Imfashanyigisho Yerekana Uburyo Hashyirwaho Ubusitani mu Mashuri

 USDA

 USAID

Imiterere y’ubusitani bw’ishuri

 umugezi

 Amajyaruguru

Ibisobanuro Ahandi binjirira

* inkingi z’uruzitiro
* ifumbire
* pepinnyeri y’ingemwe
* ibitunguru bito by’umweru/spring onion/oignon blanc

insina

* ubwoko bw’ibihumyo

(Morille noire/black morel)

* amashu
* Ubwoko bw’ibihumyo

 (Morille verte/green morel)

* amaranthe ubwoko bw’amateke
* umufumba (oseille/sorrel)
* karoti
* epinari
* okra/gombo

inanasi

 Aho binjirira imbere mu busitani

Intangiriro

Gutunganya ubusitani ni uburyo bwo guhindura imirimo ni n’uburyo bushimishije bwo kongera ibiribwa, bifasha abanyeshuri kongera ubumeny. Dore intera z’ibanze mu gukora ubusistani:

* Gushyiraho akanama gashinzwe ubwo busitani
* Guhitamo ahantu hakwiye ubusitani
* Gutegura igishushanyo cy’ubusitani
* Gutegura aho hantu
* Gutera imbuto cyangwa ingemwe
* Kwita ku busitani
* Gusarura

UMUZENGURUKO W’UBUSITANI

Uruzitiro n’umuharuro ukikije ubusitani birafasha mu kugabanya iyangirika ry’ibimera riterwa n’udukoko, amatungo yo mu rugo n’inyamaswa ziba mu bihuru.

* Harura inyuma y’uruzitiro ku buryo haboneka ubuso buri hagati ya metero 2 na metero eshanu mu bugari. Ubuso buzitiwe – imbere mu ruzitiro n’inyuma yarwo- ntibugomba kubonekamo ibyatsi bibi, kugirango udukoko tutihishamo kandi hakarandurwa ikintu cyose cyatuma ibyatsi bibi byongera kumera.
* Gutera ibihingwa byirukana udukoko na/cyangwa ibihingwa byica udukoko nka za *marigolds /rose d’inde,* ibirete cyangwaza *daisies/* *marguerites* mu ndimi z’icyongereza n’igifaransa. Guhita mubihinga mu nkengero z’uruzitiro kugirango bikumire udukoko.
* Gutera ibihingwa “bitegerwa” nk’ibinusi (Agava sisalana) cyangwa imiyenzi (Uphorbia tirucalli) bikikije umuzenguruko w’ubusitani kugirango bikumire ibyonnyi. Ibinusi bigira ibibabi bifite amahwa asongoye kandi akomeretsa bikabije. Imiyenzi igira amata amatira kandi aryana ku buryo yirukana ibikoko hafi ya bwose.
* Gutera ibihingwa bidasaba isuku nyinshi bishobora kumera ahantu hari ubutaka bubi, nk’imyumbati cyangwa ubwoko bw’amateke, hagati y’inkike y’umuzenguruko utegerwa n’ibihingwa byirukana udukoko bikikije uruzitiro. Ibi bifasha mu kurwanya ibyatsi bibi bimera kandi byongera ifumbire.

Imiyenzi Ikinusi

*Euphorbia tirucalli Agava sisalana*

GUTUNGANYA IFUMBIRE

Gutunganya ifumbire mu cyobo cyangwa mu buryo bw’ikirundo hejuru y’ubutaka. Hera ku bintu by’ikijuju byumutse; mugerekeho ikidendezi cy’ibintu by’icyatsi kibisi. Vangavanga ibyo bidendezi incuro nyinshi. Mwongereho na none imborera ikuze cyangwa itaka ryiza ryo mu bisitani kugirango ibyo byose bitangire kuborera hamwe. Minjiramo amazi kandi utwikire icyo kirundo niba cyumutse. Bihindure ubivangavanga buri cyumweru kimwe cyangwa buri byumweru bibiri.

GUTEGURA UBUTAKA

Ibimera bikura neza cyane mu gitaka kirimo amazi menshi hamwe n’ifumbire (ibinyabuzima biboze). Tunganya itaka kugeza kuri sentimetero 20 z’ubujyakuzimu, hanyuma ubivanganvange n’ifumbire mbere yo gutera imyaka.

GUTERA IMBUTO

Amabwiriza muri rusange ni ugutera imbuto mu bujyajkuzimu bureshya n’urubuto inshuro ebyiri.

