



MINAGRI



RAB

UBUHINZI BW'IBISHYIMBO BISHINGIRIRWA



Mata 2013



Ugushimira

Turashimira abagize uruhare mu iyandikwa ry`aka gatabo bose :

- Abakozi b`ikigo cy`Igihugu gishinzwe guteza imbere ubuhinzi n`ubworoz "RAB",
- Umushinga AGRA-SHP-Climbing bean ukorera muri "RAB",
- Umushinga SPATT II wa BTC,
- Abakozi b`Ikigo gishinzwe gukusanya no gusakaza amakuru ku buhinzi n`ubworoz "CICA".

Akamaro k`ibishyimbo bishingirirwa



Ibihyimbo bishingirirwa



Ibihyimbo bigufi

- Ibihyimbo bishingirirwa bigira **umusaruro mwinshi** ugereranyije n`ibigufi kuko ushobora kwikuba inshuro 3 kugeza kuri 4.
- Bitanga amafaranga menshi kubera umusaruro mwinshi ndetse no gukundwa ku isoko,
- Ibihyimbo bigira **intungamubiri nyinshi (Ibyubaka umubiri)** zijya kwegera iziri mu nyama, n'umunyu ngugu wa feri (Fe).
- Guhinga ibihyimbo byongera umunyu ntungabihingwa wa Azote mu butaka

Amwe mu moko y`ibishyimbo bishingirirwa ari mu Rwanda

Ibiberanye n`imisozi miremire



Gikundiro1 (Mac44)



Mpanguhe (RWV3317)



Vuzimpundu (RWV 3316)



Girubuzima
(RWV 2887)



Rukundo
(RWV2361)



Nyiramata
(CAB 2)

Ibiberanye n`imisozi miremire n`iciriritse



Inshutinziza
(RWV3006)



Kazeneza
(RWV2269)



Zanisuka
(RWV 2872)



Mamesa (G2331)



Kaki (RWV 2070)



Kiryumukwe
(RWV1129)



Gasilida
(ISAR CB 10-3)



Gikundiro 2
(MAC 49)

Ibiberanye n`imisozi iciriritse n`imigufi



MAC 42



Gikundiro 3
(MAC 9)



MAC 28

Ibishyimbo bishingirirwabihingwa ryari mu Rwanda?



Ibishyimbo bishingirirwa biterwa

- Ku **Muhindo** : Nzeri-Ukwakira (Igihembe cya A),
- Mu **Itumba** : Gashyantare-Werurwe (Igihembe cya B)
- Mu **Mpeshyi** mu bishanga:Gicurasi-Kamena
(Igihembe cya C).

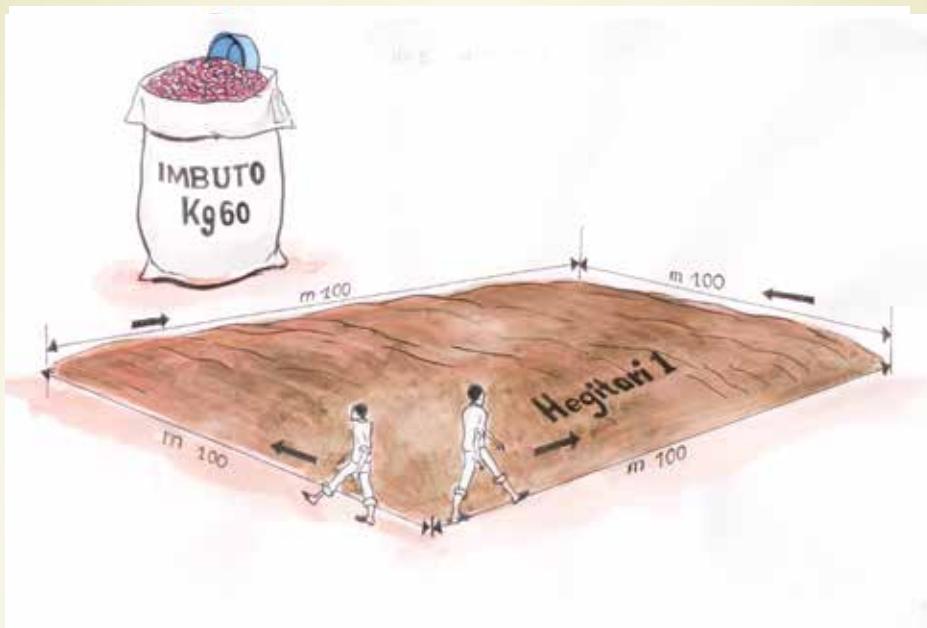
Mu bihembe bibiri bya mbere (urugaryi), ibishyimbo biterwa imvura imaze gusomya ubutaka neza.



