

# **DAMPING OFF**

Caused by the soil-borne fungus Pythium spp.

Damping-off is a horticultural condition caused by several different fungi and fungi-like organisms that kill or weaken seeds (pre-emergence damping off) and young seedlings, damaging their roots (post-emergence damping off).

Bare patches in rows of sprouted seedlings and collapsed young seedlings are a sign of possible damping off. Infected seeds show a poor germination rate. Many times, seedlings in seedbeds are completely destroyed by damping-off or they die soon after they are transplanted. Infected older plants are rarely killed, but they develop root and stem lesions and root rots. Their growth may be retarded considerably, and their yields may be reduced drastically. In severe cases, older plants also wither and die.

When seeds are planted in infested soils, they fail to germinate. They become soft and mushy, turn brown and finally break down. Seedlings that have managed to emerge can be infected at the roots or stem area, below soil level. The infected part becomes watery, discoloured and thinner than the uninfected part, which soon results in the collapse of the seedling. The fungus continues to grow on the fallen seedling, eventually turning it into a rotten mass.

#### PREVENTION

Make sure that your seedlings are given the correct amount of water, keeping the soil slightly moist, not saturated, and water in the mornings. Beds need to be free-draining, with a good amount of airflow. Maintaining drier conditions with better air circulation helps prevent the spread of the disease, although it can also prevent or slow down germination.

Prevention in greenhouses can be achieved with good-quality and sterile soil. If your plants have contracted this disease previously, replace the soil.

Clean and sterilise seed trays and containers before use, and avoid using excess amounts of nitrogen (N)-rich fertilisers until plants are established.

Seeds that are commonly affected by damping off are often sold with a chemical coating. If you are saving your own seed, you can dust them with organic <u>Free Flo Copper</u> to help reduce the chance of infection.

#### TREATMENT

There is no chemical treatment to prevent Damping off, hygiene is the key (see prevention).



## DAMPING OFF PRODUCT RECOMMENDATIONS

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### **FREE FLO COPPER**

An organic copper hydroxide that controls a wide range of fungal and bacterial diseases on fruit, vegetable and ornamental plants. Certified Organic.



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