



MINISTRY OF AGRICULTURE AND ANIMAL
RESOURCES (MINAGRI)

IMFASHANYIGISHO KU BUHINZI BW'INYANYA



SEAD
Strengthening Education for
Agricultural Development

1. NI IKI TWAKORA KUGIRANGO IMIRIMA YACU IDUHE UMUSARURO MWIZA?

- Kurwanya isuri
- Guterera igihe
- Gusimburanya ibihingwa
- Gukoresha ishwaragara ahari ubutaka busharira
- Gukoresha imbuto y'indobanure
- Gukoresha intera nyayo
- Gukoresha ifumbire mvaruganda ndetse n' imborera
- Kubagara
- Kurwanya indwara n'ibyonnyi
- Gupimisha ubutaka kugira ngo umenye imyunyungugu iri mu butaka bwawe

2. NI IZIHE NYONGERA MUSARURO, INGANO YAZO N'IBIKORESHO DUKENERA KURI ARI (ARE) IMWE?

Ishwaragara	Umurama	Imborera	Ire	NPK 17-17-17	Ingemwe	Inkoni zifite	Agafuniko
kg 30	g 5	kg 200-250	kg 1.3	Kg 3	200-270	cm 10 cm 60 m 1	1 ka fanta 1 k'amazi

3. NI HEHE DUSHYIRA KANDI NI RYARI DUKORA UBUHUMBIKIRO, BUGOMBA KUBA BUNGANA BUTE?

Hehe?

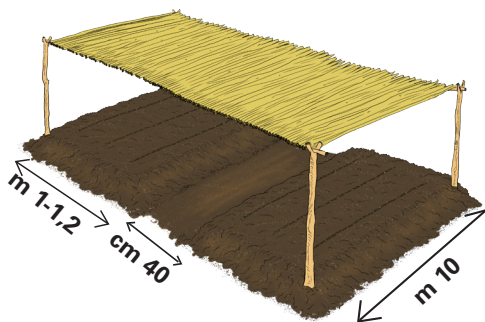
- Ahantu hatigeze hahingwa inyanya mu bihembwe 3 bishize
- Hafi y'umurima uzahingwamo inyanya

Ni ryari?

- icyumweru 1 mbere yo guhumbika umurama

Ingano:

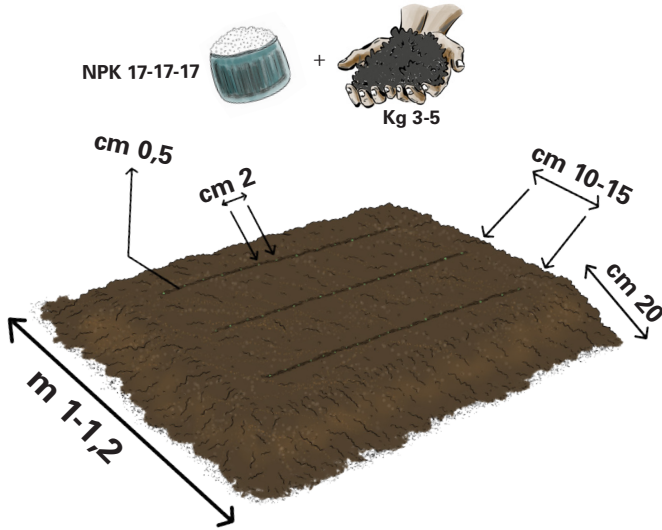
- Ingemwe zahumbitswe kuri metero 1 ziterwa ku murima wa Are 1
- Ubuso bw'ubuhumbikiro bugomba kuba bungana na 1% by'umurima wose uzaterwamo



4. NI GUTE INGEMWE ZITEGURWA MU BUHUMBIKIRO?

- Gusanza neza ubuhumbikiro
- Vanga amashyi abiri y'imborera iboze neza n'ubutaka bwo hejuru.
- Nyanyagiza iyo mvange mu buhumbikiro.
- Nyanyagiza g 20(udufuniko 2 tw'amazi) twa NPK 17-17-17 mu buhumbikiro.
- Kubwubakira ubuha igicucu muri metero 1.5 hejuru.
- Kora umutabo uzamuye
- Ca imirongo yo kwinzamo ifite ubujyakuzimu bwa cm 0.5 ukoresheje agati

