# Red cabbage Growing Guide Brassica oleracea var capitata



Cabbages are in the Brassica genus and are closely related to other vegetables such as broccoli and Brussels sprouts. They are a low calorie vegetable which is high in minerals such as potassium and high in vitamins A and C.

## UK Market

Cabbages have many different uses; most red cabbages are grown for the pre-pack market but some are grown for processing.

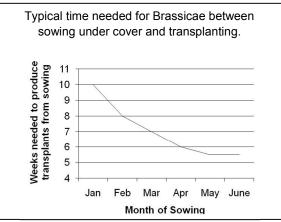
## Soil Types

Cabbages can be grown throughout the UK in a range of soils. Good drainage is important however in lighter soils irrigation may be needed. The soil pH is also important, if the pH is below 7 liming may be needed to increase the pH this will also allow some control over club root disease.

## Growing

Red cabbages are normally sown February to mid April for transplanting from April to late May and cropping between August and November.

Most red cabbage is now grown in modules to be transplanted into the field. For pre-pack they are normally grown with approximately 20 inches between rows and 16 inches between plants, approximately 18,000 to 25,000 plants per acre (44,500 to 61,800 plants per hectare). If grown for processing they have approximately 20 inches between rows and between plants, giving



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approximately 10,000 to 15,000 plants per acre (24,700 to 37,000 plants per hectare).

## Post-harvest Treatment

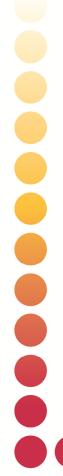
The post harvest treatment is dependent on the variety. The cabbages used for storage need to be harvested before hard frosts occur as this can reduce marketable yield and storage life, to a lesser extent now field storage is used in sheltered areas of the UK. Losses should be expected during storage this can occur as a result of disease or trimming afterwards.

Changes in the storage regime occur throughout the season; initially they can be stored in ambient barn stores. As time progresses they need to be stored in cold stores, controlled atmosphere cool (CAC) storage can be used for the storage later in the storage period.

## Fertiliser usage

Source: The Fertiliser Manual (RB209), 8<sup>th</sup> edition (2011).

	Soil index							
	0	1	2	3	4	5	6	
Nutrient	kg/ha							
Nitrogen <sup>b</sup> (N) - all soil types								
Storage cabbage	340	310	280	240	190	90	0 <sup>a</sup>	
Head cabbage pre-December 31st	325	290	260	220	170	70	0 <sup>a</sup>	
Phosphate <sup>c</sup> (P <sub>2</sub> O <sub>5</sub> )	200	150	100	50	0	0	0	
Potash <sup>c</sup> (K <sub>2</sub> O)	300	250	200 (2-) 150 (2+)	60	0	0	0	
Magnesium (MgO)	150	100	0	0	0	0	0	



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<sup>a</sup> a small amount of nitrogen may be needed if there is little nitrogen in the 1-30 cm of soil.

<sup>b</sup> Nitrogen – On light soils where leaching may occur or when crops are established by direct seeding no more than 100 kg N/ha should be applied prior to seeding or transplanting. On retentive soils in drier parts of the country where leaching risk is low and spring planted brassicas are established from modules, more nitrogen can be applied prior to planting. The remainder of the nitrogen requirement should be applied after establishment but before the surface soil dries out to ensure that it is utilised by the crop.

<sup>c</sup> Phosphate and potash requirements are for average crops and it is important to calculate specific phosphate and potash removals based on yields especially for the larger yielding cabbage crops.

#### Storage cabbage

For storage cabbage grown on fertile soils the recommendations for nitrogen may need to be decreased in order to reduce the risks of storage losses.

#### Post-December 31st crops

Apply no more than 100 kg N/ha at sowing or transplanting, less if there is risk of frost damage. The remaining nitrogen should be applied to reflect crop growth. Further top dressings of nitrogen will depend on the harvest date and expected yield – some nitrogen will be required to support growth during the winter particularly for crops harvested in late winter. For crops harvested in late spring more of the top-dressing should be left until the beginning of re-growth in spring.

#### Sulphur

Consider applying up to 50 kg SO<sub>3</sub>/ha in situations where sulphur content of soils is low, i.e. on light soils following wet winters where there is no history of organic manure application.

## Varieties available from Elsoms seeds

#### **NEW Kosaro F1**

A new early variety with a maturity slightly later than Primero, with improved internal characteristics.

### NEW Lodero F1 (BJ 2819)

Lodero is resistant to the commonly occurring races of clubroot, however specific growing conditions should be tested before commercial crops are grown.

	transplant to maturity time			Suggested Planting/Maturity Period							
Variety	(days)	Uses	Storage potential	April	May	Jun	Jul	Aug	Sep	Oct	Nov
Primero F1	75	Pre-pack/fresh	Limited								
NEW Kosaro F1	82	Pre-pack/fresh	Limited								
Integro F1	95	Pre-pack/fresh	Limited								
Buscaro F1	110	Processing	Limited								
Lectro F1	120	Pre-pack/ processing	Medium to long term				Internet Internet Internet Internet				
NEW Lodero F1 (BJ2819)	121	Pre-pack/ processing	Medium term					COURSE DOUGH PORCE COURS			
Subaro F1	135	Pre-pack	Long term					196960 196960 FEDERA (19696			
Huzaro F1	140	Pre-pack/fresh/ processing	Long term								

## **Further information**

For further information on the different varieties, seed treatments, pests and disease please contact your regional vegetable seed specialist or see the Elsoms Seeds catalogue.

## Links

Elsoms Seeds website and catalogue: http://www.elsoms.com/

The Fertiliser Manual (RB209) http://www.defra.gov.uk/publications/files/rb209-fertiliser-manual-110412.pdf

Assured Produce: *the growing partnership* (contains crop specific protocols): http://www.assuredproduce.co.uk

The information provided in this sheet is intended for general guidance only and is correct to the best of our knowledge. Please be aware that variations in the growing environment and climatic conditions can render this information inaccurate. For more specific advice about fertiliser use please contact a FACTS certified advisor. KCW/JAN13

