



Funded by
the European Union



UBUHINZI BWA KAROTI



Gicurasi 2024

Ishakiro

1. Akamaro ka karoti	2
2. Aho karoti zikunda kwera	2
3. Amoko aboneka mu Rwanda	2
4. Guhitamo umurima, kuwutegura no gutera	2
4.1 Guhitamo umurima	2
4.2 Gutegura umurima	3
4.3 Gutera	3
5. Kwita ku gihingwa nyuma yo gutera	3
5.1. Gusasira	3
5.2. Kubagara	3
5.3. Kuvomerera	4
5.4. Gushyiraho ifumbire mvaruganda	4
5.5. Kwicira	4
5.6. Kugenzura indwara n’ibyonnyi	5
6. Gusarura no gufata neza umusaruro	5
7. Indwara n’ibyonnyi by’ingenzi bya karoti	6

1. Akamaro ka karoti

Karoti ni imboga nziza cyane zikoreshwa mu bihugu bitandukanye kuko ziribwa zihye cyangwa ari mbisi.

Karoti ziri mu mboga zikungahaye kuri Vitamini A, B,C zikaba kandi zigira akamaro gakomeye mu mubiri ko kurwanya indwara z'ubuhumyi, gukesha uruhu n'izindi. By'umwihariko, imboga za karoti zikungahaye cyane ku kinyabutabire bita β -Carotene (Beta Carotene), kigera mu mubiri kigahinduka vitamine A, ikaba ari ingenzi cyane mu gufasha amaso kubona neza. Karoti zikungahaye kandi ku butare bwa 'Potassium' ifasha umutima gukora neza ukanatera ku rugero rukwiriye, ndetse no ku butare bwa Fosifore.

Kuzihinga bifata ubutaka buto, kuzitaho ntibigoranye, kandi zishobora kwera mu gihe gito cy'amezi 3 bityo zikaba zavamo inyungu mu gihe gito. Ku batuye ahantu hatari ubutaka buhagije nko mu mijyi bashobora kwegeranya ubutaka mu mifuka.

2. Aho karoti zikunda kwera

Karoti zibarizwa mu muryango w'ibihingwa nka sereri na perisire, zikaba zihingwa ahantu hari ubushyuhe burunganiye buri hagati ya dogere 10 na 25, ku butumburuke buri hejuru ya metero 700. Umurama wa karoti ushobora kumera hagati y'ubushyuhe bwa dogere selisiyusi 7 na 30. Zera mu butaka bufite ubusharire (pH) buri hagati ya 6.6 na 7.1. Karoti zihingwa mu turere twose tw'u Rwanda, mu butaka bw'isi ndende, buseseka, buhitisha amazi kandi bufumbiye.

3. Amoko aboneka mu Rwanda

- Ubwoko butabanguriye bwitwa Nante (Nantes) nibwo bukunze guhingwa
- Ubwoko bubanguriye (iburide). Urugero: Morelia RZ F1.



Nantes



Morelia RZ F1

Muri rusange, umusaruro wa karoti kuri ari 1 (m10xm10) uri hagati ya kg 150 na kg 200. Ni ukuvuga ko kuri hegitari (m 100x m100) umusaruro wa karoti uri hagati ya toni 15 na 20.

4. Guhitamo umurima, kuwutegura no gutera

4.1 Guhitamo umurima

- Hitamo umurima udaheruka guhingwamo karoti cyangwa ibimera biri mu muryango umwe na karoti (sereri, perisire) nibura mu bihembwe by'ihinga bibiri biheruka.

4.2 Gutegura umurima

- Tegura umurima mu byumweru 2 mbere yo gutera, unatabike ibisigazwa by'ibimera mu butaka.
- Hinga neza ugeze isuka mu butaka ku bujakuzimu bwa cm 30 kugirango bifashe kuringaniza ubutaka neza, guhitisha umwuka no gushora kwa karoti.
- Menagura ibinonko byose ukuramo amabuye n'ibyatsi byose.
- Kora imitabo izamuye ya m 1-1.2 z'ubugali n'ubujyejuru bugera kuri cm 20.

