	Uburyo bwo gukusanya, gutunganya no gukwirakwiza amakuru kuri filiyeri y'imbuto mu Rwanda	Kode y'inyandiko: 41KR170I179v0
	IGICE CYA 4 : UBUMENYI BW'IMIKORERE MU BYA TEKINIKI	Itariki yo kujyanisha inyandiko n'igihe UKUBOZA 2007
IFISHI YA TEKINIKI ZO GUHINGA KIJYAMBERE : IGITUNGURU		Inyandiko ikomatanyije

Inkomoko y'inyandiko	AJENDA Y'UBUHINZI / MINAGRI

Itariki inyandiko yasohokeyeho	2002

Umubare w'amapagi	3

IFISHI YA TEKINIKI ZO GUHINGA KIJYAMBERE : IGITUNGURU (ONYO)

1. **Umuryango w'ibihingwa** : ibitunguru « **ALLIUM CEPA** » kimwe na puwalo, ibitungurusumu bibarirwa mu muryango wa « **Liliaceae** » muri ordre ya **Liliflores** no mu muryango mugari wa « **Monocotyledones** »

2. **Aho bikunda** : bikunda mu Rwanda hose. Ariko kugirango ibijumba bibe binini, hagomba uburebure bw'umunsi mugufi buri hagati y'amasaha 12 na 16. Hagomba kandi ubushyuhe buri hejuru ya dogere 18 (18°C) kugirango ibitunguru bibyimbe bimere nk'ibihaze. Ubushyuhe buke bwo bubifasha mu gihe cyo gushibuka, gukura no kuzana indabo.

3. **Ubutaka**: Onyo ikunda ubutaka bworoshye, butari burebure cyane kandi bwumutse neza. Ntabwo ikunda ubutaka buhora butose kandi n'ubutaka bw'ibumba si bwiza. Ikunda ubutaka burimo potasi. Niyo mpamvu, umuhinzi agomba kubufumbiza ivu.

4. **Amoko** : Amoko yamamazwa mu Rwanda ni aya :

   - igitunguru gitukura : **Red Cléole**
   - igitunguru cy'umuhondo : **Texas grano**

   Ayo moko afite amabara atandukanye. Niyo mpamvu umuhinzi areba ibara n'impumuro (parfum) y'ubwoko agiye guhinga kuko aribyo abaguzi bakunze kwibandaho.

5. **Ifumbire** : kubera ko ifumbire ari ingirakamaro mu gutunganya imiterere y'ubutaka, ni ngombwa gushyiramo ifumbire iboze neza cyane. Kg 200/are 1 iba ihagije.

6. **Igihe cy'ihinga** :- kwinaza muri pepiniyeri : Mata-Kamena
   - bihingwa (kugemura) mu mpeshyi ariko bikavomerwa. Bigomba gutangira kwera mbere y'imvura yo mu kwezi kwa Nzeri

7. **Gutera ibitunguru** :

   - Habanza kwinaza umurama mu buhumbikiro bakoresha g 5/m² 1. Bataba umurama muri mm 5-10 ku mirongo bagasigamo cm 10 hagati yayo.
   - Urwinarizo rufite m² 100 rurahagije kugirango ubone ingemwe zahinga ha 1
   - Igihe bimara mu rwinarizo : iminsi 45 kugeza kuri 60
   - Bagemura onyo ifite umubyimba w'igice cyo hasi ungana n'ikaramu nto, icyo gihe amababi aba areshya na cm 15-20
   - Uko bagemura : mbere yo gutera ingemwe, babanza gushabura iminsi y'ingemwe, itemerwa kuri cm 1 hepfo y'ikijumba cya onyo kandi ntibakuraho imitwe y'amababi
   - Bazitera kuri cm 20-25 hagati y'imirongo na cm 5-10 ku mirongo ni ukuvuga ingemwe 450.000/ha
   - Urugemwe ruterwa kuri cm 3 z'ibujyakuzimu, nyuma bamara gutera bagasubiranya kandi bagatsindagira itaka ryo hejuru
   - Iyo ushaka ibitunguru bitari binini kuko aribyo bibikika, utera ingemwe nyinshi/are

8. **Gukorera ibitunguru :**

   - Kubagara kenshi ariko unamenera kugirango ubutaka bworohe no kugirango ibyatsi bidakura vuba bigakwirakwiza indwara
   - Iyo onyo itangiye kubyibuha, bataba ivu iruhande rwayo.
   - Kwambura ibijumba by'ibitunguru ubutaka kugirango bishobore kubyimba no gufata ibara. Bikorwa ibitunguru biri hafi yo kwera babanza kubigondera amababi ku munigo wayo (collet).