→ **Icyitonderwa :**

Guhinga kare, ugatera kare byongera amahirwe yo kweza neza kandi byinshi.

Gutegura imbuto

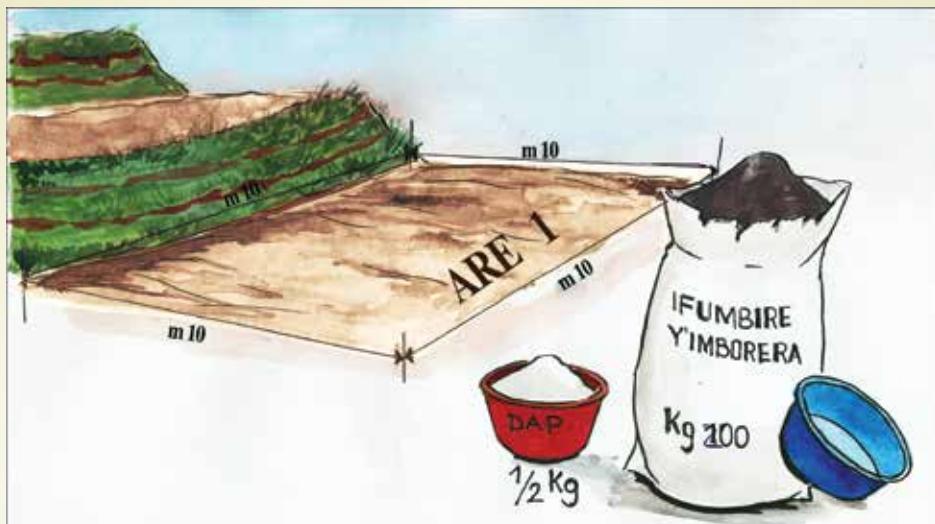


Umuhinzi yitegura imbuto y'indobanure ingana n'ibilo biri hagati ya **40 na 60** kuri hegitari bitewe n'ubunini bw'ibishyimbo: ibilo 40 ku ntete ntoya, ibilo 60 ku ntete nini,

Imbuto nziza y'indobanure umuhinzi ashobora kuyivana:

- Muri RAB, cyangwa
- ku mutubuzi w'ibishyimbo wemewe na RAB cyangwa
- ku mucuruzi w'inyongeramusaruro wemewe.

Gutegura umurima n'ifumbire



Gutegura umurima : gusekera imbere y'ibyumweru 2 imvura itaragwa no gusanza neza mu gihe cy`itera.

Ifumbire: ku murima ufite intambwe 10 ku 10 (ari1) bakoresha ifumbire y`imborera iboze neza ingana n'ibitebo 20 (Ibilo 200) n`ifumbire ya DAP ingana na kimwe cya 2 cy'ikilo (1/2 kg).



→ Icyitonderwa

Iyo utabonye DAP ushobora gukoresha NPK 17-17-17 ibilo 2 cyangwa 3 kuri ari 1.

