# Black rot on cabbage

**Xanthomonas campestris pv. campestris**

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| - Use certified tolerant varieties like Baraka F1, Globe Master F1, Blue dynasty F1, Riana F1.  
- Rotate with non-brassicas like maize and legumes for at least 2 years.  
- Keep field free from weeds to avoid alternate host of brassica family.  
- Monitor for  
  1. Yellow, brown v-shaped patches at the edge of the leaves.  
  2. If the yellow/black lesion is held against the light, black veins are visible.  
  3. A cross section of infected stem that reveals a black ring.  
  4. In later stages, head turns black with an offensive foul smell.  
  5. Disease is common during wet conditions with high temperatures.  
- Take immediate action when first symptoms appear.  
- Remove all infected plant and debris from the field and destroy by burning.  
- Spray the remaining plants using a protective fungicide to suppress further damage. (See direct control yellow option)  
- Spray copper based fungicide as a protective spray e.g. copper oxy chloride. (Kocide or Isacop)  
- Moderately hazardous (WHO Class II).  
- Spray interval of 14 days during wet weather.  
- Use a maximum of 3 sprays.  
- Wear protective clothing.  
- Follow instructions as per manufacturer. recommendation on pre-harvest interval. |

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Kenya

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