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# UBUHINZI BW'IMITEJA

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## **1. Akamaro k'imitaja**

Imiteja ibarizwa mu muryango w'ibinyamisogwe kimwe na soya, amashaza, n'ubunyobwa.

Uretse kuzana amafaranga ku bantu b'ingeri zitandukanye, imiteja ikungahaye kuri vitamini A, C, na K. Si izo gusa kuko tunasangamo vitamin B1, B2, B6, B9 n'imyunyungugu nk'ubutare, potasiyumu, silikoni, kalisiyumu, manganese, umuringa na manyeziyumu. Imiteja kandi inafatiye runini umubiri wacu kuko irimo ibifasha igogorwa kugenda neza, bikarinda amara kuba yananirwa.

## **2. Aho imiteja ikunda**

Imiteja y'ibishyimbo yera neza ahantu hari ubutumburuke buri hagati ya m 1000 na m 2100, hari imvura igwa ku gipimo kiri hagati ya mm 900 na mm 1200, hari ubushyuhe buri hagati ya dogere selisiyusi 20 na 25. Imiteja ntiyihanganira ahantu hari ikirere gikunda kuzana ibihu cyangwa inyababa. Yera neza mu butaka bwumutse, buseseka bufumbiye kandi bufite ubusharire (pH) buri hagati ya 5.5 na 6.8, kandi butarimo imyunyu myinshi. Mu Rwanda, imiteja y'ibishyimbo yera neza mu bice byose by'ighugu.

## **3. Amoko aboneka mu Rwanda**

Amoko y'imitaja agabanjemo ibice 2 by'ingenzi:

- Imiteja migufi (Vanilla, Monel, Vernadon, Gloria, Espadia, Morgan, Teressa, Nyeganyega). Vanilla nibwo bwoko bukunze guhingwa cyane mu Rwanda.
- Imiteja ishingirirwa (Kentucy wonder, Roilet, Nyirabukara).

Iyo imiteja y'ibishyimbo yitaweho neza ishobora gutanga umusaruro uri hagati ya toni 4 na toni 8 kuri hegitari imwe.

## **4. Inyongeramusaruro zikenerwa kuri ari imwe**

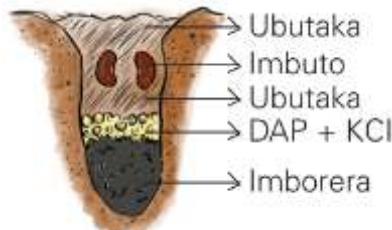
- Imbuto: g 500
- Imborera: kg 250
- DAP: kg 1.6
- Ire: g 500

## **5. Gutegura umurima**

Umurima utegurwa basekera imbere y'ibyumweru 2 imvura itaragwa no gusanza neza mu gihe cy'itera.

## 6. Gutera

- ✓ Sekera mbere y'ibyumweru 2 imvura itaragwa, usanze neza mu gihe cy'itera.
- ✓ Batera muri Nzeli - Ukwakira mu gihembwe cy'ihinga A, no mu ntangiriro za Gashyantare mu gihembwe cyihinga B ubutaka bumaze gusoma. Mu bishanga ni muri Gicurasi-Kamena mu gihembwe cy'ihinga C.
- ✓ Koresha buri gihe imbuto yujuje ubuziranenge ipakiye mu gapaki keza, ivuye ku mucuruzi wizewe, ifite ubwiza kandi ikihanganira indwara.
- ✓ Cukura uduferege dufite ubujyakuzimu bwa cm 10 kandi dutandukanijwe na cm 40.
- ✓ Shyira muri buri gaferere imborera iboneze neza. Hakoreshwamashyi yuzuye neza ku murongo wa m 1.
- ✓ Ongeraho DAP yuzuye agafuniko kamwe ka Fanta kuzuye cyane ku murongo wa m 1 (ijya kuri ari imwe ni kg 1.6).
- ✓ Ongeraho KCl yuzuye agafuniko kamwe ka Fanta kuzuye cyane ku murongo wa metero imwe (ijya kuri ari imwe ni kg 1.3).
- ✓ Shyira intete mu gaferere ku ntera ya cm 10.
- ✓ Twikira neza n'itaka kuburyo utamenya aho agaferege kari gacukuye.