- Tera umurama mu mirongo ku ntera ya cm 2 hagati y'umurama n'undi
- Siga cm 10-15 hagati y'imirongo
- Twikiriza agataka unasibanganye

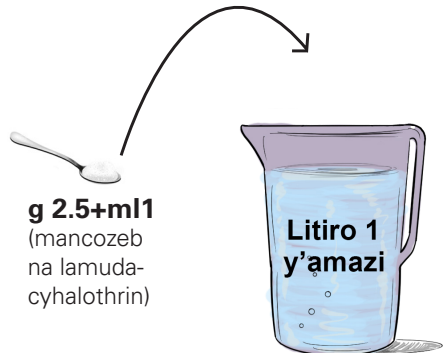


5. NI IYIHE MIRIMO IKORWA MU KWITA KUBUHUMBIKIRO?

- Sasira mu minsi 5-7 kugira ngo ingemwe zimere neza.
- Vomerera mu gitondo na nimugoroba.
- Randura ingemwe zirwaye ndetse n'izitameze neza.
- Bagara buri gihe habonetsemo ibyatsi.
- Tera umuti urwanya indwara mu buryo bukwiye rimwe mu cyumweru.
- Gabanya kuvomerera n'igicucu mu byumweru bibiri mbere yo kugemura.

6. NI IYIHE MITI YAKORESHWA, NI UBUHE BURYO YAKORESHWAMO NEZA IDATEJE IBYAGO?

- Vanga g 2.5 za mancozeb na ml 1 za lamuda-cyhalothrin muri litiro y'amazi
- Koresha ibikoresho by'ubwirinzi
- Terera hasi (ca bugufi) umuti wirinda ko wawuhumeka
- Abana n'abagore batwite cyangwa bonsa ntibemerewe kwegera ahatererwa umuti
- Buri gihe shyira umuti kure yaho abana bagera



7. NI RYARI KANDI NI GUTE DUTERA INGEMWE?

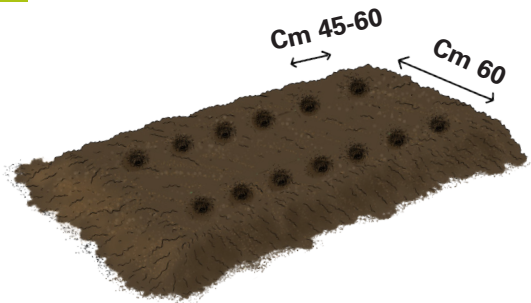
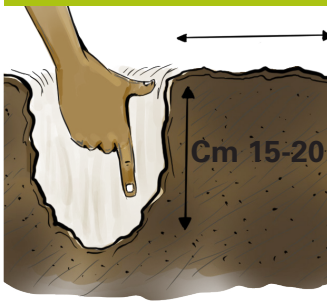
Ryari?

- Gemura nyuma y'ibyumweru 4 ugemetse.
- Ingemwe zigemurwa zifite amababi hagati 3-4

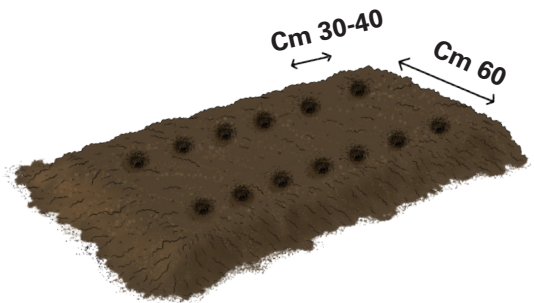
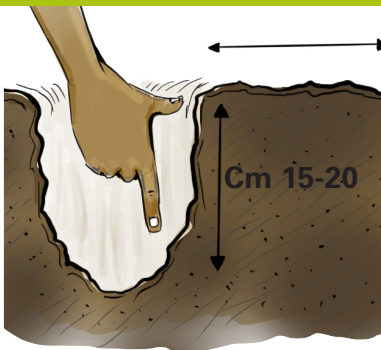
Ni gute?

