

Cultural Details: **Lupin**

A range of species of which the most familiar are the Russell and Gallery types, an essential part of the perennial programme.

Lupins are easy to raise, but care should be taken to avoid the disease *Colletotrichum*, which causes plant collapse.

Variety Selection

The standard varieties are divided into tall types (the Russells, which are generally sown in the Summer and overwintered), and the shorter types such as Lulu and the Galleries which can also be flowered in the first year from an early sowing.

Tree Lupin (*Arboreus*) forms a shrubby bush up to 1.5 metres in height.

Annual Lupin Sunrise is a less common direct sown annual reaching a height of around one metre; this leaflet does not cover it.

Programming the Crop

Sow June-July to overwinter, and in January (Gallery only) to flower in the Summer.

Propagation and Growing-on

Sow the large seeds (around 40 per gram) onto the surface of a free-draining, open-structured, seed sowing compost, which should be thoroughly wetted with a suitable fungicide prior to sowing (to prevent damping-off diseases), and the trays allowed to drain. Sow either into trays, or into plug trays at one seed per station, to avoid root disturbance when pricking out. Cover the seeds with a layer of vermiculite, and cover trays with clear or milky polythene to maintain humidity, until the first seedlings are visible. Germination takes around 7 days at 15-18°C. Keep the germinating seedlings moist at all times, and grow on at 15-18°C.

When large enough to handle, the seedlings should be ready for transfer into large-celled plug trays. (The plug-germinated plants can go straight into a 9cm pot.) Grow on at around 15°C until ready for potting up into the final container, up to a 2-litre pot. Cool the plants down in the Autumn, overwintered plants should be kept on the dry side, under protection, such as a well-ventilated polytunnel or glasshouse. Sell as green plants with a colour label, in Spring or Autumn. Galleries sown in January can be moved on from a 9cm to a 2 or 3 litre pot for sales as flowering plants in June. Liquid feed the plants during periods of active growth.

Pest and Disease

Maintain good air movement through the crop, and water in the morning rather than the evening to keep the foliage dry and lessen attack by Botrytis. Anthracnose (*Colletotrichum*) is currently the number one problem associated with Lupin production; apparently healthy plants can collapse and die at quite an advanced stage. Gallery Seed is supplied treated with a fungicide, but it is very important to pay good attention to glasshouse hygiene at all stages, using only fresh trays, pots, compost, water and clean bench tops and standing-out areas. As an extra precaution, plants can be stood out in small batches in different locations around the nursery. Aphids commonly infest Lupins - spray accordingly, according to the manufacturer's guidelines.

Information provided for guidance only, as cultural practices and climatic circumstances vary.