9. Indwara n'ibyonnyi :

a) Isazi ya onyo :

Ikiyitera : isazi y'ibitunguru
Aho ifata : igihingwa cyose
Ibimenyetso : amababi aratumba. Inyo ziyo sazi zica utuyira mu gitunguru maze kikabora kikananuka cyane
Uko bayirwanya :
- kurandura no gutwikira mu mwobo ibitunguru byafashwe
- kuvanga onyo na karoti kuko karoti yirukana isazi ifata onyo, naho onyo ikirukana ifata karoti
- aho isazi yageze, nta onyo igomba gusubira muri uwo murima mbere y'imyaka 3

b) Ububore bw'umweru (mildiou + alternariose)

Ikiyitera : uduhumyo **Peronospora scheideni + Alternaria porri**
Aho ifata : ku mababi no ku bijumba by'igitunguru
Ibimenyetso : Onyo zikiri nto zihinduka umuhondo kandi zikarandurwa n'ubusa. Ku bitunguru haba hatwikiriwe n'utwoya tweruruka ndetse rimwe na rimwe hakabaho utuntu tw'umukara
Uko bayirwanya :
- gusimburanya ibihingwa mu murima
- guhumbika no gutera onyo mu murima uhinze neza
- gukoresha imiti ya kizungu :
  - Dithane : gr 50/L 10 z'amazi/ari 2
  - Cupro-antracol : 2 Kg/ha
  - Milraz : 2 Kg/ha

c) Ububore bw'ikijuju :

Ikiyitera : uduhumyo (**Aspergillus niger na Sclerotium cepivorum**)
Aho ifata : ibitunguru
Ibimenyetso : mu gihe bibitse, ibitunguru byuzuraho amoya y'ikijuju cyangwa ibintu by'umukara kandi bikomeye. Amaherezo ibitunguru birabora neza neza
Uko bayirwanya :
- kwanika neza ibitunguru mbere yo kubihunika kandi bigahunikwa ahantu humutse
- gukuramo ibitunguru byafashwe kugirango bitanduza ibindi
- kubibika ahantu hari umwuka uhagije kandi bimanitse

d) Indwara iterwa n'inzoka y'ibimera :

Ikiyitera : inzoka yitwa **Angilile** (**Ditylenchus dispaci**)
Aho ifata : amababi, ibitunguru
Ibimenyetso : onyo ziranuka. Amababi aratumba. Ibitunguru birafobagana. Igitunguru kirisatura maze kikabora.
Uko bayirwanya :
- gutwikira mu mwobo onyo zafashwe
- gusubiza onyo muri uwo murima nyuma y'imyaka 4-5

10. Iminsi zerera : basarura onyo iyo ibibabi byazo byumye neza neza, igishishwa cy'inyuma kimeze nk'urupapuro rushaje. Bitewe n'ubwoko bw'ubutunguru n'akarere bihinzemo, ibitunguru byera nyuma y'amezi 3-4 bigemuriwe mu murima

11. Umurumbuko : umusaruro w'ibitunguru kuri ha 1 uri hagati ya toni 30 na toni 70 bitewe n'uburemere bwa buri gitunguru.

12. Guhunika :
- iyo bamaze gusarura onyo zeze, bazanika ku zuba
- izimaze kugabanukamo amazi bareba izitarwaye, izidatemye bakazibika ku mbaho cyangwa ku byatsi byumye ahantu humutse kandi hinjiramo umwuka uhagije
- bashobora no kumanika ibitunguru byiza mu gisenge

N.B. *: Ibitunguru bishobora kubikwa mu gihe kiri hagati y'amezi 4 na 6. Ibyo aribyo byose ibigomba gupfa muri icyo gihe ntibigomba kurenga 30% y'ibyabitswe.*