

RHUBARB

CALU FACTSHEET

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INTRODUCTION

Rhubarb has a justified reputation for growing on a wide range of soil textures and conditions. However, to get the best out of the crop the requirements are more exacting. A well drained retentive soil is ideal. For early production light sands warm up quickly and will provide the first outdoor rhubarb on the market.

SITE PREPARATION

Perennial weeds

Perennial weeds are a problem in rhubarb and every effort has to be made to clear up the weeds prior to planting. The worst weeds are creeping thistle, couch grass, perennial nettle, willow herb and bramble. If possible, it is better to follow an arable rotation rather than permanent pasture.

Liming

Rhubarb does not like acidity and, as with any perennial crop, it is difficult, if not impossible, to rectify low pH later on in the plantation life. The field will need liming up to a pH of 7.0. Lime applied at the outset can be well mixed into the soil but applications later will tend to sit on the soil and produce no benefit.

Organic matter and soil structure

Once the pH is correct, attention needs to be paid to soil structure. Addition of farm yard manures (FYM) at the rate of 70 - 100 tonnes per ha will be useful in improving the retention qualities of the soil. It also helps preserve soil structure. Before applying check that this complies with any Nitrate Vulnerable Zone regulations in the area.

Care needs to be taken with manures as they can introduce perennial weeds. Docks are a particular menace as they are a near relative of rhubarb; they are often brought in via FYM.

Over-cultivation and pulverisation of the tilth will cause slumping, especially in weakly structured soils. As rhubarb sets are large, relative to other types of plant propagation material, fine soil is not needed.

Some type of ridge or raised bed is useful to give extra depth of soil, better drainage and more opportunity to get under the crop for lifting for forcing.

NUTRITION

Rhubarb is a gross feeding crop and is very responsive to fertiliser. The best approach is to take a soil analysis pre-planting and repeat it every two years. The target indices are two to three for potash and three plus for phosphorus.

PLANTING DENSITY

The traditional density of 76 cm x 92 cm gives 14,346 stations per hectare and this has been demonstrated as being optimal for a range of varieties.

PLANTING

Planting can be carried out from October to March provided that the plants are dormant. In reality, it doesn't matter if the stock is not completely dormant; it is much more important to plant in good conditions in terms of soil structure.

The 'sets' are ideally large chunks of the original plant or 'crown' and should have at least one good bud showing. They should be planted with the base of the bud under the soil and the top just showing. Adventitious roots will then form underneath the bud and from elsewhere on the set.

Ideally the sets are cut one day and planted the next. In reality the shelf life may need to be a month or more. The best conditions to keep sets are cool and dry. This will inhibit fungal growth.



Cronfa Amaethyddol Ewrop ar gyfer Datblygu
Gwledig: Ewrop yn Buddsoddi
mewn Ardaloedd Gwledig
The European Agricultural Fund for
Rural Development: Europe Investing in
Rural Areas



Centre for Alternative Land Use
Canolfan Ddefnydd Tŷ Amgen



Llywodraeth Cynulliad Cymru
Welsh Assembly Government

The sets will need monitoring during storage to check that they are not becoming desiccated. If they begin to shrivel up they need a soaking of water to rehydrate them.

VARIETIES

Table 1: Outdoor pulling varieties or rhubarb

Variety	Harvest from	Stick colour	Comments
Timperley Early	February	Pink-green with red base	Fairly slender sticks
Stockbridge Arrow		Red base fading to green	
Reeds Early Superb	April	Pink-green	Mainly for forcing
The Sutton	May	Can be very red	High yield, good for PYO
Victoria	May		Very large sticks – upto 1kg each. Useful for processing

(nb harvest times are only indicative; colour can vary greatly)

HERBICIDES

Rhubarb is a good competitive crop with a dormant season, so annual weed control is simpler than with some perennial crops. Unfortunately as it is a minor crop, recommendations on labels are few in number. Check the current position on the Chemicals Regulation Directorate website (formally known as the PSD website) www.pesticides.gov.uk/psd_databases.asp

HARVESTING AND MARKETING

Outdoor rhubarb is pulled carefully to detach the petiole or stem without either snapping it or squeezing which can bruise. The stem needs a good steady pull so the whole leaf base comes out of the socket. Any surplus is stripped off the bottom and the leaf area is usually removed by a knife to give a tidy triangle.

The pulled stick can then go into a clean field crate without touching the soil. A stick of rhubarb will weigh in at 250g or more, so it is relatively cheap to harvest.

The crop is ready roughly when the stem length is 350 mm although the early crop is often shorter, it depends to some extent on your market requirements.

To achieve premium quality, sticks have to be whole and unblemished and practically straight. In the field the crowns are either selectively pulled or in some cases the whole field is stripped and any poor quality sticks are left in the field.

The harvested crop should be kept cool, an ice bank is ideal. If left to desiccate the skin becomes dull and the whole stick is flaccid and rubbery.

PLANTATION LIFE

Normally harvesting begins the second year after planting. However, if there are any signs of weakness do not harvest; instead try and find out why and rectify the problem. This will allow the crop to build up reserves for stronger growth and better levels of future production.

The plantation should produce for three to five years. Signs of decline are diminishing yields and a high count of thin and weak sticks. As the replacement crop will take a year to establish, the current stock must be replaced as soon as any weakness is identified. It is best to have a rotational removal and replacement plan to ensure continuity of cropping.

PESTS AND DISEASES

Rhubarb has no major pest and diseases and is, therefore, good for organic growing.

In terms of pests, the main problems arise in propagation and with newly planted crops. The main threat is leatherjackets, especially if the preceding crop was turf or a weedy crop or fallow. These large grubs come up at night and will eat away any growth causing the set to die away. Slugs will cause similar damage.