



Japan International Cooperation Agency



Agriculture and Food Authority
Horticultural Crops Directorate

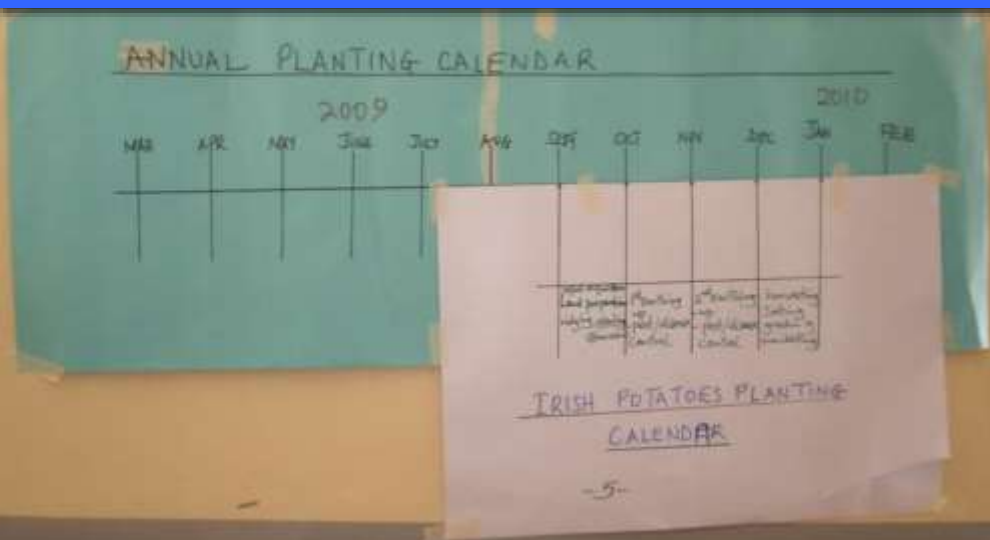


Ministry of Agriculture, Livestock and Fisheries
State Department for Crop Development & Agricultural Research

Smallholder Horticulture Empowerment & Promotion Project for Local and Up-Scaling (SHEP PLUS)

*“Changing Farmers’ Mindset from **“Grow and Sell”** to **“Grow to Sell”**”*

A CROP PLANTING CALENDAR



Prepared by SHEP PLUS

Training Title: A Crop Planting Calendar; a Planning tool towards successful marketing of horticultural produce

Objective: To assist smallholder farmers in planning their production to optimize their income

Specific objectives:

- **Assist farmers in preparing and utilizing planting calendar**
- **Guide farmers in resource allocation**
- **Assist farmers in targeting peak market for a produce**

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Disclaimer

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1. Introduction

1-1

GROUP 2						BULB ONION					
JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
		Land prep	Transplanting	Spraying	Spraying	Hardening	Income				
		Seedling	Fast off	Watering	Hardening	Harvesting	Analysis				
		Watering	Watering	Full dressing							
		Watering	Watering	Watering	Watering	Curing	Planning				
		Spreading	Spreading	Needling	Needling	Grading & sorting	for next season				
		Watering	Watering								
		Spreading	Spreading			Packaging/					
		Watering	Watering			storage					
						Marketing					

Photo: SHEP PLUS

A sample of a Bulb Onion Planting Calendar

1. Introduction



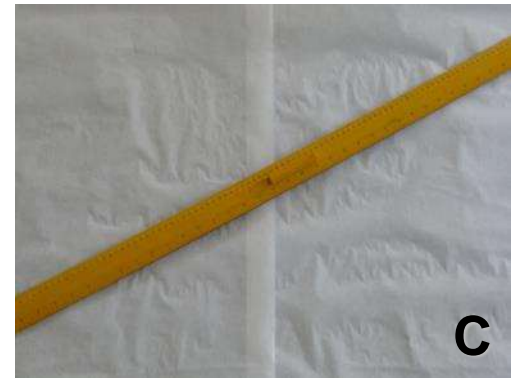
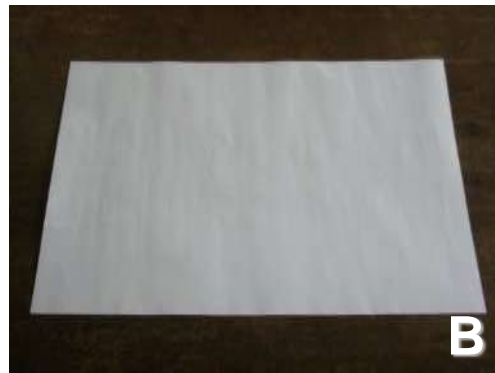
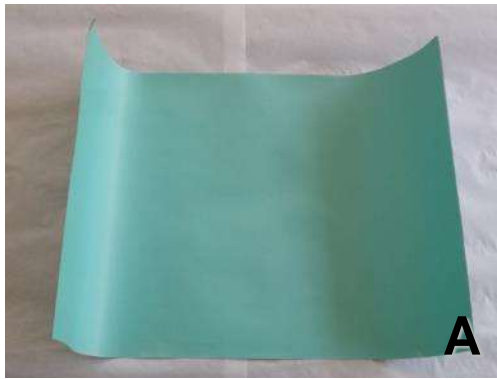
A Sample of a Cabbage Planting Calendar; with land preparation beginning in August and a peak market demand in December