 Ubujyakuzimu Bateramo Imbuto

GUSUZUMA UKO IMBUTO IMERA

Gusuzuma uko imbuto imera bizagufasha kongera umusaruro w’ubusitani bwawe. Ushobora gusuzuma imbuto mu buryo bukurikira:

1. Guhitamo ubwoko bw’imbuto ugiye gusuzuma. Niba ufite imbuto zikomoka ahantu hatandukanye, muzishyireho ibimenyetso, muzitandukanye, maze mukore isuzuma ukwaryo kuri buri tsinda. Mushyire nibura imbuto 30 mu mirongo itunganye ku gitambaro gitose kandi gisukuye. Mutwikire izo mbuto mukoresheje ikindi gice cy’igitambaro gfite isuku, noneho muzinge cya gitambaro.

Mushyire uwo mwenda uzinze mu gicucu igihe cy’iminsi hagati y’itanu (5) n’ irindwi (7). Imbuto nziza izaba yarameze muri icyo gihe. Suzuma noneho izo mbuto.

1. Mubare imbuto zameze, noneho mugabanye uwo mubare ku mubare mwasuzumye mutangira. Muhita mumenya ikigereranyo cy’umumero w’imbuto zanyu. Niba ikigereranyo cy’umumero (GR) uri munsi ya 85%, mugomba gutera umubare w’imbuto urenze uwo mwateganyaga. Uko ikigereranyo cy’umumero (GR) kigenda kigabanuka, ni nako umubare w’imbuto muzakenera gutera uzagenda wiyongera kugirango mwizere ko indiri zatewemo neza. Nk’urugero, niba ushaka ibimera bine by’ibihaza ariko umubarefatizo ukaba warabaye 70% gusa, muzakenera gutera imbuto zihagije ku bimera 5 cyangwa 6.

Urugero:

GR (G21/30) = 0, 7 =70%

 mu gihe G = # y’imbuto zameze

 N = # y’imbuto zasuzumwe

UMWANYA HAGATI Y’IKIMERA N’IKINDI

Tera imbuto cyangwa gabanya ingemwe ku buryo nibimara gukura, ibihingwa bizaba bitandukanyeho nibura ku gipimo gihwanye n’ubutambike bw’ikiganza.

UBUSITANI MURI METERO KARE

Mu busitani bufite ubuso bwa metero kare, ushobora gutera amoko menshi y’imyaka ahantu hatoya. Bisaba akazi gake kurushaho, birinda imbuto, bizigama amazi, kandi bigabanya umurimo wo kubagara. Uburyo busanzwe bwo kuburizamo ibyonnyi buba buhagije cyane ahantu hegeranye; na none, kuba ari ahantu hatoya bituma bitorehera indwara z’ibimera gukwirakwira.

INDIRI Z’UBUSITANI

Gukora indiri zigana hasi mu butaka cyangwa ziri hejuru ku butaka mukoresheje ifumbire bizatuma ubutaka bwanyu busukirwa neza kandi buba bwiza kurushaho.

GUTUNGANYA ISASIRWA N’ISUKIRWA

Gusasira ibimera no kongerera ifumbire ubusitani bwanyu bizafasha guhorana ubuhehere mu butaka, ibyatsi bibi bizaba bike cyane, bizabafasha kurwanya isuri no kubungabunga ubutaka, ndetse no kongerera ibitunga ubutaka.

INDIRI Z’UBUSITANI

Ibintu 2 bikurikira bishobora gutunganywa mu cyaro kandi ntacyo bitwaye kubikoresha mu busitani.

Ibyangombwa bikenewe mu kuburizamo udukoko twangiza imyaka (Umuti wica udukoko)

Hakoreshwa:

akayiko 1 ka tungurusumu iseye ikinyabwoya cyashushanyijwe na Dawudi Moukouyi

akayiko 1 k’urusenda ruseye

akayiko gapakiye k’isabune baconze

ibikombe 2 by’amazi yatogose.

Uburyo bikoreshwa:

1. Kuyengesha isabune mu mazi
2. Kongeramo ibindi bikoreshwa twavuze haruguru no kubivanga neza
3. Kubibika ahantu hakonje iminsi ibiri
4. Kuyungurura iyo mvange hakoreshejwe isogisi cyangwa igitambaro
5. Kuvanga igikombe 1 cy’imvange y’umuti wica udukoko hamwe n’ibikombe 10 (akadobo) by’amazi.
6. Kuminjira iyo mvange ku dutsiko tw’ibimera usanga birimo kwangizwa n’udukoko (hejuru no munsi y’ibibabi). Imvura izakuraho uwo muti, yoze ibyo bihingwa; kongera kubigenza gutyo igihe bibaye ngombwa. Kuminjira mukoresheje umuzinge cyangwa umweyo bikoze mu bwatsi cyangwa mu myenda.

