



Temperature and Germination

All seeds need warmth and moisture to germinate and grow on well. How much warmth varies by type of vegetable – for example broad beans will grow fine in soil temperatures over 8 degrees C, whereas aubergines need much more heat: ideally over 24C.

The table below shows the minimum and preferred temperatures that different types of seed need to germinate. While seeds will germinate in the cooler conditions, they will come on more slowly and be more inclined to rot or get diseased.

	Minimum (°C)	Preferred (°C)
Heat lovers:		
Aubergine	16	24-32
Courgettes	16	21-35
Cucumber	16	16-35
French and runner beans	8-10	16-30
Squashes and pumpkins	16	21-35
Sweet peppers and chillies	16	18-35
Sweetcorn	16	16-32
Tomatoes	10	16-30
Others:		
Beetroot and chard	4	10-30
The cabbage family	4	7-30
Broad beans	5	8-15
Carrot	4	7-30
Lettuce	2	4-27
Onion	2	10-35
Parsnip	2	10-21
Peas	4	4-24

So, you can see that French beans will start to germinate from 8-10C, but ideally need much warmer temperatures – between 16-30C is ideal.

Remember that the soil temperature is not the same as the air temperature; the soil warms up more slowly in the springtime. Typically soil temperatures only get over 10C from mid May, and over 15C from mid June.

At Farfield Farm, we have the polytunnel, the greenhouse and heated propagators to help us to germinate seeds and grow vegetables in warmer temperatures than the outside world.