- A crop planting calendar guides farmers on when to plant/sow in order to capture the highest price in the market
- To decide when the planting/sowing should be done, farmers have to undertake a market survey to determine the month when there is peak demand before preparing a crop planting calendar
- In addition, a crop planting calendar is an important planning tool used by farmers to make decisions on when to carry out various farm activities to meet specific market demand
- It is useful for members of farmer groups in synchronizing their farm operations, thus exploiting the economies of scale when purchasing inputs, the bargaining power, and constant supply when marketing the produce

[Note]

- This is a sample calendar for a specific area for a specific crop

2. Materials for Preparing a Crop Planting Calendar



Or



2. Materials for Preparing a Crop Planting Calendar



Colored Manila Papers (2 pieces): For preparing an annual calendar



Markers: For labeling the annual calendar & the monthly activities sheet



White Manila Paper (1 piece): For preparing a monthly activities sheet



Masking Tape/Cello Tape: For joining the annual calendar & the monthly activities sheet



Ruler (1 m): For drawing straight lines

Or



Glue: For joining the annual calendar & the monthly activities sheet

3. Parts of a Crop Planting Calendar

3-1

A. Annual Calendar

GROUP 2						BULB ONION					
JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Land prep	Transplanting	Spraying	Spraying	Hardening	Income						
Seed/inputs	Fert. app.	Watering	Hardening	Investing	Analysis						
Purchase											
No. bag prod	Weeding (herbicide)	Weeding	Watering reduced	Curing	Planning for next season						
Sowing	Spraying			Grading & Sorting							
Manure app	Pest & Dis.			Packaging/ storage							
Ridge Making				Marketing							
Spraying											
Watering											

