MOLES SEEDS

IMPATIENS DOWNY MILDEW

Cultural Details: ZZ195

(Plasmopara obducens)

This organism can cause serious damage to 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.

Summer 2008 provided perfect conditions for the development of this disease (cool, wet and humid), and some crops were 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 impatiens 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.

There is a single unconfirmed report of the disease noticed on New Guinea Impatiens, otherwise it affects seed-raised types only, and evidence suggests all varieties have the potential to be affected. Although Hymalayan Balsam, another introduced wild impatiens species, (tall, pink flowers, 'exploding' seed-pods) is running amok along riverbanks throughout the UK, the disease has not been noticed on it.

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. *Rev 02/09*