## 7. Imirimo y'ingenzi yo kwita ku gihingwa

➤ Kuvomerera:

- Gushyiramo amazi buri gihe ni ngombwa cyane kuko ubuhehere bugira ingaruka ku ireme n'ubwiza bw'umusaruro.
- Kubura amazi mu gihe cy'ururabo bitera cyane kuma k'ururabo bityo umusaruro ukagabanuka.
- Ni ngombwa gukoresha mm 35 mu cyumweru ugitera kugera mu minsi 10 ikurikiraho, ugakoresha mm 50 mu cyumweru mu minsi ikurikira kugera mu gihe cy'urururabo.



➤ Kubagara:

- Ibyatsi bibi bigomba kurandurwa buri gihe kuko bicuranwa n'ibihingwa amazi n'ibitungakimera bigakorwa mbere y'uko ururabo ruza.
- Mu kubagara witondera kudahungabanya imizi y'igihingwa. Wirinda kubagara igihe imiteja y'ibishyimbo itangiye kuzana indabyo.



- Gusukira: sukira ibihingwa uzamura agataka kugira ngo wirinde isazi y'ibishyimbo ifata ku ruti hasi. Ibi bikorwa imiteja ifite amababi 4.



- Kongeraho Ire: nyuma y'ibyumweru 4 bateye: hakoreshwa g18 (udufuniko tubiri tw'icupa ry'amazi twuzuye neza) kuri buri murongo wa m 10.
- Gushingirira
  - Bikorwa nyuma yo kubagara no gusukira/kuhira, mbere y'uko ibishyimbo bitangira kuzana urugoyi.
  - Bakoresha umushingiriro 1 hagati y'ibishyimbo 4-6, bakawushyira hagati y'imirongo, bakayihuza hejuru bakanayizirika.
  - Igomba kuba ikomeye kandi ifite nibura m2- m 2.5 z'uburebure.
  - Ushobora gukoresha ibiti bisanzwe cyangwa se uruzitiro rw'ibiti ruvanze n'imigozi.
  - Hari uturere bashingirira ibishyimbo bakimara gutera.



## 8. Gusarura no gufata neza umusaruro

- Imiteja migufi isarurwa mu byumweru 6-8 imaze guterwa igasarurwa inshuro 2 kugeza kuri 3.
- Imiteja ishingirwa itangira gusarurwa mu byumweru 8 imaze guterwa igasarurwa inshuro 3 kugeza kuri 5.
- Imiteja isarurwa ikiri uruteja kandi yoroshye itarera ngo ihwane. Gutinda gusarura imiteja si byiza kuko bigabanya ubwiza bwayo ugasanga ifite imitsi myinshi.
- Gusoroma bigomba gukorwa mu gihe runaka gihoraho urebye kabiri cyangwa gatatu mu cyumweru, mu gitondo cya kare cyangwa nimugoroba cyane iyo hariho amafu kugira ngo idatakaza ubwiza bw'umusaruro.
- Imiteja isarurwa witonze inkondo zikaguma ku ruti.
- Gusarura mu bihe by'ubukonje n'imvura si byiza. Gusa iyo ikirere kidatanga umucyo, imiteja iramburwa ku gitambaro gisa neza kugira ngo yumuke mbere y'uko ipakirwa.
- Ikigereranyo cy'umusaruro ni kg 6,000-10,000 kuri Ha bitewe n'uko ibihingwa byafashwe.
- Imiteja yasaruwe ishyirwa mu gitete cya pulastike gisukuye kandi gitwikiriwe n'igitambaro gisukuye
- Imiteja yasaruwe igomba gutoranywa (kujonjorwa) iyo yumutse ikanashyirwa mu makarito.
- Batoranya imiteja imeze neza idakomeretse itariwe n'udusimba kandi ifite umubyimba ugororotse wa mm6 kugeza kuri mm 9 n'uburebure bwa cm 10.
- Si byiza kuvanga imiteja n'ibindi bintu cyangwa n'izindi mbuto mu bubiko bumwe kuko bituma isaza vuba.
- Imiteja ishobora kubikika ahantu hari ubushyuhe buri hagati ya dogere 4 kugeza ku 7.5 n'ubuhehere bwa 95%-100% mu gihe kingana n'icyumweru kimwe kugeza ku byumweru bibiri.