B. Monthly Activities Sheet

Photo: SHEP PLUS

A sample of a Bulb Onion Planting Calendar

3. Parts of a Crop Planting Calendar

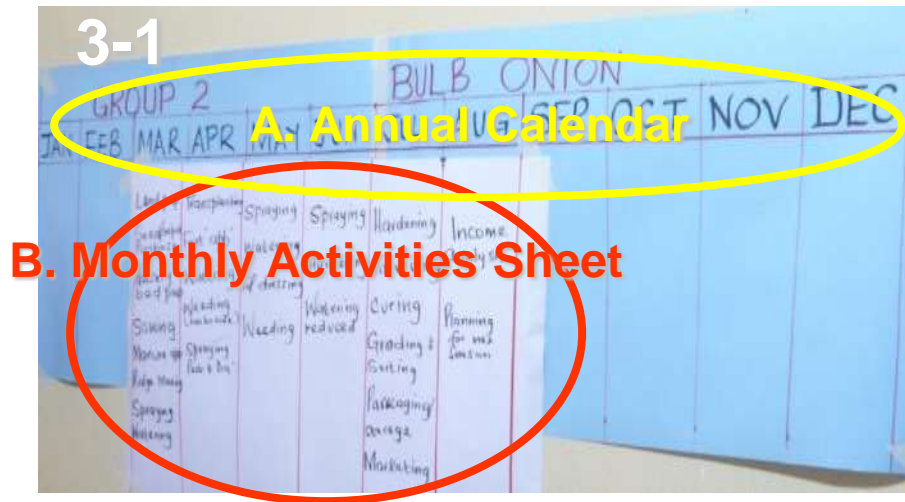
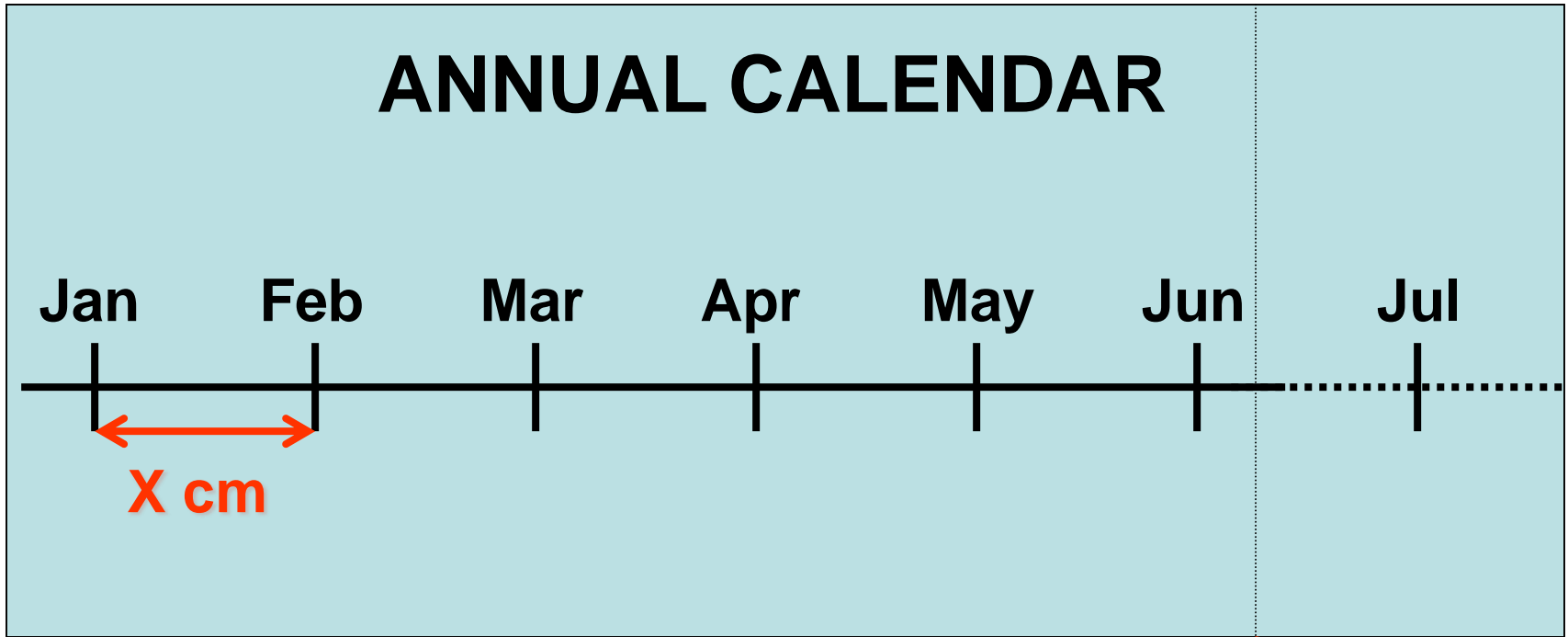


Photo: SHEP PLUS

- A crop planting calendar has two (2) parts:
 - A. **The Annual Calendar** (made by 2 blue manila papers in the photo) without days or dates – indicated by the yellow circle
 - B. **The Monthly Activities Sheet** (made by white manila paper in the photo) indicate the activities for a crop from land preparation to harvesting – indicated by the red circle