- Gemura unatere ingemwe mu gitondo kare cyangwa ku mugoroba
- Kora imitabo ya metero 1.2m z'ubugari n'uburebure butarengeje m15-20 bitewe nuko umurima ungana. Mu mitabo irenze icumi hagati y'itanu hajyamo inzira rusange ya metero imwe.
- Siga inzira y'abagenzi ya cm 40 hagati y'imitabo
- kuri Ari imwe vanga kg 200 z'imborera n'itaka.
- Imyobo ya cm 15-20 z'ubujyakuzimu mu mitabo.
- Cm 30-40 hagati y'imyobo ku nyanya zishingirirwa.
- Cm 45-60 hagati y'imyobo ku nyanya zidashingirirwa
- Intera hagati y'imirongo ya cm 60

Inyanya zidashingirirwa



Inyanya zishingirirwa



8. NI IYIHE MIRIMO Y'INGENZI IKORWA MU GUKENURA IGIHINGWA CY'INYANYA

- Sasira ukimara gutera ukoresheje ibyatsi byumye neza
- Vomera rimwe mu minsi 3 niba imvura idahagije
- Bagara buri gihe
- kuraho ibisambo, usigaza udushami 3-4 ku runyanya rumwe unagabanye indabo.

9. NI RYARI, NI GUTE KANDI NI KUBERA IKI DUSHYIRAHO IFUMBIRE MVARUGANDA?

NPK 17-17-17

- Ingano: Garama 10 (agafuniko kamwe k'amazi) ku rugemwe rumwe
- Ryari: Icyumweru 1 nyuma yo gutera
- Kubera iki: ituma imizi ikomera zigakura vuba

IRE

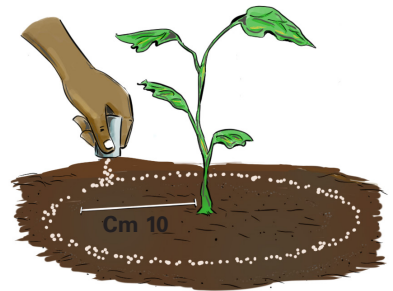
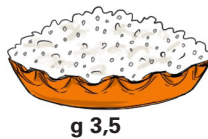
- Ingano: Garama 3,5 (agafuniko 1 ka fanta)
- Ryari: Ibyumweru 6 nyuma yo gutera
- Gute: Ca akazenguruko ku murambararo wa cm 10 uvuye ku runyanya.
- Kubera iki: Ikomeza uruti ikanatuma urubuto rw'urunyanya ruba runini

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10. NI RYARI KANDI NI GUTE DUSARURA INYANYA?

- Inyanya zisaruranwa n'inkondo yazo.
- Sarura inyanya ugendeye kuzo abaguzi bifuzwa.
- Ibara inyanya zifite niryoyerekanako uko zihye
- Sarura mugitondo cyangwa nimugororoba kugirango uzirinde kwangizwa n'izuba
- Koresha icyuma cyangwa umukasi ufite isuku mu kwirinda indwara.
- Tandukanya inyanya zihye cyane n'izidahiye neza wirinda ko zatera izindi kubora.
- Koresha amakurete, amabase cg ibitebo bikomeye kandi wirinde kubyuzuzwa cyane (nturenze ibiro 20) kugirango wirinde ko zangirika mu gihe cyo kuzikorera.
- Irinde gutera umuti wica udukoko ku nyanya zasaruwe.
- Sarura gusa inyanya zitangiritse naho izangiritse uzite mu kimoteri.



INDWARA Z'INGENZI N'IBYONNYI BIKUNZE KWIBASIRA INYANYA

Indwara y'imvura (Kababu, Late blight)

- Iyi ndwara ikara cyane mu gihe cy'ubukonje n'ubuhere bwinshi,
- Ikwirakwira vuba ikaba yakwangiza igihingwa mu gihe gito,
- Ifata ibice byose by'igihingwa. Ibimenyetso bigaragara muni y'amababi nk'uruhumbu naho hejuru y'amababi bisa nk'ibyababutse.



Uko wayirinda

- Gusimburanya ibihingwa.
- Isuku mu murima.
- Kudatera ingemwe hafi y'inyanya zikuze.
- Kuvanaho ibisambo kugirango urumuri rubashe kwinjiramo.
- Gutera umuti urimo Mancozeb (Dithane, Safari-Zeb) cyangwa Mancozeb + Metalaxyl (Ridomil, Victory,..).



