Damping off in vegetable nurseries

Recognize the problem
Damping off is a common disease which occurs mostly in the seedling stage of vegetables in the nursery. It can kill seedlings very quickly. This disease is caused by soil-borne fungi and attacks many crops (e.g. cole crops, tomato and chillies). Symptoms on the stem include brown water sunken lesions at ground level. Gradually the stem or roots rot and the seedling falls over onto the ground surface and dies.

Background
Seedlings grown in high density, high humidity and high temperature allows the disease development. When plants are older they become more resistant to damping off and control measures are unnecessary.

Management
• Wash tools thoroughly with clean water before use
• Select a nursery bed in a sunny area with good aeration
• Insure the nursery bed is well drained
• Use soil solarization in the nursery bed. Moist the prepared nursery bed then cover with white plastic (250-300 gauge) so that it is air tight for up to 21 days. Then, remove the plastic and leave the bed for up to 3 days
• Use treated seeds. If seeds are not treated, place them in a container with Carbendazim @ 2 gm/ kg of seed, close the lid and shake well
• Maintain the seedling spacing of row to row: 10 cm, and plant to plant: 2 cm
• Remove the weak and unhealthy seedlings
• If symptoms of damping off appear, then spray Carbendazim @ 1 gm/ litre of water in nursery seedlings
• If carbendazim is not effective, use copper fungicides

Scientific name(s) > Pythium/ Phytophthora/Rhizoctonia/Fusarium

When using a pesticide, always wear protective clothing and follow the instructions on the product label, such as dosage, timing of application, and pre-harvest interval.