## 9. Indwara n'ibyonnyi byingenzi by'imitaja

	Indwara / Ibyonnyi	Ibimenyetso	Uburyo bwo kubirwanya	Ibipimo by'umuti bikoreshwa muri L20 z'amazi + Iminsi ikenerwa kugira ngo igihingwa cyatewe umuti gisarurwe (PHI)
1	Virusi/ imfunyarazi 	<ul style="list-style-type: none"> <li>• Indwara ikwirakwizwa n'inda.</li> <li>• Amababi arikunja akagira amabara y'umuhondo uvanzze n'icyatsi kibisi.</li> <li>• Ibihingwa byafashwe bigira imiteja mito kandi yigonze.</li> <li>• Ishobora gukwirakwiza n'imbuto yanduye.</li> </ul>	<ul style="list-style-type: none"> <li>• Koresha imbuto nziza kandi yizewe.</li> <li>• Guhungiza imbuto umuti w'ubusimba nka Imidaclopride.</li> <li>• Randura ibishyimbo bigaragaye ho uburwayi.</li> <li>• Tera imiti uyinyuranya igihe hari inda mu murima.</li> </ul>	-Lambda cyhalothrin: ml20 <b>PHI: iminsi 7</b> -Alphacypermethrine: ml20 <b>PHI: iminsi 14</b> -Abamectin: ml20 <b>PHI: iminsi 7</b> -Azadirachtin (Nimbecidine): ml20 <b>PHI: iminsi 7</b>
2	Umugetse 	<ul style="list-style-type: none"> <li>• Utudomo tw'umugese tugaragara ku bice byo hejuru y'ubutaka ku miteja.</li> <li>• Utudomo dusana'udutukura tumeze</li> </ul>	<ul style="list-style-type: none"> <li>• Koresha imbuto nziza zizewe kandi zihungiwe na Benlate.</li> <li>• Kora isimbura bihingwa neza.</li> <li>• Randura ibyafashwe cg birwaye cyane.</li> </ul>	-Azoxystrobin:ml20 <b>PHI: iminsi 10-15</b> -Chlorothalonil: ml20 <b>PHI: iminsi 7</b>