A Sample of a Bulb Onion Planting Calendar

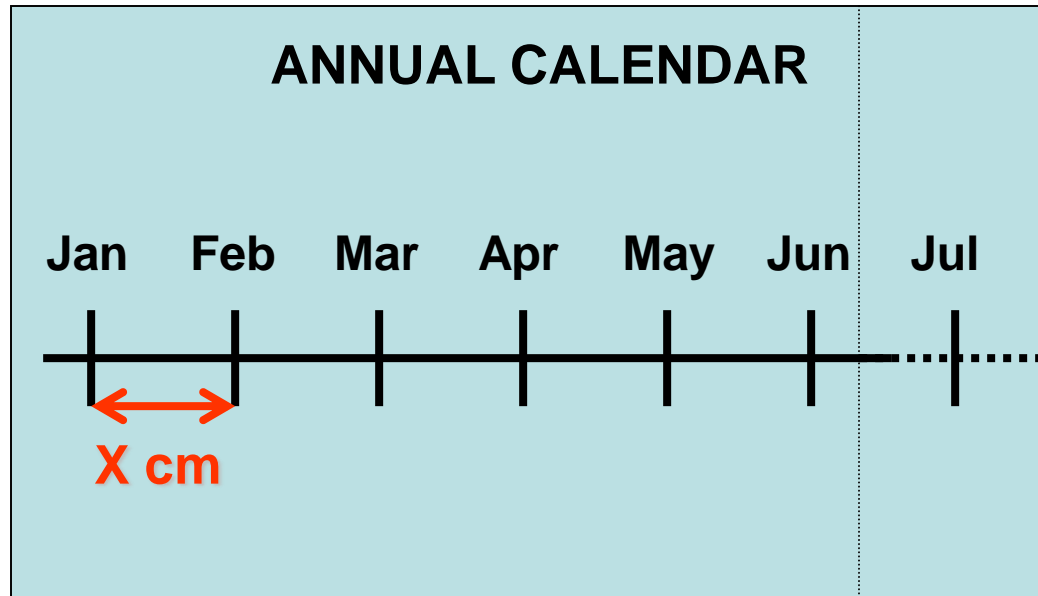
4. Preparing an Annual Calendar



The joint of the 2 manila papers

Joined manila papers with calibrated months

4. Preparing an Annual Calendar



**The joint of the 2
manila papers**

A. The Annual Calendar

Procedure for preparing an annual calendar

1. Join two (2) colored manila papers from width to width using a masking tape/cello tape to make one long sheet
2. Using the 1 m ruler, draw a straight horizontal line on the joined manila papers at the centre
3. Subdivide the horizontal line into twelve (12) equal sections (X cm)
4. Label the sections starting from January to December without days or dates (It **DOES NOT** always have to start from January)

Joined manila papers with calibrated month

5.1 Preparing a Monthly Activities Sheet

Land Preparation	Transplant 30 days after Seed Germination	Weed, Pest & Disease Control	2 nd Top-dress 120 kg/acre (10 g/hole)	Harvesting 75 – 120 days after Transplanting
Nursery Sowing	Spacing 60 x 60 cm ² Fertilizer Application 10 g DAP per hole (2 bottle tops Per hole)	1 st Top Dressing 60 kg/acre (5 g/hole or 1 bottle top per hole)	Weed, Pest & Disease Control	Sorting & Grading Small<1kg Medium 1 – 2 kg Large >3kg
120 g of seed per acre				Yields 6,000 – 12,000kg per acre
Control of Damping off Diseases & Cutworms	Manure 4 – 8 ton/acre (2 – 3 handfuls)			Marketing



X cm

**A sample of a monthly activities sheet
for Cabbage**

5.1 Preparing a Monthly Activities Sheet

Land Prepa- ration	Trans- plant 30 days after Seed	Weed, Pest & Disease Control	2 nd Top dress 120 kg/acre (10g/hole)	Harvesting 75 – 120 days after Trans- planting
Nursery Sowing	Germi- nation	1 st Top Dressing	Weed, Pest & Disease Control	Sorting & Grading
120 g of seed per acre	Spacing 60 x 60 cm ²	60 kg/acre (5 g/hole or 1 bottle top per hole)		Small<1kg Medium 1 – 2 kg Large >3kg
Control of Damping off Diseases & Cutworms	Fertilizer Appli- cation 10 g DAP per hole (2 Bottle tops per hole)			Yields 6,000- 12,000kg per acre Markrting
	Manure 4 – 8 ton/acre (2 – 3 handfuls)			



X cm

A sample of a monthly activities sheet for Cabbage (For a five (5) months maturity period)

B. The Monthly Activities Sheet

- The monthly activities sheet consists of columns
- Each column indicates the monthly activities (activity) to be undertaken and the inputs required

Procedure for preparing the monthly activities sheet

1. Prepare one (1) white manila paper
2. Consider the maturity period of the crop that you are preparing the planting calendar for
3. If the planting calendar is for a crop whose maturity period is five (5) months, draw five (5) columns on the manila paper
4. The width of each column must be equal to that of each section (**X cm**) of the annual calendar
5. Start considering monthly activities and input requirements of the crop
6. Indicate in the appropriate column of the monthly activities sheet the activities and inputs required up to marketing

5.2 Importance of a Monthly Activities Sheet

Indicates resources required towards all the planned activities in every month/ column

