### Soft rot of onions

*Erwinia carotovora* ssp. *carotovora*, *Pseudomonas* spp. Gatombo (Meru)

#### Prevention
- Avoid overhead irrigation once onions start to bulb
- Allow tops to mature and dry fully before harvesting
- Provide for quick drying following topping, especially if temperatures are high
- Avoid wounding plants during cultivation and weeding as these serve as avenues for bacterial entry into the bulb
- Avoid surface run off from contaminated areas
- Rotate with maize or wheat
- Cure onions promptly and thoroughly before storage
- Plant using clean bulbs from clean plants
- Disinfect farm tools between plants and farms (Use 50ml JIK in 1L of water)

#### Monitoring
- Additional relevant crops: chives, leeks
- Look out for:
  - Water-soaked and pale yellow to light brown lesions that appear on scales
  - Soft and sticky scales with the interior of the bulb breaking-down
- A watery, foul-smelling thick liquid coming from the neck of diseased bulbs

#### Direct Control
- Uproot all infected plants and destroy by burning
- Store onions in well ventilated place to avoid accumulation of moisture on the surfaces of bulbs

#### Direct Control
- Use protective clothing when handling insecticides
- Follow product label instructions
- Use 50ml JIK in 1L of water for disinfecting farm tools between plants and farms

#### Restrictions
- Drench the seedlings using copper based fungicides e.g. copper oxichloride (Amicop 50WP and Cobox 50WP at 60g/20L of water) and copper hydroxide (Cuprocaffaro Micro 37.5 WG and Kocide DF at 50g/20L of water) to minimize bacterial infection
- WHO Class II (Moderately hazardous), PHI 7 days

- Spray with Bronopol 27% W/W (Enrich BM) at 1.3kg/ha
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