



MINISTRY OF AGRICULTURE AND ANIMAL
RESOURCES (MINAGRI)

IMFASHANYIGISHO KU BUHINZI BWA PUWAVURO



SEAD
Strengthening Education for
Agricultural Development

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

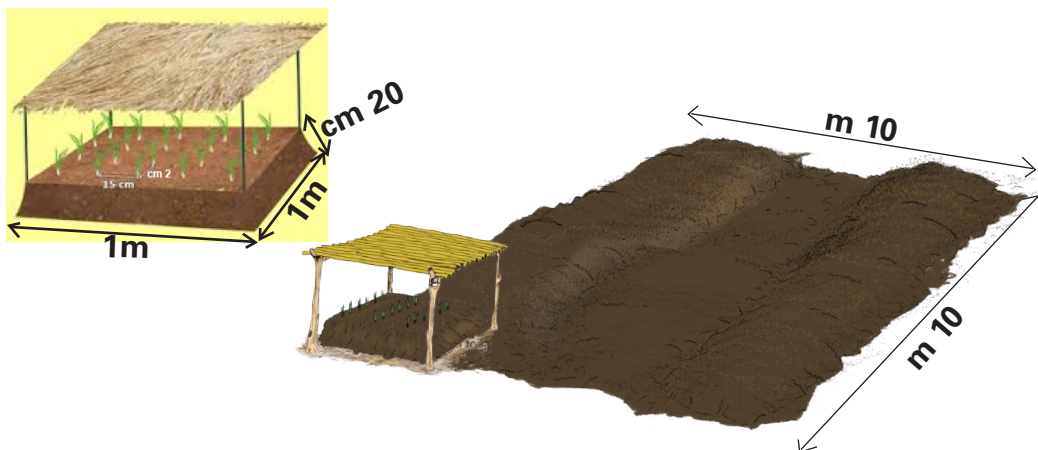
- Gukoresha imbuto y'indobanure
- Guterera igihe
- Gusimburanya ibihingwa
- Kubahiriza intera
- Gukoresha ishwaraga ku butaka busharira
- Gukoresha imborera n'imvaruganda
- Kurwanya isuri
- Kubagara
- Kurwanya indwara n'ibyonnyi.
- Gupimisha ubutaka kugirango umenye imyunyungugu iri mu butaka bwawe

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

Ingano y'umurama	Imborera	Ire	NPK 17-17-17	Ingemwe	Inkoni zifite	Agafuniko
Garama 5	Kg 250	Kg 1.3	Kg 4.7	200-270	Cm 10 Cm 20 m 1	1) 1 ka fanta 2) 1 k'amazi

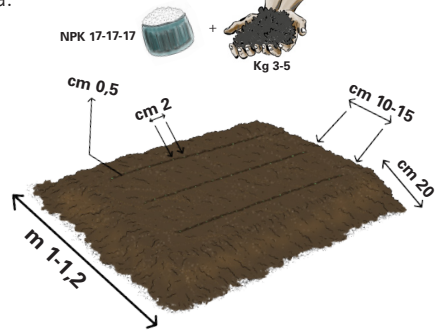
3. KUBERA IKI DUTEGURA INGEMWE MU BUHUMBIKIRO?

- Ingemwe zikiri nto zikura ari nyinshi kandi zigakurira rimwe ari nziza
- Bikumira indwara n'ibyonnyi
- Bigabanya akazi ko kubagara, kwicira, gutera imiti no kuvomerera
- Birinda kwangiza umwayi /umurama kuko ukoreshwa neza
- Ubuhimbikiro bushyirwa ahantu hatigeze hahingwa ibihingwa byo mu muryango umwe na Puwavuro nk'inyanya, urusenda, intoryi... ibihembwe 2 bishize
- Ubuhumbikiro bugomba kuba 1% by'umurima wose uzaterwamo. Mbese metero kare imwe k'umurima wa ari 1.



4. NI GUTE DUTEGURA UBUHUMBIKIRO NO KWINAZA?

- Hategurwa ubuhumbikiro bufite ubugari bwa metero imwe kugeza kuri m 1.2 n'ubujyejuru bwa cm 20 kugirango amazi abashe gusohoka mu butaka.
- Vanga amashyi atatu y'imborera iboze neza n'ubutaka bwo hejuru (ibiro 3-5 by'imborera) kuri metero kare imwe na grama 20 za NPK 17-17-17(udufuniko 2 twa mazi)icyumweru kimwe mbere yo guhumbika.
- Igihe cyo kwinaza, ringaniza ubutaka, hagacibwa imirongo yo kwinazamo y'ubujyakuzimu bwa cm 0.5 kandi itandukanijwe na cm 15.
- Umurama ushyirwa muri ya mirongo yaciwe ku ntera ya cm 2 hagati y'imbuto ; hanyuma hakarenzwaho agataka gake bagasibanganya.