KUBURIZAMO UDUKOKO TW’UDUHUMYO

Icyagenwe mu kuburizamo indwara z’ibimera zikomoka ku dukoko two mu bwoko bw’ibihumyo

Hakoreshwa:

Akayiko 1 gapakiye umuti ukoreshwa mu gukora soda (sodium bicarbonate/bicarbonate de soude)

Akayiko 1 gapakiye ifu y’isabune baconze

Ibikombe 2 by’amazi ashyushye cyane

Uburyo bikoreshwa:

1. Kuyengesha isabune mu mazi

2. Kongeramo ibindi bikoreshwa twavuze haruguru no kubivanga neza

3. Kuvanga igikombe kimwe cy’imvange y’umuti wica udukoko two mu bwoko bw’ibihumyo hamwe n’ibikombe 10 (indobo 1) by’amazi.

4. Kuminjira iyo mvange ku dutsiko tw’ibimera usanga birimo kwangizwa n’udukoko (hejuru no munsi y’ibibabi). Imvura izakuraho uwo muti, yoze ibyo bihingwa; kongera kubigenza gutyo igihe bibaye ngombwa. Kuminjira mukoresheje umwenda uzinze cyangwa umweyo ukoze mu bwatsi. Kubikoresha igihe cyose ku gihingwa gishya kimera.

IBIMERA BYICA UDUKOKO

Ibimera byinshi bifite urwunge rw’ibintu byirukana cyangwa byica udukoko (imiti yica udukoko). Ku rutonde ruboneka hano hepfo murasanga bimwe mu bimera byica udukoko byiyongera kuri tungurusumu n’urusenda (reba ku ipaji ya 3). Imiti yica udukoko nk’imvange ya tungurusumu/urusenda/isabune irafasha mu kugabanya udukoko twangiza imyaka. Uramutse usanze ko ntacyo ugeraho kigaragara, hitamo kimwe cyangwa byinshi mu bihingwa musanga ku rutonde ruboneka hano hepfo noneho murebe ububasha byabyo. Ni byiza cyane guhinduranya buri mwaka imiti yica udukoko kugira ngo udukoko tutongera ubwikanyize ku muti runaka.

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| **Izina Risanzwe & Izina ry’Abahanga** | **Ubwoko bw’Igihingwa** | **Ibice Bikoreshwa** | **Uko Bikoreshwa** | **Ibindi bisobanuro** |
| **Marigold**/Rose d’inde*Tagetes spp*.**Yera hejuru ku butaka** | Icyatsi gikura impagarike kandi cyera buri mwaka | Igihingwa cyose uko cyakabaye ; cyane cyane amababi | Iki gihingwa cyose uko cyakabaye cyigizayo udukoko | Uburabyo bwacyo bukoreshwa mu gutaka ahantu ; giha ubusitani isura nziza |
| **Neem***Azadirachta**Indica***Yera hejuru ku butaka** | Kirugara, gikura vuba, ni igiti cyisanzura kikanagira agatsiko k’ibibabi | Imbuto zacyo ni umuti w’ingirakamaro mu kwica udukoko | 0,6 by’ikiro cy’imbuto zumye, ziseye muri Litiro 10 z’amazi ashyushye igihe cy’amasaha 24 ; kuyungurura ; kongeramo igarama 1 y’isabune ; kongeramo amazi 1 :10 (igipimo 1 cy’umuti : inshuro 9 z’amazi) ; Kuminjira ku bimera mbere cyangwa nyuma ya saa sita. Kutabikora ku bihingwa by’inyanya biri mu rugo. | Azadirachtin ikomoka kuri iki gihingwa. Ibice byose by’icyo giti bifite akamaro ! Amababi ni meza cyane mu gukora ifumbire. Udushami tw’icyo giti ni twiza mu kubungabunga ubuzima bw’amenyo. Iyo cyumye, igiti cyacyo cyaka neza. |
| **Derris/Poison vine:** *Derris elliptica***Yera hejuru ku butaka** | Icyatsi cyurira kandi gikura vuba kikagira ibibabi by’urwunge | Imizi yacyo ni ingirakamaro mu kwica udukoko | Imizi isekuye hongerewemo imvange ya alikolo hamwe n’amazi igihe cy’amasaha 24; kuyungurura no guhita uminjira ku bimera. | Inkomoko y’uyu muti ni ku bicuruzwa by’ibirete. Nta ngaruka bigira ku bantu muri rusange; mwiza cyane ku busitani bw’amashuri. |
| **Chrysanthum***Chrysanthum**cinerariaefolium***Yera hejuru ku butaka** | Cyera impagarike hejuru y’ubutaka rimwe mu mwaka kandi kigira utwatsi | Imbuto (imitwe y’uburabyo) zivamo umuti wica udukoko(insecticide) | Gushyira uburabyo bwanitse muri peteroli igihe cy’amasaha 24; kumimina uwo mushongi, hanyuma muka wongeramo amazi 1:10 ( igice 1 cy’umushongi: ibice 10 by’amazi) no kubiminjira mu bihingwa. | Bikomoka ku bicuruzwa by’ibirete. Ntacyo bitwara abantu muri rusange; ni ingirakamaro mu busitani bw’amashuri. |