Land Preparation	Transplant 30 days after Seed Germination	Weed, Pest & Disease Control	2 nd Top-dress 120 kg/acre (10 g/hole)	Harvesting 75 – 120 days after Transplanting
Nursery Sowing	Spacing 60 x 60 cm ²	1 st Top Dressing 60 kg/acre (5 g/hole or 1 bottle top per hole)	Weed, Pest & Disease Control	Sorting & Grading
120 g of seed per acre	Fertilizer Application 10 g DAP per hole (2 bottle tops Per hole)			Small <1kg Medium 1 – 2 kg Large >3kg
Control of Damping off Diseases & Cutworms	Manure 4 – 8 ton/acre (2 – 3 handfuls)			Yields 15,000 – 64,000kg per acre
				Marketing

←→
X cm

A sample of a monthly Activity Sheet for Cabbage

5.2 Importance of a Monthly Activities Sheet

Indicates resources required towards all the planned activities in every month/ column

Land Preparation	Trans-plant 30 days after Seed	Weed, Pest & Disease Control	2 nd Top dress 120 kg/acre (10g/hole)	Harvesting 75 – 120 days after Trans-planting
Nursery Sowing	Germi-nation	1 st Top Dressing	Weed, Pest & Disease Control	Sorting & Grading
120 g of seed per acre	Spacing 60 x 60 cm ²	60 kg/acre (5 g/hole or 1 bottle top per hole)		Small<1 kg Medium 1 – 2 kg Large >3kg
Control of Damping off Diseases & Cutworms	Fertilizer Application 10 g DAP per hole (2 Bottle tops per hole)			Yields 15,000 – 64,000kg per acre
	Manure 4-8 ton/acre (2-3 handfuls)			Marketing

↔
X cm

B. The Monthly Activities Sheet

The importance of the monthly activities sheet

- Resources are always scarce more so for smallholder farmers
- However, by using the monthly activities sheet, a farmer can confine his/her resource allocation to immediate needs as indicated by the sheet
- Since the monthly activities sheet indicates the input requirements, farmers working in a group can proportionately pool resources together to meet their monthly input requirements, thus exploiting the economies of scale

A sample of a monthly Activity Sheet for Cabbage

6. Adjusting a Crop Planting Calendar

Jun	Jul	Aug	Sep	Oct	Nov	Des
Land Preparation Nursery Sowing 120 g of seed per acre Control of Damping off Diseases & Cutworms	Transplant 30 days after Seed Germination Spacing 60 x 60 cm ² Fertilizer Application 10 g DAP per hole (2 bottle tops Per hole) Manure 4 – 8 ton/acre (2 – 3 handfuls)	Weed, Pest & Disease Control 1st Top Dressing 60 kg/acre (5 g/hole or 1 bottle top per hole)	2nd Top-dress 120 kg/acre (10 g/hole) Weed, Pest & Disease Control	Harvesting 75 – 120 days after Transplanting Sorting & Grading Small <1kg Medium 1 – 2 kg Large >3kg Yields 6,000 – 12,000kg per acre Marketing	Peak demand of Cabbage	

Joined crop planting calendar of Cabbage

6. Adjusting a Crop Planting Calendar

Jun	Jul	Aug	Sep	Oct	Nov	Dec	...
Land Preparation	Trans-plant 30 days after Seed Germination	Weed, Pest & Disease Control	2 nd Top dress 120 kg/acre (10g/hole)	Harvesting 75 – 120 days after Trans-planting	Peak demand of Cabbage		
Nursery Sowing	Spacing 60 x 60 cm ²	1 st Top Dressing 60 kg/acre (5 g/hole or 1 bottle top per hole)	Weed, Pest & Disease Control	Sorting & Grading			
120 g of seed per acre	Fertilizer Application 10 g DAP per hole (2 Bottle tops per hole)			Small<1kg Medium 1 – 2 kg Large >3kg			
Control of Damping off Diseases & Cutworms	Manure 4 – 8 ton/acre (2 – 3 handfuls)			Yields 6,000 – 12,000kg per acre			
				Marketing			

Joined crop planting calendar of Cabbage: determining the planting/sowing month for a peak demand in November

How to determine the planting/sowing month for a given peak demand of a produce

- A crop planting calendar provides guidance on which month the planting/sowing should be done in order for harvesting to coincide with the peak market demand for the produce
- Once the month for peak demand on the annual calendar has been determined through the market survey, place the monthly activities sheet against the annual calendar with the last column of the monthly activities sheet (extreme right) directly under the month for peak demand on the annual calendar
- With the superimposition of the annual calendar and the monthly activities sheet as described above, the column of the monthly activities sheet on the extreme left will coincide with the month when the planting/sowing should be done
- The monthly activities sheet is moved along the annual calendar based on market demand

