

A Selection of Wheat Varieties

Many species of plants and animals have a number of different varieties. Think of the large number of varieties of potatoes, such as Maris Piper, King Edward, Kestrel, Wilja or Desiree, that are grown as early, mid-season or maincrop potatoes.

Wheat also has many different varieties, some being created to suit particular climatic conditions, others for the quality of the grain. A wheat variety bred for the British climate, typically with rainfall occurring during some (all!) of the summer months, usually takes several months for the grain to develop before ripening in the late summer. The same variety would be unsuitable for growing in many Mediterranean countries where a short spring is followed by a long dry summer, conditions that would cause the plants to become parched and die before the grain had fully developed.

The display growing in the protective cage has a selection of wheat varieties, some old, some modern, showing a range of different characteristics such as plant height, ear type and colouration.

- 1 = "Solstice". A short British variety, first grown commercially in 2002 and currently on the UK National List of Permitted Varieties (EU legislation policed by DEFRA). It is widely grown, producing grain with a high protein content suitable for milling to a bread-making flour.
- 2 = "Soissons". A short French awned variety from the 1970's, also on the UK National List. Matures early allowing an early start to the wheat harvest but prone to damage by late frosts when in flower so is more commonly grown in southern England than further north. It is favoured by millers for the good bread-making quality of the flour.
- 3 = An old Armenian variety that can grow up to five feet high. The ears are lax with the flower heads spaced along the central stalk or rachis of the ear. This will result in a reduced grain yield compared to the more usual compact type of ear.
- 4 = "Maris Widgeon". A moderately-tall variety produced by PBI at Cambridge in 1964 with the emphasis on good bread making qualities. This was the last variety bred by PBI before the introduction of height reducing genes. The long straw was favoured by thatchers for roof thatching and for making corn 'dollies' in straw crafts. The variety has been deleted from the UK National List of Permitted Varieties so that it is now illegal to buy, sell or even give away seed of this variety, much to the dismay of the thatching industry.
- 5 = "Redfast". A tall British heritage variety sharing one parent with Maris Widgeon. The plants and mature grain have a darker 'tanned' appearance, known as 'red', when compared to the more usual British 'white' varieties. The ears are devoid of awns.
- 6 = "Bearded Red". Another tall British heritage variety similar to "Redfast" but with ears that have awns, commonly referred to as 'bearded'. The mature plants and grain have a similar darker 'tanned' appearance.

DEFRA = Department for Environment, Food & Rural Affairs

PBI = Plant Breeding Institute. A part of the PBI later became the JIC (John Innes Centre)



X	X					short	height
		X	X	X	X	tall	
X	X		X	X	X	compact	ear
		X				lax	
X			X	X		absent	awns
	X	X			X	present	
X	X	X	X			white	colour
				X	X	red	
1	2	3	4	5	6		

The photographs and columns numbered 1 to 6 represent the varieties of wheat, each with four characteristics with two alternatives.

height: height of plant at maturity, either short or tall.

ear: compact ears are the usual type; 'lax' ears have the flower heads spaced along the ear.

awns: presence or absence of bristles or awns on the ears, 'bearded' wheat having awns.

colour: colour of the mature grain; 'white' grain is a light brown colour, 'red' grain is a darker brown.

Most varieties of wheat now grown in Britain are short with compact awnless ears with white grain, similar to plot 1.