



HOW TO GROW CABBAGE

HG/TT:Ag Ext 99:17

INTRODUCTION

Cabbage (*Brassica oleracea* var *capitata*) belongs to the family Cruciferae. Other member of this family include cauliflower, broccoli and pak-choi. Cabbage can be cooked or eaten raw as in salads and coleslaw.

It is important for its food value since it is a good source of Vitamins B and C, dietary fibre and minerals. Cabbage can be grown all year round but does better when the nights are very cool (October to March). Just a few plants planted fortnightly will keep the home continuously supplied with this vegetable.

VARIETIES

Varieties are classified according to the length of time taken to produce mature heads. Generally there are two types namely early maturing and late maturing varieties.

EARLY MATURING VARIETIES	LATE MATURING VARIETIES
Early maturing varieties produce smaller heads and mature between 60 – 65 days.	Late maturing varieties produce large heads and mature between 65 – 75 days.
Examples of early maturing varieties are: Tropicana, Fortuna, Blue Vantage, Supreme Vantage and Bravo	Examples of late maturing varieties are: Salvation, Green Challenge, Caribbean Queen, and Emperor.

- Choose the varieties that are resistant against diseases.
- Red cabbages are also available, but they take longer to mature. Examples are Red Rookie, Red Dutch and Red Acre.

SOIL PREPARATION

The soil should be well tilled and sufficiently drained but must allow for good water retention.

This is because Cabbage requires a great deal of water. To prepare the soil for planting, fill the soil with a garden fork and break up the clumps. Form beds if needed; about 1 m (3 ft) wide.

Cabbage responds well to organic manure and does not tolerate acid soils. Mix one handful of well-rotted manure in the soil and incorporate 5g (1 tsp) of hydrated agricultural lime in each planting hole.

PLANTING

In a home garden situation, plants may also be planted in several types of containers or on beds. See factsheet on “Container Planting”. Cabbage may also be intercropped with herbs and other vegetables.

If producing seedlings, see the factsheet “Producing Seedlings for the Home Garden”. If purchasing seedlings, select healthy seedlings, making sure they are not too old. A healthy seedling is characterized by:-

- a shoot: root ratio of about 2:1:
- having about 5–6 leaves and the outer leaves should be at least 5 cm (2 in).
- white roots

HARVESTING

When pesticides have been used, be sure to observe the pre-harvest interval (PHI) as advised on the product label.

The PHI is the period between the last application of a particular pesticide to the time of harvest.

This avoids harmful chemical residue on the harvested cabbage.

Since all varieties do not mature at the same time, it is important to know how long the selected variety takes to mature.

Use the following guidelines to know when to harvest:

- the head is firm or compact when pressed down with the thumb

- the outermost leaves roll back and are not yet yellow.
- The recommended number of days to maturity has passed.

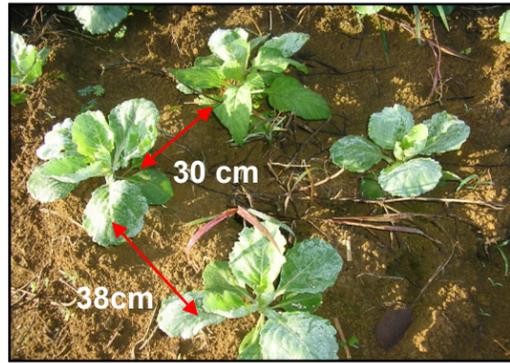
Cut the stem with a sharp knife, close to the base of the plant. Leave about 2 or 3 protective leaves.

The harvested heads can be placed in perforated plastic bags and stored in a refrigerator for 2 - 3 weeks.

Planting cabbage at home can result in the satisfying experience of growing and eating your own healthy food.

Technical content edited by - David Ram

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Newly transplanted seedlings and spacing

When several plants are planted in the same area, plants should be placed about 30 cm (12 in) apart within rows and 38–45 cm (15-18 in) between rows. Late maturing varieties may be planted at slightly larger spacing.