4.3 Gutera

- Nyanyagiza imborera iboze neza, ku mitabo uyivange neza n'itaka mu cyumweru kimwe mbere yo gutera. Imborera ingana na toni 20 niyo ikoreshwa kuri hegitari.
- Mu gutera, vanga n'itaka ifumbire mvaruganda ya DAP garama 25 (udufuniko tubiri n'igice tw'agacupa k'amazi y' Inyange) na KCl garama 40 (udufuniko tune tw'agacupa k'amazi y'Inyange) k'umurongo wa m 10.
- Tera ku mirongo itandukanijwe na cm 20 , usige cm 30 hagati y'imitabo.
- Ca uduferege two gushyiramo umurama/umwayi dufite ubujyakuzimu bwa cm 0.5-1.
- Tera umurama wa karoti umaze kuwuvanga n'itaka ryumye neza cyangwa umucanga ku buryo udashobora kubona imbuto 3-5 ziri hamwe, kubera ko umurama wa karoti ari muto cyane, murwego rwo kwirinda ubucucike.
- Humbika umurama uvanze n'itaka cyangwa umucanga muri twa duferege wakoze hanyuma utwikirizeho agataka gakeya.



5. Kwita ku gihingwa nyuma yo gutera

5.1. Gusasira

- Shyiraho isaso ukimara gutera kandi uhite uvomerera kugira ngo bifashe umurama kumera neza. Kuraho isaso umurama ukimara kumera.

5.2. Kubagara

- Bagara igihe cyose ibyatsi bibi bigaragara mu murima. Kubera ko utugemwe twa karoti ari duto kandi tworoshye, bagara ukoresheje intoki cyane cyane mu byumweru bya mbere.



5.3. Kuvomerera

- Vomerera buri gitondo, igihe cyose ari ngombwa kugirango bifashe karoti gukura neza.
- Vomerera ukoresha amazi adafite ingufu nk'arozwari, umupira utonyanga utuzi duke cyangwa akuma kamisha amazi ariko kagabanyirijwe ingufu kugeza zimaze gufata neza.
- Irinde uko bishoboka kose ko amazi areka mu murima kuko ashobora gutuma karoti zibora.
- Rekeraho kuvomerera karoti ziri hafi kwera kugira ngo byongere ubwiza n'uburyohe kandi bitume zibikika neza.

5.4. Gushyiraho ifumbire mvaruganda

- Nyuma y'ukwezi umaze gutera, ongeramo ifumbire ya Ire ingana na garama 650 kuri ari imwe (agafuniko kamwe n'igice k' icupa ry' amazi y'Inyange ku murongo wa metero 10) nyuma y'ukwezi umaze gutera. Sukira imizi y'ingemwe itangiye kubyimba.

5.5. Kwicira

- Nyuma y'ibyumweru 3 uteye, icira ukuramo izitameze neza usige cm 3-5 hagati y'ibihingwa.



- Nyuma y'ibyumweru 5-6 uteye, icira bwa kabiri usige noneho cm 5-8 hagati y'ibihingwa.



5.6. Kugenzura indwara n'ibyonnyi

- Genzura umurima inshuro eshatu mu cyumweru (cg buri munsu) urebamo ibyonnyi n'ibimenyetso bigaragaza indwara z'uduhumyo, virusi na bagiteri nkuko bigaragara mu mbonerahamwe iri ku gika 7.6. Wibanda kureba munsu y'amababi kuko niho udusimba dufata mu gihe twihisha izuba n'imvura. Iyo ubonyeho ibyonnyi cyangwa ibimenyetso by'indwara utera umuti.

6. Gusarura no gufata neza umusaruro


- Sarura karoti guhera ku minsi 75 kugera ku minsi 110 nyuma yo gutera. Karoti zikuze neza ziba ifite ibara risa na oranje.
- Sarura mu gitondo kare cyangwa ku mugoroba igihe hari amafu.
- Karoti zisarurwa cyane cyane hakoreshejwe intoki, uzamura umuzi ufashe amababi igihe cyose ubutaka buhehereye.







- Igihe ubutaka bwumagaye, banza kubutosa bihagije, ucukure na majagu hanyuma uranduze amaboko kugira ngo karoti zitavunikira mu butaka.
- Umaze gusarura karoti, kuraho amababi yazo ariko usigeho agace gato k'aho ahurira n'ikijumba kugirango utazikomereza hakinjirira indwara cyangwa zigatakaza amazi vuba.
- Oza karoti nyuma yo kuzisarura, zitoranye utandukanya izangiritse n'izitangiritse, inini n'intoya kuko zigurishwa ku biciro bitandukanye.
- Igihe usarura, irinde kurunda karoti ku zuba no kuzitiza mu murima.
- Zishyire mu mifuka cyangwa mu bisanduku mbere yo kuzijyana kw'isoko.