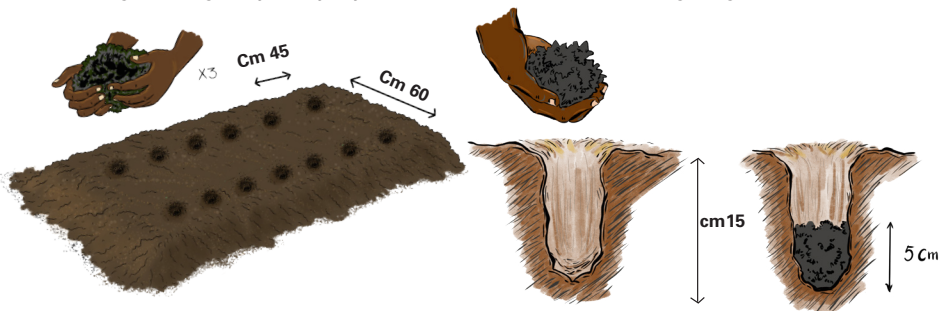


5. NI IYIHE MIRIMO IKORWA MU KWITA K'UBUHUMBIKIRO?

- Gusasira hakoreshajwe ibyatsi byumye neza kandi bitaremereye, urugero nka vetiveri, ishingwe. Nyuma y'iminsi 7 kugeza ku 10 ingemwe ziba zimaze kumera maze isaso igakurwaho
- Vomerera mu gitondo kare na nimugoroba mugihe imvura itaguye
- Ubuka igisharagati hakoreshajwe ikirago gikozwe mu miseke, udukenyeri, urubingo, urufunzo kuko aribyo bituma imirasire y'izuba yinjira neza mu buhumbikiro
- Randura ingemwe zirwaye ndetse n'izitameze neza maze uzishyire mu kimoteri.
- Bagara buri gihe ndetse wicire ingemwe mu gihe zicucitse
- Tera umuti urwanya indwara igihe ari ngombwa.
- Gabanya kuvomerera mu byumweru bibiri mbere yo kugemura.
- Gabanya igicucu utwikurura ubuhumbikiro kugira ngo umenyereze ingemwe ubuzima bwo mu murira zigiyeye kujyamo

6. NI GUTE DUTERA INGEMWE?

- Umurima uhingwa neza ku bujakuzimu bwa cm 30.
- Vomerera ingemwe mbere yo kuzitera uzitere mu gitondo kare cyangwa nimugoroba izuba rirenze.
- Tera ku ntera ya cm 60 hagati y'imirongo na cm 45 mu murongo.
- Cukura imyobo y'ubujyakuzimu bwa cm 15.
- Mu mwobo umwe hajyamo ifumbire y'imborera yuzuye ikiganza n' agafuniko k' icupa ry' amazi kuzuye NPK 17- 17-17 .
- Shyira KCl agafuniko ka fanta kuzuye neza mu myobo ine mu gihe cyo gutera
- Ongeramo ifumbire mvaruganda (nyuma y'ibyumweru3) mu gihe cy'ibagara g10 ku gihingwa
- Ongeramo g10 nyuma y'ibyumweru 6 bitewe nuko ubona igihingwa.



7. NI IYIHE MIRIMO Y'INGENZI IKORWA MU GUKENURA IGIHINGWA CYA PUWAVURO

- Gusasira.
- Kuvomerera
- Kubagara: Bikorwa igihe cyose ibyatsi bibi bigaragara mu murima
- Kurwanya indwara n'ibyonnyi
- Kugabanya amashami n'indabo kugira ngo hinjiremo urumuri n'imbuto zibe nini

