



Funded by
the European Union



UBUHINGZI BW'IBITUNGURU



Gicurasi 2024

Ishakiro

1. Iriburiro	2
2. Aho ibitunguru bikunda	2
3. Inyongeramusaruro zikenewe kuri ari imwe	3
4. Guhitamo umurima/ubuhumbikiro	3
5. Gutegura umurima	3
6. Imirimo ikorwa mu kwita ku buhumbikiro	4
7. Gutera ingemwe	4
8. Imirimo y’ingenzi yo kwita ku gihingwa	4
9. Gusarura no gufata neza umusaruro	5
10. Indwara n’ibyonnyi by’ingenzi by’ibitunguru	6

1. Akamaro k'ibitunguru

Ibitunguru ni ikiribwa kiryohe, gihugumura neza, kitagira ibinure bibi byatera ingaruka ku muntu ubirya, kandi ibitunguru bigira ibyiza bizana mu mubiri.

Akamaro k'ibitunguru ni kenshi. Aha twavugaga nko kwigiramo ibyitwa 'fibres' ndetse na Vitamini C bifasha mu mikorere myiza y'umubiri w'umuntu. Ibitunguru byongera Vitamine B9 icyenerwa cyane mu mikorere myiza y'ubwonko. Byifitemo kandi umwunyangugu w'ubutare ari bwo butanga impumuro y'igitunguru, iyo mpumuro ikagira akamaro ku buzima bw'ibihaha.

2. Aho ibitunguru bikunda

Ibitunguru byera mu butaka bufite ifumbire ihagije, butarekamo amazi kandi buseseka. Ubusharire bw'ubutaka bugomba (pH) kuba buri hagati ya 6 na 6.8. Bikunda ubutaka burimo potasi. Niyo mpamvu, umuhinzi agomba kubufumbiza ivu aramutse aribonye.

Mu Rwanda, ibitunguru byera mu turere twose tw'igihugu. Ariko byera neza ahantu hashyuha hejuru ya dogere selesiyusi 18, kuko ariho hatuma ibijumba biba binini. Amwe mu moko aboneka mu Rwanda harimo:

- Ubwoko bubanguriye (iburide): Red star F1, Jambar F1, Ruby F1, ...
- Ubwoko butabanguriye: Bombay red, Red creole, Texas early grano, ...

Ubwoko	Ibiburanga
Red star F1 	-Bigira hasi habwase -Byera kugeza kuri toni 60 kuri ha -Byerera iminsi 120-140 nyuma yo kugemura -Bifite ibara ry'umutuku wijimwe -Bibikika igihe kirekire kugeza ku mezi 5 -Byihanganira indwara zinyuranye
Jambar F1 	-Byera kugeza kuri toni 60 kuri ha -Byera ku butaka butandukanye n'ikirere gitandukanye -Bibikika igihe kirekire kugeza ku mezi 6
Ruby F1 	-Byerera iminsi 90 nyuma yo kugemura -Byera kugeza kuri toni 60 kuri ha -Bibikika igihe kirekire kugeza ku mezi 6
Bombay red 	-Bigira impumuro iri hejuru cyane -Byerera iminsi 150 nyuma yo kugemura -Bikundwa cyane ku isoko -Byera kugeza kuri toni 35 kuri ha -Bibikika igihe kirekire kandi bigatwarika neza -Bifite ibara ry'umutuku wijimwe
Red creole	-Byera ahantu hatandukanye -Byerera iminsi 150 nyuma yo kugemura -Bikundwa cyane ku isoko -Byera kugeza kuri toni 35 kuri ha

		-Bibikika igihe kirekire -Bigira ibara ritukura cyane
	Texas early grano	-Bigira umusaruro mwinshi -Byerera iminsi 120 nyuma yo kugemura -Bikunzwe cyane ku isoko -Byera kugeza kuri toni 50 kuri ha -Bibikika igihe kirekire kandi bigatwarika neza -Bifite ibara ry'umweru inyuma bakajya kuba zahabu