Seedlings should be transplanted late in the afternoon. This will prevent the plants from wilting. When transplanting, observe the following steps:

- Place one seedling into each planting hole and be careful not to cover the base of the first leaves with soil.
- Ensure that the seedlings are firmly positioned by pressing the soil around it with your hand.
- If necessary, after transplanting, apply a soil insecticide and soil fungicide at the recommended rates to protect the seedling in its early stages.
- Keep the plants free from weeds at all times.

WATERING

Water the plants immediately after transplanting.

Thereafter, water daily if there is insufficient rainfall.

When watering, add water to the ground at the base of the plant so as to avoid splashing soil onto the leaves.

Remember to use clean water to irrigate the plant.

FERTILIZER APPLICATION

- Immediately after transplanting, apply 5g (1 tsp) of a granular NPK fertilizer such as 12:24:12 to each plant to encourage root growth. Be sure to place this fertilizer at least 5 cm (2 in) away from the plant.
- In the 2nd and 4th weeks after transplanting, apply a granular NPK fertilizer with a high percentage of Nitrogen, such as 20:10:10.
- In addition, in the 3rd and 5th weeks, apply Calcium Nitrate at a rate of 1 tsp (5g) per plant.
- In the 5th and 7th weeks, apply a NPK fertilizer with a high percentage of potassium, e.g. 12:12:17+2 or 13:13:21+2 to develop firm heads.
- The rates of application of these fertilizers range between 1 – 3 tsp (5 – 15g) per plant increasing from 1 tsp to 3 tsp as the plant grows bigger.

PEST AND DISEASES

Integrated Pest Management (IPM) is the best approach to controlling pests and diseases in a home garden.

In this method, pesticides are not heavily relied upon and cultural as well as biological methods are used.

For further information on IPM see the factsheet entitled “Integrated Pest Management for Home Gardeners”.

PEST/DISEASE	SYMPTOMS	CONTROL
Budworm <i>Hellula phidealis</i> 	<ul style="list-style-type: none"> • This is a caterpillar that bores holes into the leaf stalks, growing point and main stem of the plant. • The plant usually responds by forming smaller heads, which are unusable 	<ul style="list-style-type: none"> • Budworms are controlled by mixed cropping and encouraging natural enemies such as wasps. • Plants known to ward off insects may be planted nearby, such as marigold and chive. • If necessary, use insecticides that are safe to human health and the environment
Leafminers <i>Liriomyza spp</i> 	<ul style="list-style-type: none"> • This is an insect that tunnels its way within the leaves and makes unsightly marks 	<ul style="list-style-type: none"> • Leafminers are controlled by good weed control • Avoiding excessive use of fertilizers and if necessary • Use insecticides that are safe to human health and the environment
Diamondback moth <i>Plutella xylostella</i> 	<ul style="list-style-type: none"> • This is a small green caterpillar, which feeds on the underside of the leaves and create many tiny ‘windows’ and shotholes all over the leaves. • The holes do not extend through the leaves so that the leaves have a skeletonized appearance 	<ul style="list-style-type: none"> • Control of the diamond back moth is similar to that for budworm
Cabbage Looper <i>Trichoplusia ni</i> 	<ul style="list-style-type: none"> • This caterpillar walk with a characteristic "looping" action. • The larvae eat out irregular holes in the leaves, leaving only the main veins • They may also destroy the heart of the plant • Brown pellets or frass are deposited in the angles between the leaves. 	<ul style="list-style-type: none"> • Control of the cabbage looper is similar to that for budworm and diamondback moth.
Black rot <i>Xanthomonas campestris</i> 	<ul style="list-style-type: none"> • This is a bacterial disease. • The first sign observed is V – shaped yellow to brown lesions on the outer edges of the older leaves • The leaf veins become black in colour. 	<ul style="list-style-type: none"> • Black rot can be controlled by use of resistant varieties, • Good weed control, • Proper drainage, • Ensuring that the soil is not acidic • Spraying plants with a copper based fungicide