

CONTROLLING DAMPING-OFF IN BEDDING PLANTS

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Damping-off, one of the most destructive disease problems of bedding plants, is caused by a group of soil-borne fungi. Most growers recognize damping-off as a collapsing of the stem and falling over of a seedling. However there are other symptoms that may be produced by this group of organisms.

Preemergence damping-off. The seeds are killed before germination, or soon after. The young plants never emerge from the soil and this loss is often blamed on poor seed.

Postemergence damping-off. Most growers are familiar with this stage. The stem is invaded near the soil surface. The seedling wilts, the stem collapses and the plant topples over. Other variations of postemergence damping-off include top rot or top damping-off, and root rot.

Wire-stem damping-off. Seedlings that have been hardened off may be attacked by damping-off organisms. Stems are partially girdled, discolored and wire-like in appearance; hence the name wire-stem. Infected plants are stunted and eventually die.

Control. Damping-off control starts long before the seeds are sown. The seedling house should be cleaned thoroughly. New flats should be used or the old ones should be sterilized.

If a soil mix is used it must be treated either with steam or chemicals. Artificial mixes should be considered as they are essentially disease free. It is wise to treat the seeds with captan before planting. If damping-off should appear after transplanting, then the following drenches are suggested at 1 pint per square foot (rate per 100 gallons):

Dexon 35W 1.0 lb. + Terraclor 75W 12 oz.

OR

Dexon 35W 1.0 lb. + Benomyl 50W 1.0 lb.

OR

Truban 30W 8 oz.

All of the above materials were tested for damping-off control

All of the above materials were tested for damping-off control last spring. They were used on petunias, impatiens, salvia, verbena and snapdragons. In some instances, up to four applications were made without plant injury.

NOTE: Some of these materials are not cleared for food crops. Check the label before using.