the plants to shrivel and die.
Their feeding exposes the plant to diseases like bacteria soft rot.

MANAGEMENT

Practice crop rotation

Use well decomposed manure

Maintain field sanitation

DISEASES

DISEASE

ONION DOWNY MILDEW

It is caused by a fungus and it is prevalent in cool, humid and poor drainage

Symptoms include formation of lesions near the tips of older leaves, yellow patches covered with grey wet fields and leaf tips shrinking, turning pale brown and later dying

MANAGEMENT

- Field hygiene
- Crop rotation
- Planting resistant varieties like Red Pinoy F1
- Spraying with fungicides like ***indofil***.

DISEASE

NECK ROT

It is caused by a fungus which enters the onion through cracks or wounds in the fleshy neck part of the onion. It is visible when the onions are in the store.

Symptoms include the softening of the bulb than the lower parts.
The top part of the bulb will turn browner and the skin will be darker brown.

MANAGEMENT

- Avoid damaging the onion bulbs at or during harvest
- Avoid over use of nitrogen containing fertilisers
- Only harvest onions when the necks have ripened and fallen over on their own accord.
- Sort out bulbs which show signs of rot
- Store only bulbs with dried out thin necks

DISEASE
RUST

It is caused by a fungus and it is favoured by high humidity, high temperature and dense plant population.

Symptoms include small reddish dusty spots on leaves.
Heavily infected leaves turn yellow and die prematurely.

MANAGEMENT

Crop rotation

Spraying with fungicides like ***indofil***

Practicing proper agronomic practices like spacing and proper nutrition.

HARVESTING & POST HARVEST HANDLING

- ## Harvesting

It can be done after 90 - 150 of transplanting depending on the variety.
Bulb onions are ready for harvesting when the leaves collapse or when 75% of the crop top have dried and fallen off

- ## Post harvest handling

Curing needs to be done for better storage.
This is the process intended to dry the necks and outer leaves of the bulb.

- It ca n be done in the field if the maturing and harvesting coincide with the dry months.
- It can then be stored and other processes like value addition can be done.

FOR FURTHER ADVICE AND INFOMATION **DIAL *284*68#**

REFERENCES | SHEP PLUS, 2019. Onion Production

CREDITS | Onion Rot
(https://extension.usu.edu/pests/research/botrytis-neck-rot)

Onion Thrips: Benito Mustacedo Cano
(https://www.plantwise.org/knowledgebank/factsheetadmin/uploads/factsheets/50e07c31-24ac-49b4-82ab-82f496144994.jpg)