

MOLES SEEDS

Impatiens

Cultural Leaflet: ZZ190

Recognised as the number one bedding plant in the UK, Impatiens are equally at home in the border (including shady locations) and containers and hanging baskets. The sales season can be from late April well into Summer.

Newer varieties have stretch resistance and a longer shelf life, with a higher germination rate. However, they still need attention to detail, together with the avoidance of big fluctuations in environmental conditions, especially early on.

For those looking for a mildew resistant alternative to bedding Impatiens, take a look at the New Guinea Impatiens. Traditionally raised from cuttings, New Guinea Impatiens may now be raised easily from seed. This offers several advantages, including production cost savings, and the lowered risk of bringing pest and disease onto the nursery.

Standard bedding Impatiens are the best variety for carpet bedding as they produce an abundance of flowers - and sales later in the season would be well promoted for gap filling in borders.

New Guinea Impatiens grow a little taller, produce less flower and have a far superior foliage, making them an excellent choice for large containers, especially in shade.

Variety Selection

Of the bedding Impatiens, the Xtreme series is the choice for packs, offering quick flowering and uniformity across the colours, with exceptional plug performance.

Lollipop Mixed has been bred to be the most professional Impatiens on the market. With very high germination, the plants are naturally self-branching and fill the pot quickly - great for baskets and containers.

The F2 variety Safari can be used to reduce costs, although the flowering is later and the habit is less compact.

New Guinea Impatiens are grown primarily in the UK as pot plants. Moles offer the Divine Series, plants with a great branching habit that produce lots of flowers all season long. Foliage ranges from green to bronze-green, providing an excellent contrast with the blooms. This series is also an economical choice for production packs and 10cm pots compared to vegetative material.

Programming the Crop

Early February sowings of bedding Impatiens will flower from early May; March sowings flower late May to June. Later sowings can be made to provide plants for sales in late June and July.

New Guinea Impatiens take longer to grow than standard bedding Impatiens and should be sown December-January.

Propagation and Growing-on

Standard Bedding Impatiens

Sow into plug trays ideally to prevent root disturbance, or seedling trays. Germination takes 10-14 days at 22-24°C, when sown onto an open seed-sowing compost. Light will improve germination (10 hours at 10 ftc (108 lux) is sufficient). Keep the germinating seedlings moist at all times. Temperatures below 21°C may cause tip abortion and seedling loss, above 24°C may cause thermo-dormancy of the seed.

Once the seed-leaves (cotyledons) have emerged, begin liquid-feeding the young seedlings, and gradually reduce the soil moisture, to prevent stretching of the young plants.

Use of supplementary lights at 5-7,000 lux will enhance development of the young plants as ambient light levels in February and March can be quite low. Gradually reduce temperatures as the seedlings develop, finishing the plugs at 17-20°C.

After around 5-6 weeks the young plants are ready for transfer into 6- or 9-packs, or 8cm pots, or else can be used for baskets and containers.

Grow them on at around 17°C at night, 17-20°C day. Reduce liquid feed levels and watering. Plants grown on the dry and hungry side at this stage will flower more quickly, and maintain a compact habit. They will be ready for sale around 4-6 weeks after potting.

New Guinea Impatiens

Sow at approx. 22-25°C. Cover very lightly with vermiculite to maintain humidity, keep moist, do not exclude light. The most controllable way to raise is into module trays, so that roots are not damaged when potting on. Germination will be visible after around 7 days. Grow on at 18-20°C and water carefully as roots will be damaged by overwatering. Supplementary lighting, especially in the early stages will hasten seedlings growth. Begin feeding after 3-4 weeks with moderate strength liquid feed.

After about 6-8 weeks (depending on size of young plant) into 10cm pots (for pot sales) or 4-packs (for bedding plant sales). Use slow release fertilizer, or a moderate strength liquid feed programme, beginning 2 weeks after potting. Maintain temperatures around 16°C if possible to grow on. Pinching and growth regulators are not required.

All Impatiens seed is variable in size; depending on seed lot there can be 1,000-2500 per gram.

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Pest and Disease

Maintain good air flow through the crop to minimize the risk of botrytis.

Use sticky traps to monitor for the presence of insects, such as whitefly, thrips and aphids, and treat crop accordingly. Western Flower Thrips must be carefully controlled, especially as they spread Tomato Spotted Wilt Virus, which can cause severe damage (mottled/distorted new growth).

Downy Mildew

This organism can cause serious damage to standard bedding Impatiens (no known cases affecting New Guinea Impatiens). Affected plants develop paler foliage than the plants around them, followed by the presence of a white layer of spores on the underside of the leaf. Plants should be regularly inspected for symptoms.

The perfect conditions for the development of this disease is cool, wet and humid weather, and crops can be seriously affected both in the greenhouse and once planted out.

The source of the infection remains unclear. Although DNA from the organism has been found associated with some batches of Impatiens seed, scientists have been unable to get this to develop on the subsequent germinated seedlings.

In fact the disease can be detected scientifically in the young plants, flowerbeds, baskets etc without ever causing a problem or showing any noticeable symptoms at all, as the conditions for disease spread have not been provided.

Impatiens Downy Mildew is an oomycete fungus (as are Pythium and Phytophthora), 2 features of which are of interest here:

- They produce resting spores (oospores) which can persist for a long time (years) in the soil, in compost under benches and in decaying plant material in damp corners etc, germinating when conditions are right. This means that greenhouse hygiene is of great importance, and consideration should be given to sterilisation of glasshouse surfaces between crops.
- They also produce zoospores, which can swim along moist surfaces and spread any infection. This means that plant foliage should be kept as dry as possible. So water the crop early in the day, and keep glasshouse humidity low so that leaves dry out quickly after watering. Any affected plants, plus seedlings growing under benches etc, should be removed and destroyed.

Chemical control of the disease is possible; full details of preventative control programmes can be provided by your chemical supplier.

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

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