8. NI GUTE DUSARURA TUKANAFATA NEZA UMUSARURO?

- Puwavuro igomba gusarurwa n'inkondo yayo
- Kwirinda gukomeretsa uruti rwa Puwavuro.
- Gusarurira ahantu hapfutse no kubika umusaruro ahantu hakonje ukimara kuwusarura mu murima
- Umusaruro ushyirwa nanone ahantu hapfutse kugira ngo udatakaza ubuhehere
- Si byiza kubika hamwe umusaruro wa Puwavuro hamwe n' ibihingwa bibyara etirene (ethylene) nk'imineke iyiye, pome, n'ibindi
- Gukoresha ibikoresho bipakirwamo bijyanye n'uburyo bwakoreshejwe mu guhunika (ibikarito bifunitse cyangwa ibisanduku by'ibiti cyangwa parasitike igihe bakonjesha bakoresheje amazi cyangwa barafu, amakurete aciyemo imirongo yinjiza umuyaga ugenewe gukonjesha.
- Umusaruro usarurwa kandi ugatwarwa mu masaha y'igitondo cya kare cyangwa aya nijoro kuko bishobora kugabanya gushyuhirana k'umusaruro upakiye mu modoka.



INDWARA Z'INGENZI N'IBYONNYI BIKUNZE KWIBASIRA PUWAVURO

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

- Indiba ya puwavuro ihinduka umweru wijimye. Uko puwavuro ihisha ahafashwe hahinduka umukara cyangwa ikigina.
- Ububore buterwa n'ibura ry'umunyungugu wa Calcium, bigaterwa cyane n'amazi make cyangwa amazi menshi aba ari mu butaka.



Uko wayirinda

- Kuhira mu gihe cy'ubushyuhe humagaye cyane cyane mu cyiciro cyo kuzana urubuto.
- Mu gihe bigaragara ko ubutaka bwawe busharira koresha ishwaraga ibiro 25 kuri Ari, yivange n'ubutaka ibyumweru bibiri mbere yo gutera
- Gusasira ubutaka hakoreshejwe isaso nziza kugirango bugumane ubuhehere.
- Kugabanya amazi mu gihe ari menshi mu murima

Uko wayirwanya

- Nta muti

Akaribata /Anthracnose

- Akaribata ni indwara yangiza cyane puwavuro zeze.
- Agahumyo kagira ibidomo byirabura bivamo amazi. Ibi bidomo biboneka kuri puwavuro ikiri mbisi niyeze ndetse n'amababi. Aka gahumyo gakwirakwizwa n'imbuto zirwaye.



Uko wayirinda

- Gukoresha imbuto z'indobanure zitarwaye.
- kugirira isuku umurima bavanamo ibisagazwa bya puwavuro nyuma y'isarura.

Uko wayirwanya

- Gukoresha umuti nka chlorothalonil (Garama 10/L10 z'amazi.), cg copper oxychloride (Garama 37/L15 z'amazi).

Kiribiranya iterwa na bagiteri (bacterial wilt)

- Iyi ndwara akenshi ituruka mu butaka burimo iyo bagiteri.
- Irangwa n'uko igihingwa kirabirana kitahinduye ibara cyane, kiba gisa nkaho cyatemwe mu mizi cyangwa cyasutseho amazi ashushye cyangwa se cyacishijwe ku muriro.
- Uruti rusohokamo umushongi w'umweru usa n'amata iyo urukase ukarushyira mu mazi.



Uko wayirinda

- Kubahiriza isimburanyabihingwa.
- Guhinga ubwoko bwihanganira ubu burwayi
- Kurandura ukajugunya kure y'umurima igihingwa cyagaragaje ibimenyetso by'ubu burwayi ibi ukabikora ukimara kubona ibimenyetso.

Uko wayirwanya

- Nta muti uhari uvurara ubu burwayi. Ni ngombwa kubwirinda.

Virusi za puwavuro (Imfunyarazi)

Ibimenyetso by'izi virusi ni ibi bikurikira :

- kugwingira kw'igihingwa, kwikunja kw'amababi, kuma ibice by'amababi n'uruti, kubemba kw'amababi.
- Guhindura ibara ikibabi kigata ibara ry'icyatsi kikaba umuhondo werurutse
- Indwara ziterwa na virusi zikwirakwizwa muri puwavuro n'imbuto zirwaye, isazi y'umweru n'inda z'ibihingwa.



Uko wazirwanya

- Kurwanya udukoko dukwirakwiza ubu burwayi.
- Gutera imbuto itarwaye

Uko wazirinda

Nta miti yihariye yica virus ahubwo ukoresha imiti irwanya udukoko dukwirakwiza iyi virus urugero : Roketi (Rocket). ml1 / l1 y'amazi

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

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