INDWARA N'IBYONNYI BY'ICYAYI

Indwara z'icyayi zikunze kuboneka mu karere kacu nuko zarwanywa.

1. **Armillaria root rot**

***Ikiyitera*:** Fungus armillaria spp

***Ibimenyetso*:**

- Kugwingira mu mikurire
- Guhinduka umuhondo kw'amababi
- Kurabya imburagihe
- Guhunguka kw'amababi
- Guturika k'uruti ku ntangiriro yarwo
- Utuntu tw'umweru tugaragara ahagana mu mizi

Armillaria root rot

Uburyo bwo kuyirinda

- Ibiti biri ahantu hazaterwa icyayi bigomba kubanza gushishurwa bikamara amezi 18-24 kugira ngo byume burundu bikabona gutemwa.

- Iyo ibiti biranduwe ari bibisi, ibishyitsi n’imizi yabyo bigomba kuvanwa mu butaka byose.
- Kwirinda gutera ibiti bishora imizi cyane aho ikunze kuboneka (mu cyayi).

Uburyo bwo kuyivura

Ibiti byose byafashwe bigomba kurandurwa bigatwikwa n’imizi yabyo yose

2. Hypoxylon wood rot

Ikiyitera: Fungus Hypoxylon serpens

Ibimenyetso:

- Kugabanuka kw’amashami ashibuka nyuma yo gukata
- Utudomo/Ibidomo tw’umukara ku mashami yaboze/yapfuye/yumye.

Ibimenyetso bya Hypoxylon wood rot

Uburyo bwo kuyirinda

- Kurinda ko imirasire y’izuba irasa ku nkovu zimaze gutemwa igihe bakata icyayi
- Gutema ku buryo amazi y’imvura ayitembaho yihuta
- Kwirinda gukatira icyayi ku burebure bwo hasi (kubahiriza ibipimo bagenwe)
- Gukoresha ibikoresho byabugenewe
- Iyo hakaswe mu gihe cy’izuba kurenzaho amashami

Gukata urwanya Hypoxylon

Uburyo bwo kuyivura

- Gukata amashami yose yapfuye akajugunywa
- Nyuma yo gukata icyayi, inkovu nini zisigwaho umuti wa copper oxychloride (oxyclolure de Cuivre50%)
- Kuvanaho igice cyose kigaragara ko kirwaye mu gihe cyo gukata (surgical pruning)

3. Stem canker

Ikiyitera: Phomopsis theae

Ibimenyetso:

- Gusaduka kw'igishishwa ku ruti hakagaragara umwanya utariho igishishwa aho uruti rutangirira
- Amababi yo ku ishami ryashishutse ahinduka umuhondo akazapfa

Stem canker

Ibindi bishobora kuyitera

- Umwuma (water stress)
- Gukomeretsa igishishwa cy'uruti
- Ubwoko bwa clone (hari clone zikunzwe kuyirwara nka 6/8)

Uburyo bwo kuyirinda

- Gusasira icyayi kugira ngo kigumane amazi mu butaka
- Guhinga ama "clones" yihanganira ubu burwayi
- Kwirinda guterera icyayi hasi cyane
- Kutangiza igishishwa cy'uruti

Uburyo bwo kuyivura

- Gukata amashami cyangwa ibiti birwaye nibura munsi y'aharwaye ho 10cm
- Amashami yakaswe agomba gutwikwa
- Hashobora gukoreshwa imiti nka dithiocabamates cg copper oxychloride

4. **Leaf spots (Brown leaf spot na Grey leaf spot)**

Brown leaf spot

- ***Ikiyitera***: Colletotrichum camelliae
- ***Ibimenyetso***:

  - Ibizinga ku mababi bitangira ari umuhondo bikagenda bihinduka kaki itsindagiye biva hagati mu kibabi bigana ku mpande zacyo

  - Utudomo tw'umukara tugaragara ku mpande zombi z'amababi turi ku turongo dukurikiranye

Uburyo bwo kuyirinda

- Kudakora igicucu gikabije mu ma pepiniyeri
- Kuhira amazi akenewe mu gihe cyo kuvomerera imbuto muri pepiniyeri
- Gutera ifumbire uko bigomba

Uburyo bwo kuyivura

- Kugabanya igicucu
- Kugabanya kuvomerera
- Imiti ikoreshwa : Dithane M45 (4-5gm/1 lt y'amazi), Copper Oxychloride (5-7gm/1lt y'amazi), Benlate (1gm/1lt y'amazi).

Iyi ndwara ikenera kuvurwa ari uko iri muri pepiniyeri gusa.

Grey leaf spot

- Ikiyitera: Pestalotia theae

Ibimenyetso:

- Ibizinga bya « grey » ku mababi akuze
- Utudomo tw'umukara muri ibyo bizinga ku ruhande rwo hejuru rw'ikibabi

Uburyo bwo kuyirinda

- Kudakora igicucu gikabije mu ma pepiniyeri
- Kutarenza amazi akenewe mu gihe cyo kuvomerera imbuto muri pepiniyeri
- Gutera ifumbire uko bigomba

Uburyo bwo kuyivura

Ivurwa kimwe na brown leaf spots.

5. **Root rot nematodes**

- **Ikiyitera**: Melodigyna sp.
- **Ibimenyetso**:

- Imizi yanduye igaragaza utubyimba
- Kuma, kudakura neza… (imizi ntibasha gukurura intungagihingwa)

Ibimenyetso

Uburyo bwo kuyirinda no kuyivura

- Gutera clones zihanganira nematodes
- Gupima ubutaka bareba ko nta nematodes zirimo mbere yo gutera icyayi
- Gutera ifumbire neza

• **Kuyivura**: Kurandura ibirwaye