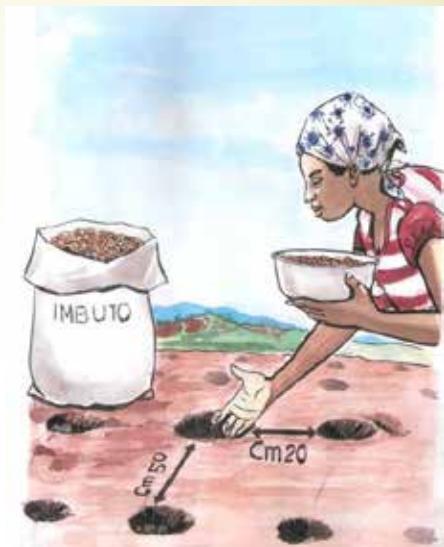
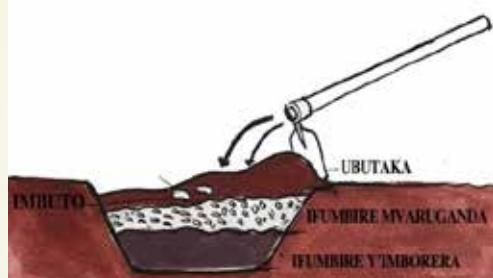
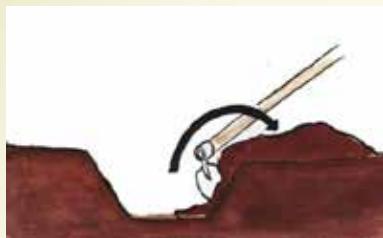
Iyo umuhinzi agiye guhinga ibishyimbo mu murima ufite ubusharire ashiramo ishwagara ingana na toni 5 kuri hegitaré cyangwa ibilo 50 kuri ari.

Gutegura imishingirizo



Umuhinzi ategura **imishingirizo 500** ku murima w'Intambwe 10 ku 10 ([Ari 1](#)) cyangwa imishingirizo **50,000 kuri hegitari** ($m100 \times m100$). Imishingirizo igomba kugira nibura uburebure bwa metero **2,5** ($m2,5$), imishinigirizo ituruka ku rubingo, inturusu, imigano, no ku **biti bivangwa n`imyaka** nka gereveriya, kaliyandara, lesena, alunusi, n`ibindi.

Gutera ibishyimbo



Ibisyimbo biterwa imvura imaze gusomya ubutaka neza.

Biterwa kuri **cm 50** (**intambwe ebyiri n`igice z`ikiganza**)

hagati y` umurongo n`undi na **cm 20** (**intambwe imwe**

y`ikiganza) hagati y`utwobo tubiri.

Utera **intete 2** muri buri kobo ku bujyakuzimu bwa **cm 5**.

Ni ngombwa gutera kumurongo

Kubagara no gusukira



Ibishiymbo bitangira kubagarwa bwa mbere bimaze **ibyumweru**
3 kugera kuri 4 bitewe.

Gusukira/ kuhira
bihita bikorwa
nyuma
yo kubagara.
Iki gikorwa
gifasha
ibishiymbo
kwihanganira
indwara z'imizi.
Bifasha kandi
imishingirizo
gukomera



→ Icyitonderwa

Ni **ngombwa kubagara bwa kabiri** n'ikindi gihe cyose bibaye
ngombwa kuko bifasha ibishiymbo kwera neza

Gushingirira



Gushingiriza
ibiti

Gushingiriza ibiti
n`imigozi



Gushingirira bihita bikorwa nyuma yo kubagara no gusukira/kuhira, mbere y`uko **ibishyimbo bitangira kuzana urugoyi**. Ushobora gukoresha ibiti bisanzwe cyangwa se uruzitiro rw'ibiti ruvanze n`imigozi.



Icyitonderwa: Mu turere tumwe na tumwe nko mu majyaruguru bashingirira ibishyimbo bakimara gutera. Umushingirizo umwe ujya hagati y`imyobo 2 ugafata ibishyimbo 4.

KURWANYA INDWARA N'IBYONNYI

Indwara y'Akaribata (nyiragakeca)



**Ibimenyetso
by`Akaribata ku
misogwe**



**Ibimenyetso by`Akaribata ku
mababi**

Kuyirwanya

- Gukoresha **imbuto itarwaye** kuko iyi ndwara igenda mu mbuto,
- Gukoresha uwoko bw' **ibishyimbo bwihanganira** iyo ndwara
- Gukoresha imiti nka **Benomyl**.