3. Inyongeramusaruro zikenewe kuri ari imwe

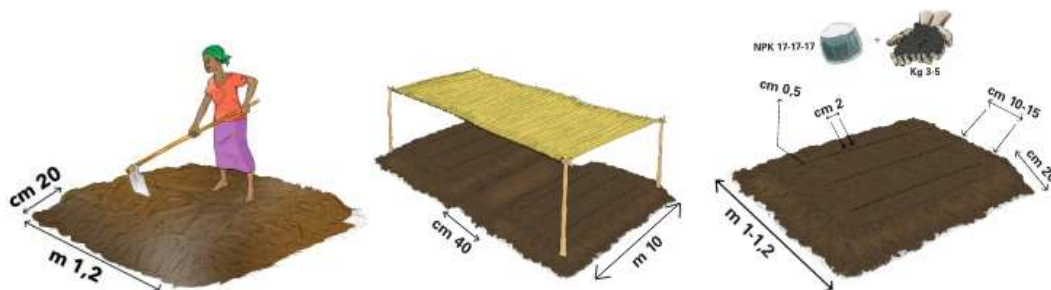
- Ingano y'umurama: gr 40
- Imborera: kg 250
- NPK 17.17.17: kg 3
- KCl: kg 1.8
- Ire: kg 1.5
- Ingemwe: 3,600

4. Guhitamo umurima/ubuhumbikiro

- Umurima/ubuhumbikiro bushyirwa ahantu hatigeze hahingwa ibihingwa byo mu muryango umwe n'ibitunguru nibura mu bihembwe cy'ihinga gishize.

5. Gutegura umurima

- Hategurwa ubuhumbikiro ku mitabo ifite ubugari bwa m 1 kugeza kuri m 1.2, uburebure butarengeje m 10, n'ubujyejuru bwa cm 20 kugira ngo amazi abashe gusohoka
- Shyira byibuze inzira ya cm 40 hagati y'imitabo ibiri
- Vanga amashyi 3 y'imborera iboze neza (kg 3-5) n'ubutaka bwo hejuru kuri m² 1 na g20 za NPK 17-17-17 (udufuniko 2 tw'icupa ry'amazi) icyumweru 1 mbere yo guhumbika
- Igihe cyo kwinaza, ringaniza ubutaka, uce imirongo yo kwinazamo ifite ubujyakuzimu bwa cm 0.5 kandi itandukanijwe na cm 10
- Umurama ushyirwa muri ya mirongo yaciwe ku ntera ya cm 1 hagati y'imbuta; hanyuma hakarenzwaho agataka gacye bagatsindagira gahoro.

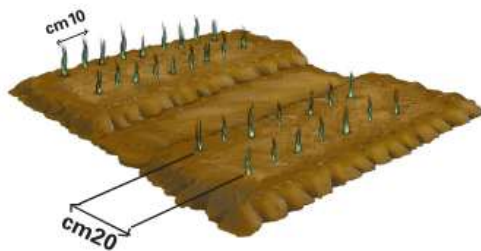


6. Imirimo ikorwa mu kwita ku buhumbikiro

- ✓ Gusasira hakoreshejwe ibyatsi byumye neza.
- ✓ Nyuma y'iminsi 7-10, ingemwe ziba zimaze kumera maze isaso igakurwaho.
- ✓ Vomerera mu gitondo kare na nimugoroba.
- ✓ Ubaka igisharagati ariko usige aho imirasire y'izuba inyura haboneke urumuri ruringaniye.
- ✓ Bagara buri gihe ndetse wicire ingemwe mugihe zicucitse.
- ✓ Tera umuti urwanya indwara mu gihe ari ngombwa.
- ✓ Gabanya kuvomerera mu byumweru bibiri mbere yo kugemura.
- ✓ Ingemwe zigemurwa zimaze ibyumweru 6-8 mu buhumbikiro

7. Gutera ingemwe

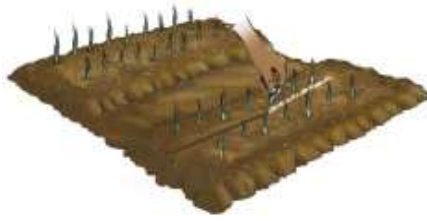
- Ingemwe ziterwa mu murima hashize iminsi 40-45 nyuma yo guhumbika
- Umurima uhingwa neza ku bujyakuzimu bwa cm 30.
- Vomerera ingemwe mbere yo kuzitera uzitere mu gitondo kare cyangwa nimugoroba
- Ibitunguru biterwa ku ntera ya cm 20 hagati y'imirongo na cm 10 hagati y'igitunguru n'ikindi mu murongo.
- Ca uduferege dufite ubujyakuzimu bwa cm 5.
- Ushyiremo imborera (yuzuye amashyi), NPK 17-17-17 (agafuniko ka fanta kuzuye ku murongo wa m 1) na KCl (agafuniko kamwe ka fanta ku murongo wa m 2) uyivange neza n'itaka.



