# **BLACKCURRANTS**

**PRODUCTION** FARMING FFERMIO

INTRODUCTION

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**GUIDES** 

**CALU FRUIT** 

### INTRODUCTION

Blackcurrants (*Ribes nigra*) cultivated in the UK are derived from species native to Scandinavia, Siberia, North America, Northern Europe and North Africa. They were first seen in gardens in the early 16th century. In the UK, the main commercial growing areas for blackcurrants are the West Midlands. Norfolk and Kent.

Blackcurrant fruits obtain their distinctive blue/purple/black colour from high levels of anthocyanins in the fruit. These anthocyanins have exceptionally strong antioxidant activity which gives the fruit health promoting properties. Blackcurrant fruit are higher in vitamin C and contain more antioxidants than many other fruits and vegetables, including blueberries.

Since the 1960s breeding programmes at the Scottish Crops Research Institution (SCRI) have produced a range of new varieties that have proved to be popular with growers and processors. These include Ben Lomond (1975) and Ben Alder (1988), and more recently Ben Sarak and Ben Moore. Breeding programmes since the late 1960s at SCRI have selected varieties which: are frost tolerant; disease resistant; have excellent fruit guality and flavour; and are high in vitamin C content. New varieties include Ben Connan, Ben Tirran and Big Ben. SCRI is the world leader in blackcurrant breeding, with their blackcurrants accounting for more than 50% of the global crop.

The area of blackcurrants grown in the UK rose steadily from the mid 90s to the mid 2000s, and has since stabilised at around 2.6k hectares.

Table 1:	Area and	yield of blackcurrant	production in UK, 2006
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UK blackcurrant production 2006	
Approximate area grown in UK (2006)	2,600 ha
Average yield per hectare	6 tonnes

## **CROP FORM AND DEVELOPEMENT**

The blackcurrant crop is produced on a bush approximately 1m - 1.5m high and across. The berries are carried on short strigs at the nodes of shoots produced the previous year. These one year old shoots may be long strong shoots arising from the base of the bush or from the older branches.

The flowers of the blackcurrant are initiated during the late summer and autumn. Buds appear in the axils of leaves on shoots of the current year's growth. On very long new shoots, some buds at the base may not contain flowers but remain vegetative. Flower buds may contain only one, but generally two or three strigs each carrying five to fifteen or more flowers. Varieties differ greatly in their numbers of flowers.

All varieties in the UK are self fertile and require insect pollination as well as wind.



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During March and April, the buds burst to produce leaves and the flowers unfold. Once pollinated the berries start to grow and are generally ready to pick during July and August.

#### VARIETIES

A wide range of blackcurrant varieties are available; the Brogdale Horticulture Trust has more than 100 varieties in its reference collection. However, commercial growers tend to concentrate on three or four main varieties; Ben Cannan (Early), Ben Hope (Mid), Ben Sarek (Late) and Ben Tirran (Late).

Variety breeding and selection in the British Isles is primarily run from the Scottish Crop Research Institute (SCRI) at Invergowrie near Dundee. The first of the `Ben' varieties bred at the Scottish Crop Research Institute was `Ben Lomond', released in 1975. This has been followed by the release of over 20 other 'Ben' varieties.

Growers need to be aware that some blackcurrant varieties are protected by Plant Breeders' Rights – this means that they are not to be used as parent stock for propagation without the authority of the holder of the Rights.

See table 2 for more detailed notes on blackcurrant varieties.

#### YIELDS

Originally, the yields of blackcurrants were low – with some of the earlier varieties averaging approximately 2.5 tonnes/ha. However since the 1950s average yields have shown an upward trend (except in seasons where spring frosts have been severe). The increase has been due to several factors including:

- Improvement in health of bushes (certification).
- Careful selection of sites.
- More efficient use of irrigation.
- Use of herbicides to eliminate competition.
- More effective pest and disease control.
- Use of water sprinkling for frost protection.

Yields of 7 - 8 tonnes / ha are now regularly achieved from the new varieties.

#### MARKETS

A large proportion of the crop is used for juice manufacture and jamming. Demand for these products is fairly static while canned currants, frozen selected and strigged fruit, yoghurt, pie fillings and the catering trade have increased in demand. A small amount of fruit is used for the confectionery trade.

While it can be said that the wholesale markets have been under-supplied, the fruit is seldom consumed raw and although consumption could be increased by improved supplies, the high cost of marketing could result in customer resistance to higher price.

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Season	Variety	First record / release	Comments	Vitamin C content	Yield	Growth habit
Early	Ben Gairn	1998	Good disease resistance. Produces medium sized berries with good flavour.		Medium	Compact
	Ben Connan		Large fruit with good flavour; popular with gardeners.		High	Compact
	Boskoop Giant	1880	A vigorous variety with large sweet fruit. Late to come into leaf.		Medium	Upright , low branching
	Laxtons Giant		Can be susceptible to high winds. Good yielder with sweet, juicy fruit		Medium	
	Mendip Cross	1970s	Produces large fruit easy for picking Baldwin X Boskoop Giant (sister to Malvern Cross)	Medium		
	Ebony	2000s	Produces a very sweet berry with the flavour compared to a cherry. Good mildew resistance.	High	High	Standard
	Big Ben	2000s	Exceptionally high yielding. Extra large shiny fruits, soft tender skins. Particularly high in anthocyanins		Very high	Standard
Mid	Blackdown		Early-mid season cropper with large slightly sweet fruit.	Low		
	Wellington XXX	1913	A good flavoured berry, popular with gardeners	High	Very high	Standard, slightly spreading
	Malvern Cross	1970s	Baldwin X Boskoop Giant (sister to Mendip Cross)	Medium		
	Ben Hope	1998	Medium sized berries, with a good flavour. Some resistance to gall mite	High	High	Upright

## Table 2: general characteristics of commonly grown blackcurrants

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Season	Variety	First record / release	Comments	Vitamin C content	Yield	Growth habit
Late	Ben Sarek		Highly productive small bush hybrid, specifically raised for planting at a closer spacing.	High	High Yield	Compact
	Baldwin	1880	Medium sized berries with a good flavour. Once reliable variety now notably disease susceptible.	Medium	High	Tall
	Ben Lomond	1972	Flowers have good frost resistance and will normally escape frost damage. Very large fruit, good flavour.	Medium / High	High	Compact, slightly spreading
	Ben More		Easy to manage bush. Late flowering, so normally avoiding spring frosts but with the advantage of relatively early fruiting.		High	Standard
	Ben Nevis	1974	Ideal for the system of cutting down the whole bush and cropping on young wood every other season. Fruit is frost resistant and berries ripen evenly. Extra large fruit.		High	Standard, tall
	Ben Alder	1989	Good flavour, recommended for juice and processing. Ben More X Ben Lomond. In flower early but late to harvest.	Mid	High	Standard
	Ben Dorain	2003	Ben Alder X Ben Lomond. Produces a very good juice quality berry. Sisters with Ben Avon.	Very High	High	Upright
Very Late	Malling Jet	1974	Flowers and ripens late so there is a reduced chance of frost damage.			Standard
	Ben Tirran	1990	Good disease resistance due to the late flowering season. Produces a good flavour. A widely grown commercial variety.	Mid	Very High	Standard
General requirements 800-1,600 hours temperature below 7ºC. Lack of chill = uneven bud break						

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