# Damping off on cabbage

**Rhizoctonia solani, Pythium spp. and Fusarium spp.**

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| - Use certified seeds.  
- Crop rotation for 3 years with maize, onions, spinach, sweet potatoes and beans. The seedbeds should be situated in areas that have not had previous cruciferous crops.  
- Plant on raised beds to reduce moisture content in the root zone and provide appropriate drainage.  
- Locate seedbed on well-drained soil and avoid excessive irrigation.  
- Avoid field operations when it’s wet.  
- Keep nursery/field weed free.  
- Use clean plastic or wooden trays to raise seedlings.  
- Use a low seed rate in seed beds as overcrowding of seedlings favours the disease.  
- Carefully examine seedlings for lesions on the lower stem or near the soil line which results in wire stem appearance.  
- Plants must be monitored throughout the cropping cycle.  
- Look for weak plants showing rapid wilt and collapse followed by rotting of seedlings.  
- Take action after one seedling is affected.  
- Discard all seedlings with wire stem, and discoloured roots when transplanting and plants with bottom rots, head rots and root rots.  
- Stop watering for a while if damping off occurs to allow soil to dry around the plants.  
- Solarise seed bed soil for 8 weeks using transparent plastic paper.  
- Drench with *Trichoderma* based products eg Trianum at 1:5 (trianum to water), Rootguard, Trichotech, Ecot.  
- When using a pesticide always wear personal protective equipment. Follow the instructions on the product label, such as dosage, timing of application, max number of sprays, restricted re-entry interval. Do not empty into drains.  
- Always consult recent list of registered pesticides (PCPB).  
- Spray the seedling after transplanting using either of the following fungicides: Metalaxyl+ Mancozeb (Amidil 50g/20L or Ridomil Gold- 50g/20L water)  
- Drench with Propamocarb hydrochloride based products eg Previcur at 30-50ml/20L, Propeller at 60-120ml/20L at seedling stage and twice when crop matures  
- WHO toxicity class II (moderately hazardous); PHI 14 days  
- WHO Class U (unlikely to present acute hazard); PHI 3-7days |