8. Imirimo y'ingenzi yo kwita ku gihingwa

- Gusasira: bikorwa mbere cyangwa nyuma yo gutera.
- Kuvomerera: bikorwa ukimara gutera bigakomeza igihe cyose ari ngombwa.
- Irinde gutosa amababi kugirango uburwayi butabona aho bworokera.
- Kongeraho Ire: nyuma y'ibyumweru 6 uteye, shyiramo ifumbire ya Ire ingana na kg 1.5 kuri ari (agafuniko 1 ka fanta kuri m 2 hagati y'imirongo).

- Kubagara: bikorwa igihe cyose ari ngombwa kandi ukaboneraho gusukira wegereza itaka ku bitunguru.
- Kurwanya indwara n'ibyonnyi.



9. Gusarura no gufata neza umusaruro

- Kumisha: ibitunguru biba bigeze igihe cy'isarura igihe imitwe ireba hasi, ni ukuvuga hagati y'amezi 3-4 bitewe n'ubwoko bw'ibitunguru. Mbere yo gusarura ukuraho itaka ritwikiriye ikijumba cy'igitunguru habura nibura ibyumweru 2 ngo usarure.



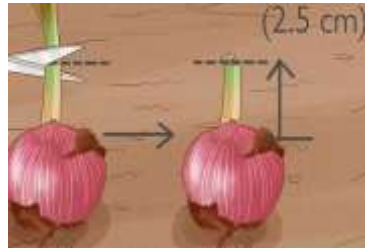
- Gusarura: ibitunguru ubirandura ukoresheje intoki iyo ubutaka buseseka, cyangwa majagu iyo hakomeye.



- Kwanika: nyuma yo gusarura, sanza ibitunguru ku mbuga isukuye neza cyangwa ubundi bwanikiro bwabugenewe kandi wanike ahantu hagera izuba; ubireke byume kugeza igihe imizi n'amababi byumye. Ibitunguru bikomeza kwanikwa ahagera imirasire y'izuba itari myinshi kandi hagera umwuka mu gihe cy'ibyumweru 2-3.



- Guhunika: Katira amababi nko kuri cm 2.5 hejuru y'ikijumba cy'igitunguru ndetse unakate ya mizi yumye. Ibitunguru bibikika neza igihe ijosi ryabyo ryumywe neza ku buryo urikanda ukabona nta mazi akirimo. Mu cyumba gikonje (0°C), ibitunguru bishobira guhunikwa hagati y'amezi 6-7, naho mu cyumba gisanzwe (30°C) ni hagati y'amezi 3-6.



- Gupakira: ibitunguru bipakirwa mu mifuka yabigenewe ituma umwuka uhita. Hashobora kwifashishwa amakerete cyangwa isanduku zikoze mu mbaho.



10. Indwara n'ibyonnyi by'ingenzi by'ibitunguru

	Indwara/ ibyonnyi	Ibiziranga	Uko bazirinda	Uko bazivura	Ibipimo by'umuti bikoreshwa muri L20 z'amazi + Iminsi ikenerwa kugira ngo igihingwa cyatewe umuti gisarurwe (PHI)
1	Indwara y' imvura (Milidiyu) 	Ibidomo cyangwa amabara byeruruka ku mababi bitwikiriwe n'agafu k'ikigina. Amababi areruruka nyuma akaba umuhondo. Imitwe y'amababi iruma.	- Kwirinda gutera ingemwe zirwaye, - Gusimburanya neza ibihingwa, - Gutera mu butaka bwumutse, - Kudacucika ibitunguru igihe cyo gutera, - Kuvana mu murima ibisagazwa by'ibihingwa bigakorwamo ifumbire, - Gutera umuti wo kurwanya uduhumyo.	Gutera umuti urimo Mancozeb + Metalaxyl cyangwa gukoresha imiti irimo copper nka Copper oxychloride.	-Mancozeb + Metalaxyl: g 50 PHI: iminsi 14-30 -Mancozeb: g50 PHI: iminsi 30 -Copper oxychloride: g 50 PHI: iminsi 14