Icyitonderwa

Ibishyimbo byavuye mu murima wagaragayemo iyi
ndwara **ntibikoreshwa nk'imbuto**

Indwara ikora inguni (Kibogo)



Ibimenyetso ku mababi

Uko wayirwanya

- Gukoresha imbuto **yavuye mu murima utarwaye**
- Kubera ko iyi ndwara igenda mu bishogoshogo, ni byiza **kubivana mu murima kandi ntubifumbize imirima** izaterwamo ibishyimbo,
- Gukoresha **imbuto zihanganira iyi ndwara**,
- Gukoresha umuti wa **Benomyl**.

Indwara y'Ikiziga (Asikoshitoze)



Ibimenyetso ku kibabi



Ibimenyetso ku
misiogwe

Uburyo bwo kuyirwanya

- Gutera imbuto ihungiye hakoreshejwe imiti ivangwa n'ibishyimbvo mberere yo gutera
- Gukoresha amoko yihanganira indwara.
- Gukoresha imiti imeze nka “Benomyl” cyangwa “Dithane”

Halo bright (Bacteriose à Halo)



Ibimenyetso ku mababi

Ibimenyetso ku misogwe

Uko wayirwanya

- Gukoresha **imbuto zitarwaye** ni ukuvuga izitaturutse mu mirima irwaye kuko iyi ndwara igenda mu mbuto,
- **Gusimburanya ibihingwa** mu murima
- **Kubagara uko bisabwa** kuko ibyatsi bishobora kubika udukoko dukwirakwiza iyi indwara
- Gukoresha ubwoko bw' **ibishyimbo budafatwa** cyangwa bwihanganira iyi ndwara,
- Gukoresha imiti nka "**Nordex**" cyangwa "**Oxychlorule de Cuivre**".

Kubemba kw'ibishyimbo



Uko wayirwanya

- Gukoresha ubwoko bw' ibishyimbo budafatwa n`iyo ndwara cyangwa buyihanganira.
- Gukoresha **imbuto zizewe** ko zavuye mu mirima itarafashwe n' iyo ndwara kuko igenda mu mbuto,
- Gukoresha imiti yica ubuhunduguru nka "Dimetoate" cyangwa "**Supermethrine**".



Ibishyimbo byavuye mu murima wagaragayemo iyi ndwara ntibikoreshwa nk'imbuto.

Ubuhunduguru



Ubuhunduguru ku bishyimbo

Uko waburwanya

- Gutera imbuto nziza, **guterera igihe**, gufumbira no kubahiriza imirimo yose ikorerwa ibishyimbo,
- Gukoresha imiti nka “**Deltamethrine**” cyangwa “**Supermethrine**”.



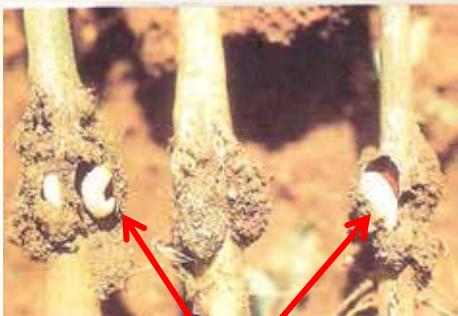
► Icyitonderwa

Ubuhunduguru bukunze kugaragara igihe imvura yabaye nkeya. Iyo iguye bushobora no kwivana ku mababi y'ibishyimbo.

Urunyo (ibihombogoro)



**Agakoko kabyara
urunyo**



Urunyo ku bishyimbo

- Aka gakoko gakunda konona ibinyamisogwe. Gatera amagi mu butaka iruhande rw' igishyimbo. Muri iryo gi havamo urunyo rufite ibara ry' umweru ruteye nk`inyuguti ya C;
- Uru runyo nirwo rutobora igihimba cy`igishyimbo rugatungwa n`amatembabuzi yacyo ntigikure neza, kikaba cyakuma burundu.
- Udukoko dukuze two turya amababi .

Uko wayirwanya

- Utu dukoko dukunze kuza iyo ibishyimbo byatewe bitinze cyangwa se igihe imvura ibaye nkeya ibishyimob byari biyikeneye. Ni byiza rero ko umuhinzi yahingira igihe bityo bikaba byamufasha kurwanya uru runyo;
- Gutoragura utu dukoko ukatwica;
- Kurandura ibishyimbo biriho urunyo ukarwica.