7. Indwara n'ibyonnyi by'ingenzi bya karoti

	Indwara	Ibiziranga	Uko bazirinda	Uko bazivura	Ibipimo by'umuti bikoreshwa muri L20 z'amazi + Iminsi ikenerwa kugira ngo igihingwa cyatewe umuti gisarurwe (PHI)
1	<p>Indwara yo kubabuka amababi (Leaf blight)</p> 	<p>Iyi ndwara igaragazwa na:</p> <ul style="list-style-type: none"> -Ibara ry'ikijuju rigenda rihinduka ibihogo ku mababi; -Ibidomagure ku mababi, igice cyafashwe gitangira guhisha kigatangira gusa n'umuhondo. -Guhunguka kw'amababi. -Iyi ndwara ikunda gufata cyane amababi akuze itaretse n'amato. -Ibidomo byakuze bigera ku nkondo y'ikibabi cya karoti ikanigwa, ikabora, igahunguka ku ruti. -Ubu burwayi bugaragara cyane igihe cy'ubuhere bwinshi. 	<ul style="list-style-type: none"> -Gukoresha umurama w'indobanure. -Gukoresha umurama cyangwa umwayi wa karoti wihanganira ubu burwayi. -Kubahiriza gahunda y'isimburanyabihingwa. -Gukora isuku ihagije mu murima no mu nkengero zawo. -Gufata neza karoti (kuzibagara no kuzisukira) kugira ngo hatabaho iyoreroka n'ikwirakwizwa ry'uduhumyo dutera iyi ndwara. -Gukoresha ifumbire mvaruganda nke ikize ku mwunyangugu w'azote. -Kubahiriza intera ikwiye mu gutera karoti 	Tera imiti	<ul style="list-style-type: none"> -Copper oxychloride: g50 PHI: iminsi 14 -Thiovit: g50 PHI: iminsi 3-15

			-Gusura umurima wahinzwemo karoti inshuro nyinshi.		
2	Uruhumbu rw'umweru (powdery Mildew) 	-Igaragazwa n'ibibara bimeze nk'ivu by'ikijuju bigaragara cyane cyane ku mababi. -Aya mababi ashobora no guhinduka akaba umuhondo nyuma akuma ndetse agahunguka.	-Kubahiriza gahunda y'isimburanyabihingwa. -Gukora isuku ihagije mu murima no mu nkengero zawo. -Guterasha karoti ifumbire y'imborera yaboze neza. -Kubahiriza intera ikwiye mu gutera karoti -Kwirinda gucucika karoti	Gukoresha neza imiti irimo Sulphur (Thiovit)	-Thiovit : g50 PHI: iminsi 3-15
3	Bagiteri itera kubabuka kw'amababi (bacterial wilt) 	-Igaragazwa n'ibibara bifite inguni by'umuhondo ku mababi nyuma bigahinduka ikigina kandi birimo amazi bikazengurukwa n'uruziga rw'umuhondo. Iyo byumye biba umukara.	-Gutera imbuto nziza y'indobanure. -Kutavomerera hejuru ku mababi mu kwirinda. ikwirakwizwa ry'ubwo burwayi. -Gusimburanya ibihingwa mu murima.	Gukoresha imiti yica uduhumyo	-Copper oxychloride: g50 PHI: iminsi 14
4	Amaga (Scrab) 	Ni indwara iterwa na bagiteri yitwa <i>Streptomyces scabies</i> . Ni bagiteri iba mu butaka kandi ikamaramo igihe kirekire. -Kuri karoti hazaho amaga ameze nk'utubara duhanda tw'ikigina rimwe na rimwe tuba umukara. Dushobora gukora uruziga ku muzi.	-Gusimburanya ibihingwa mu murima bitagira ubu burwayi nk'ibitunguru cyangwa amashu. -Gushyira amazi ahagije mu murima, gutegura ubutaka buzaterwamo karoti hakorwa amabimba. -Gutera imbuto zihanganira ububurwayi.	-	-
5	Amasazi (Carrot rust fly) 	-Ni amasazi yitwa <i>Psila rosae</i> yangiza imizi. -Ayo masazi atera amagi ku butaka akazavukamo inyo. Izo nyo zinjira imbere mu mutima	-Gutera imbuto z'indobanure. -Gutera imbuto zidacucitse cyane. -Kwirinda kubagaza isuka cyangwa gutemera karoti mu murima kuko	-	-

	<p>wa karoti, zitungwa na karoti zoroshye. Ibyo bituma kuri karoti hazaho imyenge iterwa n'ayo masazi.</p> <p>-Karoti zangijwe zihagarara gukura, zigasharira, zikabora.</p> <p>-Amababi araraba, agata ibara akagwa.</p>	<p>impumuro yazo ikurura ayo masazi.</p> <p>-Kwirinda gutera ahantu haba umuyaga mwinshi kuko uzikwirakwiza ahandi.</p>		
---	---	---	--	--

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.