		<p>nk'udusohotse mu nsi y'ikibabi tuzengurutswe n'ibara ry'umuhondo. • Amababi ashobora guhunguka yose</p>	<ul style="list-style-type: none"> <li>• Tera umuti mbere yo kuzana ururabo</li> </ul>	
3	Uruhumbu rw'umweru	<ul style="list-style-type: none"> <li>• Uruhumbu rw'umweru rugaragara hejuru y'amababi.</li> <li>• Aho uruhumbu rufashe ku kibabi hahita hahinduka umutuku nyuma amababi yose yafashwe akaba umuhondo agahunguka.</li> </ul>	<ul style="list-style-type: none"> <li>• Hinga utabira ibisigazwa byose nyuma yo gusarura.</li> <li>• Simbuza neza ibihingwa wirinda gusubiza ibishyimbo aho bisaruwe.</li> <li>• Bagara kare ibyatsi bitarakura cyane.</li> <li>• Ushobora gukoresha imiti ubonye ibimenyetso</li> </ul>	-Sulphur (Ramsulf): g50 <b>PHI: iminsi 3-15</b>
4	Ibidomo by'ikigina	<ul style="list-style-type: none"> <li>• Ibidomo bigaragara mbere ku mababi makuru.</li> <li>• Ibidomo ku mababi bigira ibara ry'ikigina, ahinduka umuhondo uko ibidomo bigenda biba byinshi, nyuma akuma agahunguka.</li> <li>• Imitaja ishobora gutangira kubora.</li> </ul>	<ul style="list-style-type: none"> <li>• Koresha imbuto nziza yizewe.</li> <li>• Hinga utabira ibisigazwa byose nyuma yo gusarura.</li> <li>• Simbuza neza ibihingwa tugarure ibishyimbo aho bisaruwe.</li> <li>• Guhungiza imbuto n'umuti wa Benlate</li> <li>• Ushobora gukoresha imiti ubonye ibimenyesho</li> </ul>	-Carbendazim: ml 20-25 <b>PHI: iminsi 7</b> -Azoxystrobin: ml 20 <b>PHI: iminsi 10-15</b> -Mancozeb: g50 <b>PHI: iminsi 7-15</b> -Copper oxychloride: g50 <b>PHI: iminsi 14</b> -Chlorothalonil: g30-40 <b>PHI: iminsi 7</b>
5	Kirabiranya	<ul style="list-style-type: none"> <li>• Ibishimbo byafashwe biragwingira bikiri bito.</li> <li>• Amababi ahinduka umuhondo ahereye hasi nyuma igihingwa cyose kikuma.</li> </ul>	<ul style="list-style-type: none"> <li>• Kora isimbura bihingwa rinoze wirinda gutera ibishyimbo aho bivuye.</li> <li>• Kuvana ibisigazwa by'imyaka mu murima nyuma yo gusarura.</li> <li>• Irinde ikigunda mu murima.</li> </ul>	-Carbendazim: ml 10-40. <b>PHI: iminsi 7</b>

		<ul style="list-style-type: none"> <li>Umuzi muremure uratukura naho indi yo mu mpande ikanga gukura.</li> </ul>	<ul style="list-style-type: none"> <li>Randura ibishyimbo byafashwe.</li> <li>Tera imiteja mu butaka butareka amazi.</li> <li>Koresha imbuto nziza kandi yizewe.</li> <li>Tera imiti</li> </ul>	
6	Inda/Ubuhunduguru	<ul style="list-style-type: none"> <li>Ni udusimba duto cyane tw'umukara, dufata ibishyimbo mu buryo bucucitse. Bufata munsi y'amababi, ku nkondo no mu miteja ikiri mito</li> <li>Inda zikwirakwiza virusi nyinshi zitera indwara</li> <li>Umushongi w'inda ukurura uduhumyo tw'umukara dutwikira ikibabi bigatuma kidakora neza intungagihingwa</li> </ul>	<ul style="list-style-type: none"> <li>Guterera igihe, gufumbira, kubagara, gutera ku murongo, kubahiriza igerambuto riteganywa</li> <li>Gusimburanya ibihingwa mu murima hakurikijwe amabwiriza ya goronomu</li> <li>Gutera umuti</li> </ul>	-Profenofos: ml 20 <b>PHI: iminsi 21</b> -Lambda cyhalothrin: ml 20 <b>PHI: iminsi 7</b> -Azadirachtin: ml 20 <b>PHI: iminsi 3</b> -Nimbecidine: ml 20 <b>PHI: iminsi 7</b>
6	Tiripusi z'ururabo	<ul style="list-style-type: none"> <li>Ubusimba bunyunuza indabo bugatuma haza inkovu no kubengerana kw'amababi.</li> <li>Iyo ubusimba bubaye bwinshi butuma indabo zihunguka.</li> <li>Imiteja irabengerana ikigonda ku buryo itakaza agaciro.</li> </ul>	<ul style="list-style-type: none"> <li>Gutera imiti y'ubusimba kuva ibishyimbo bifite amababi 2 kugera bigeze mu rurabo birafasha cyane.</li> <li>Gusimburanya imiti</li> </ul>	-Lambda cyhalothrine: ml 20 <b>PHI: iminsi 7</b> -Alphacypermethrin: ml 20 <b>PHI: iminsi 14</b> -Deltamethrine: ml 20 <b>PHI: iminsi 3</b>
7	Udutagangurirwa dutukura	<ul style="list-style-type: none"> <li>Amababi arabengerana akagaragaraho indodo z'udutagangurirwa.</li> </ul>	<ul style="list-style-type: none"> <li>Randura ibyatsi bibi biri mu murima.</li> <li>Gukora isimburana bihindwa ryiza nibindi</li> </ul>	-Abamectin (Avimeric): <b>PHI: iminsi 14</b> -Sulphur: g 50 <b>PHI: iminsi 3-15</b>