Gusarura, guhura no guhunika



Isarura ry'ibishyimbo rikorwa bimaze kwera neza, imisogwe imaze kuba **ikigina**,

Si byiza gusarura ibishyimbo bimaze **kumira mu murima cyane**;

Ibishyimbo byanikwa ku mbuga za **sima, ku birago, cyangwa ku mashitingi**;

Si **byiza kwanika ku butaka** kuko ibishyimbobihura n`ubukonje cyangwa se imyanda.

Uburyo bwo guhura bugomba kuba **budatuma ibishyimbo bimenagurika**.

Guhunika ibishyimbo



- Mbere yo guhunikwa ibishyimbo bigomba kubanza kugosorwa no gutoranywa kuko imyanda n`ibisigazwa by`umusaruro ari yo soko y`ibyonnyi by`umusaruro uhunitse.
- Ibishyimbobihunikwa iyo byumye neza. Birahungirwa, bigashyirwa mu mifuka idatobotse bigaterekwa mu bubiko busukuye.
- Imifuka iterekwa ku mbaho cyangwa ku mabuye kugira ngo idahura n`ubutote bwo hasi.
- Mu guhunika bakoresha imiti nka "Skana-Super".(ibinini bishyirwa ahari imifuka y`ibishyimbo)
- Gukoresha imiti ishyirwa mu bishyimbo nyirizina, nka Actelic,na Malathion

Kugeza ibishyimbo ku isoko



Iyo abahinzi bashyize umusaruro wabo hamwe nibwo bagira ijambo ku isoko. Mu gushaka isoko ry`umusaruro abahinzi bagomba kwita kuri ibi bikurikira:

- **Ubweko bw`ibishyimbo:** abaguzi bakunze gutandukanya ibishyimbo bahereye ku mabara n'ubunini bw'intete. Abahinzi bagomba kumenya ikiciro abaguzi babo bakunda.
- **Aho bicururizwa:** bitewe n`aho abaguzi bari ibiciro biratandukana. Umuhinzi agomba kubanza kumenya ahari abaguzi benshi kadi batanga igiciro kiza.
- **Igiciro cy`ibishyimbo:** mbere na mbere igiciro cy`ibishyimbo giterwa n'ibyo umuhinzi aba yarashoye mu kubihinga. Giterwa kandi n'uko isoko rihagaze. Igihe igiciro ari gito baba bagomba gufata ingamba zituma bazagurisha ibishyimbo byabo igehe igiciro cyazamutse.
- **Kumenyekanisha igicuruzwa:** Abahinzi bagomba gukora uko bashoboye bakamenyekanisha ubwiza bw`ibishyimbo byabo.

Umwanzuro



- Ubuhinzi bw' ibishyimbo bya mushingiriro bukeneye kwitabwaho by' umwihariko kugirango umusaruro w' ibishyimbo muri rusange wiyoungere. Bityo rero ni ngombwa gufata neza ubutaka, gukoresha neza amafumbire yabugenewe, guterera igihe no kwita ku mirimo yose isabwa kugirango ibishyimbo bya mushingiriro byere neza.
- Umusaruro mwiza kandi mwinshi ubonetse ugomba kwitabwaho bihagije kuva mu isarura kugera ku isoko. Igihe umuhinzi azi isoko ahingira aba azi n' icyo rikeneye bityo agatunganya umusaruro we neza, bigatuma abona amafaranga menshi, ubuhinzi bw' ibishyimbo bya mushingiriro bukaba bwamuteza imbere .

Umaze gusoma aka gatabo ku buhinzi bw'ibishyimbo bishingirirwa, twifuzaga ko wagira icyo ukavugaho kugira ngo turusheho kunoza uburyo bwo kubagezaho amakuru y'ubuhinzi n'ubworoz!

1. Ibyo ushima kuri aka gatabo

2. Ibyakosorwa muri aka gatabo

3. Ubundi bumenyi bw'ingenzi wifuza kumenya kubihumyo

Umaze kuzuza uru rupapuro ruce urwohereze kuri CICA cyangwa ku biro bya RAB bikwegereye