Uko wayirwanya

- Gutera umuti urimo Mancozeb + Metalaxyl (Ridomyl) (50g), Victory (50g), umuti ukoreshwa muri 20L z'amazi.
- Gukoresha imiti irimo cuivre nka Copper Hydroxide (FUNGURAN) (40-60g).

Indwara y'ibidomo ku mababi n'imbutu (Early Blight)

- Iterwa n'agahumyo kitwa *Alternaria solani*.
- Ikaragazwa n'ibidomo bisa n'ikigina birimo inziga ku mababi, ku ruti no ku mbuto aho inkondo ifatiye.
- Ikunda kuboneka mu bice bishyuha kandi bifite ubuhere buke.



Uko wayirinda

- Gusimburanya ibihingwa bitari mu muryango umwe nyuma y'ibihembwe bibiri,
- Kwirinda ko umurima urekamo amazi,
- Gukura mu murima ibisigazwa by'inyanya ukabishyira mu kimoteri,
- Guha igihingwa ifumbire ihagije. Ibyiza ni ugushyiramo inyongeramusaruro mu byiciro bitatu.

Uko wayirwanya

Gutera imiti yica udhumyo nka Carbendazim (20-25ml), Copper (40-60g), Tricyclazole(Beem) (10-15ml), Chlorothalonil (30-40ml), Thiovit (50-60ml), Mancozeb (50g) umuti ukoreshwa muri 20L z'amazi.

Ububore bwo mu ndiba y'urubuto (Blossom end rot)

- Ububore buterwa n'ibura ry'umunyungugu wa kalisiyumu, bigaterwa cyane n'amazi make cyangwa menshi aba ari mu butaka.
- Mu bihe by'ubushyuhe cyangwa igihe hiriwe humagaye bakavomereza amazi menshi, bituma igihingwa kidashobora gufata vuba kalisiyumu mu butaka.



Uko wayirinda

- Kuhira witonze mu gihe cy'ubushyuye humagaye cyane cyane mu gihe cyo kuzana urubuto.
- Gukoresha ifumbire y'imborera ihagije.
- Gushyira ishwaraga mu butaka igihe ari ngombwa.
- Gusasira ubutaka kugirango bugumane ubuhehere.

Urunyo rw'amababi n'imbuto

Ni ikinyugunyugu bita *Tuta absoluta*, aho gitera amagi ku mababi akura akavamo urunyo rugenda rukora inziga rukanihisha ku mababi. Rutobora n'imbuto z'inyanya rukinjiramo imbere.



Uko wayirinda

- Gusimburanya ibihingwa mu murima hahingwa ibindi bitari mu muryango umwe n'inyanya nk'ibigoli, ibishyimbo, amashu,...
- Gukuramo ibisambo n'inyanya zamaze gufatwa bigatabwa,
- Gukoresha imitego ifata ibinyugunyugu mu murima no munkengeru zawo.

Uko bazivura umuti ukoreshwa muri 20L z'amazi

Gutera imiti yica udukoko nka Abamectin (10ml), Acetameprid (5-10ml), Imidachloprid (5-10ml), Delthamethrin (15-20ml), Pyrethrin (20-25ml)

Ibyonnyi (Inda, Isazi y'umweru na Tiripusi) (Aphids, white flies and thrips)

Ubu busimba bukunze gufata cyane cyane amababi n'uruti bikiri bito, indabo n'amababi.

Inda zikwirakwiza virusi ku gihingwa.



Uko wayirinda

- Kubungabunga inshuti z'abahinzi (udukoko turya inda. Urugero: udusurira, urutambara,...)
- Kwirinda guhora ukoresha ubwoko bw'umuti umwe kuko inda ziwumenyera ntizipfe ahubwo zikororoka vuba.
- Gukoresha imitego y'ibara ry'umuhondo izifata.

Uko wayirwanyana

Gutera imiti yica udukoko nka Lambda-Cyhalothrin (15-20ml) Abamectin (10ml), Nimbecidine (15ml), Azadirachtin (60ml), Acetamiprid (5-10ml). Umuti ukoreshwa muri 20L z'amazi.

Icyitonderwa: Egera umujyanama mu buhinzi akubwire umuti wemewe ku isoko mu gihe cyo gutera umuti

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Iyi mfashanyigisho yakozwe ku bufatanye na: MINAGRI, RAB, NAEB, RDB
SEAD, UR na IPRC HUYE