7. How to use a Crop Planting Calendar

Jan	Feb	Mar	Apr	May	Jun
Land Preparation	Trans-plant 30 days after Seed	Weed, Pest & Disease Control	2 nd Top dress 120 kg/acre (10g/hole)	Harvesting 75 – 120 days after Trans-planting		
Nursery Sowing	Germi-nation	1 st Top Dressing	Weed, Pest & Disease Control	Sorting & Grading		
120 g of seed per acre	Spacing 60 x 60 cm ²	60 kg/acre (5 g/hole or 1 bottle top per hole)		Small<1kg Medium 1 – 2 kg Large >3kg		
Control of Damping off Diseases & Cutworms	Fertilizer Application 10 g DAP per hole (2 Bottle tops per hole)			Yields 6,000 – 12,000kg per acre		
	Manure 4 – 8 ton/acre (2 – 3 handfuls)			Marketing		

Fig. 1

Sep	Oct	Nov	Dec	Jan	Feb
Land Preparation	Trans-plant 30 days after Seed	Weed, Pest & Disease Control	2 nd Top dress 120 kg/acre (10g/hole)	Harvesting 75 – 120 days after Trans-planting		
Nursery Sowing	Germi-nation	1 st Top Dressing	Weed, Pest & Disease Control	Sorting & Grading		
120 g of seed per acre	Spacing 60 x 60 cm ²	60 kg/acre (5 g/hole or 1 bottle top per hole)		Small<1kg Medium 1 – 2 kg Large >3kg		
Control of Damping off Diseases & Cutworms	Fertilizer Application 10 g DAP per hole (2 Bottle tops per hole)			Yields 6,000 – 12,000kg per acre		
	Manure 4 – 8 ton/acre (2 – 3 handfuls)			Marketing		

Fig. 2

7. How to use a Crop Planting Calendar

*The figures illustrate how to determine the planting/sowing months for different peak months for produce (cabbage) demand

Jan	Feb	Mar	Apr	May	Jun
Land Preparation	Trans-plant 30 days after Seed	Weed, Pest & Disease Control	2 nd Top dress 120 kg/acre (10g/hole)	Harvesting 75 – 120 days after Trans-planting
Nursery Sowing	Germi-nation	1 st Top Dressing	Weed, Pest & Disease Control	Sorting & Grading	
120 g of seed per acre	Spacing 60 x 60 cm ²	60 kg/acre (5 g/hole or 1 bottle top per hole)		Small<1kg Medium 1 – 2 kg Large >3kg	
Control of Damping off Diseases & Cutworms	Fertilizer Application 10 g DAP per hole (2 Bottle tops per hole)			Yields 6,000 – 12,000kg per acre	
	Manure 4 – 8 ton/acre (2 – 3 handfuls)			Marketing	

Fig. 1: A planting calendar for Cabbage targeting the peak demands just after June

Sep	Oct	Nov	Dec	Jan	Feb
Land Preparation	Trans-plant 30 days after Seed	Weed, Pest & Disease Control	2 nd Top dress 120 kg/acre (10g/hole)	Harvesting 75 – 120 days after Trans-planting
Nursery Sowing	Germi-nation	1 st Top Dressing	Weed, Pest & Disease Control	Sorting & Grading	
120 g of seed per acre	Spacing 60 x 60 cm ²	60 kg/acre (5 g/hole or 1 bottle top per hole)		Small<1kg Medium 1 – 2 kg Large >3kg	
Control of Damping off Diseases & Cutworms	Fertilizer Application 10 g DAP per hole (2 Bottle tops per hole)			Yields 6,000 – 12,000kg per acre	
	Manure 4 – 8 ton/acre (2 – 3 handfuls)			Marketing	

Fig. 2: A planting calendar for Cabbage targeting the peak demands just after February

8. Conclusion



Farmers displaying a crop planting calendar

8. Conclusion



Farmers displaying a crop planting calendar which they have prepared

Conclusion

- A crop planting calendar is a simple and easy tool that can be prepared by farmers
- Farmers can plan future farm activities using the crop planting calendar
- It is a significant planning tool which if properly used can make farming a profitable undertaking