		<ul style="list-style-type: none"> <li>Ushishoje wabona udukoko duto dutukura tugenda munsi y'amababi</li> </ul>	<ul style="list-style-type: none"> <li>bihingwa bitari ibinyamisogwe.</li> <li>Gutera imiti</li> </ul>	
8	Urunyo rw'ibishyimbo 	<ul style="list-style-type: none"> <li>Ibishyimbo byafashwe behinduka umuhondo, ku ruti ahagana ku butaka haba hasadutse.</li> <li>Urunyo rwinjira mu ruti rukarya igishyimbo kimaze kugondora cg kikiri mu butaka</li> </ul>	<ul style="list-style-type: none"> <li>Gutera imbuto zihungiye n'umuti wa Imidachropride.</li> <li>Gukora isimburana bihingwa ryiza n'ibindi bihingwa bitari ibinyamisogwe, kuhira ibihingwa</li> <li>Gutera imiti uyisimburanya</li> </ul>	-Cypermethrine: ml 20 <b>PHI: iminsi 14</b> -Lambda cyhalothrine: ml 20 <b>PHI: iminsi 7</b> -Deltamethrin: ml 20 <b>PHI: iminsi 3</b>
9	Udusazi tw'umweru 	<ul style="list-style-type: none"> <li>Imiteja yatewe n'udusazi iragwingira igahinduka umuhondo, ikarabirana nyuma ikaba yakuma.</li> </ul>	<ul style="list-style-type: none"> <li>Igihe udusazi tubaye twinshi, tera imiti uyisimburanya</li> </ul>	-Cypermethrine: ml 20 <b>PHI: iminsi 14</b> -Lambda cyhalothrine: ml 20 <b>PHI: iminsi 7</b> -Deltamethrin: ml 20 <b>PHI: iminsi 3</b>
10	Ibinyabwoya by'imisogwe 	<ul style="list-style-type: none"> <li>Ibinyabwoya byangiza indabo zigahunguka. Biruma imiteja bigakora umwenge bikinjira imbere.</li> <li>Iyo myenge bisiga byinjira iba intandaro yo gutangira kubora.</li> </ul>	<ul style="list-style-type: none"> <li>Kubona kare ibnyabwoya birafasha kubirwanya.</li> <li>Irinde ikigunda hafi y'umurima</li> <li>Tera ibigori na kokombure hafi y'umurima w'imateja bizakurura ibinyabwoya bibihugireho kuko bibikurura kurusha imiteja.</li> <li>Koresha imiti</li> </ul>	-Azadirachtin (Nimembicide): ml 20 <b>PHI: iminsi 3</b> -Lambda cyhalothrin: ml 20 <b>PHI: iminsi 7</b> -Deltamethrin: ml 20 <b>PHI: iminsi 3</b>

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

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