2	Indwara y' ibidomo (Ariterinariyoze) 	Iyi ndwara igaragara mu gihe cy'imvura nyinshi. Itangira igaragazwa n'ibikomere biretse amazi ku mababi nyuma bikaba ikigina. Nyuma, irangwa n'ibidomo byijimye imbere ariko byerurutse ku muzenguruko wabyo.	• Gutera igihe cyiza bitewe n'aho umurima uherereye, • Amoko y'ibitunguru bigira ubwoya yihanganira ubu burwayi ugereranije n'atabugira, • Gutera ku mitabo, no gutegura neza umurima. • Kudacucika ibitunguru igihe cyo gutera, • Gusimburanya ibihingwa, • Kuvana mu murima ibisigazwa by'ibihingwa, • Gutera mu butaka bwumutse. • Icyitonderwa: Ubutaka burekamo amazi ntibuberanye n'ibitunguru.	-Gutera umuti urimo Mancozeb + Metalaxyl cyangwa gukoresha imiti irimo copper nka Copper oxychloride	-Mancozeb + Metalaxyl: g 50 PHI: iminsi 14-30 -Mancozeb: g50 PHI: iminsi 30 -Copper oxychloride: g 50 PHI: iminsi 14
3	Umugese 	Iyi ndwara igaragara cyane igihe cy'ubuhere buwinshi buvanze n'ubushyuhe buringaniye cyangwa buke. Iyi ndwara ifata kumababi ikarangwa n'ibidomo bifite ifu ifite ibara rishyira umutuku cyangwa orange nyuma bikaba umukara. Amababi yafashwe cyane ahinduka umuhondo nyuma agahita yuma atarakura bityo bigatuma umusaruro ugabanuka	• Gutera ku mitabo, • Kudacucika ibitunguru igihe cyo gutera, • Gusimburanya ibihingwa, • Kuvana mu murima ibisigazwa by'ibihingwa, • Kwirinda gufumbiza azote irengije ikigero cyagenwe.	•Gukoresha imiti irimo copper nka Copper oxychloride (Funguran) cyangwa Copper Oxide, Sulphur (Thiovit) Azoxystrobin 25% SC (Othello)	-Copper: g 50 PHI: iminsi 14 -Sulphur: g 50 PHI: iminsi 3-15 -Azoxystrobin: ml20 PHI: iminsi 10-15
4	Tiripusi	Tiripusi ni udukoko duto cyane (mm1) kandi Tugenda cyane. Twangiza ibitungura turuma abababi tukanyunyuzwa amatembagihingw.	• Ubutaka bugomba guhora bufite amazi ahagije; • Kwirinda gukoresha ifumbire ya Azote irenze urugero; • Kubagara neza kuko utu dukoko twihisha mu bwatsi;	Gutera imiti yica udukoko	-Profenofos: ml 20 PHI: iminsi 14 -Lambdacyhalothrin (Lamdex): ml 20 PHI: iminsi 7 -Acetameprid (Golan, Dudu acelamectin): ml 20.

		Amababi yafashwe agira amabara y'umweru avanze n'ibidomo by'umuringa. Utu dukoko dusiga umwanda ugaragazwa ku mababa nk'utudomo tw'umukara. Utu dusimba tugomba kugenzurwa hakiri kare kuko tugira ingaruka ikomeye ku musaruro.	• Gusukura ahakikije umurima; • Kurandura ibyafashwe cyane;		PHI: iminsi 14
--	---	---	--	--	------------------------------

Icyitonderwa: Iyi mfashanyigisho yateguwe n'umushinga "HINGANA UBUZIRANENGE" ugamije kongera ubuziranenge bw'ibiribwa mu Rwanda. Uwo mushinga ushyirwa mu bikorwa n'Umuryango Nyarwanda Uharanira Inyungu Rusange Utegamiye kuri Leta "AGRIFOP" ku nkunga y'Umuryango w'Ubumwe bw'Ibihugu by'i Burayi "EUROPEAN UNION".

Mu kuyitegura, hifashishijwe impuguke, abakozi ndetse n'imfashanyigisho zateguwe na Minisiteri y'Ubuhinzi n'Ubworozi (MINAGRI), Ikigo cy'Igihugu Gishinzwe Guteza Imbere Ubuhinzi n'Ubworozi mu Rwanda (RAB) n'abandi bafatanyabikorwa.