Ibihingwa bitanga amatunda

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| *Izina Risanzwe & Izina ry’Abahanga* | *Izuba n’ubuhehere mu butaka* | *Iminsi yo gusarura & Uburyo* | *Akamaro ku buzima bwiza* | *Ibindi bisobanuro & Ibihingwa bikurana* |
| **Eggplant/****Aubergine/** **Ikibiringanya***Solanum melongena* **Yera hejuru ku butaka** | Gikenera imirasire y’izuba, aho cyeruruka.Ubujyakuzimu bw’imizi buraciriritseUbutaka bugomba kuba buhehereye munsi ya 2cm. | Iminsi hagati ya 80 na 90Gisarurwa ari cyiza igihe kimaze gukomera kandi cyerurutse, kandi mbere y’uko gikururumba. | Ni cyiza mu gutanga indodo na potasiyumu*.* Gifasha umubiri gukoresha imyunyungugu (*carbohydrates)* n’intungamubiri *(protéines)*, kikanashyira mu buryo ibipimo by’amazi yo mu mubiri. | Kugisasira utwatsi twa pinusi niba dushobora kuboneka. |
| **Pepper/****Urusenda***Capsicum annuum,**C. frutescens***Yera hejuru ku butaka** | Rukenera imirasire y’izuba, aho rweruruka.Ubujyakuzimu bw’imizi yarwo buraciriritseUbutaka bugomba kuba buhehereye munsi ya sentimetero 2. | Iminsi hagati ya 60 na 90Kurusoroma rukomeye rufite umubyimba nyawo n’irangi nyaryo. Gurusarura rumaze gukura kugirango rukomeze rubyare amatunda. | Rufite akamaro cyane cyane mu kongera uburyohe no kuba umuti usanzwe wica udukoko. Rufasha mu kuvura ibikomere n’ ibisebe.Rukurinda ubwandu. Rukomeza ubuzima bw’uruhu n’urw’ishinya. Rufasha amaso kubona nijoro. Rufite za Vitamini A na C. | Kurwongerera ifumbire nko mu byumweru 8 rumaze guterwa.Ibimera bibana neza: ibitunguru.Insenda ni ingirakamaro iyo barushyize mu miti yica udukoko isanzwe kandi itarimo ubumara. |
| **Tomato/Tomate***Solanum lycopersicum***Yera hejuru ku butaka** | Ikenera imirasire y’izuba, aho yeruruka.Ubujyakuzimu bw’imizi yayo buraciriritseUbutaka bugomba kuba buhehereye munsi ya 2cm. | Iminsi hagati ya 70 na 90Kurusarura rutukuye rwose kugirango itange intungamubiri n’uburyohe | Ifite vitamini A na C nyinshi. Rufite akamaro cyane cyane mu kongera uburyohe no kuba umuti usanzwe wica udukoko. Rufasha mu kuvura ibikomere n’ ibisebe.Rukurinda ubwandu. Rukomeza ubuzima bw’uruhu n’urw’ishinya. Rufasha mu kwakira ubutare mu mubiri.Rufasha amaso kubona nijoro. | Ibimera bikurana : amashu, karoti, ibitunguru, insenda.Biroroshye kubika imbuto zayo ; kunyanyagiza imbuto ku rupapuro, ukanika. |
| **Gumbo (Okra) /Gombo***Abelmoschus esculentus***Yera hejuru ku butaka** | Ikenera imirasire y’izuba, aho yeruruka.Ubujyakuzimu bw’imizi buraciriritseUbutaka bugomba kuba buhehereye munsi ya sentimetero 4. | Iminsi hagati ya 55 na 65Gusarura Okra kenshi bituma icyo kimera gikomeza gutanga umusaruro.Isarurwa mu kigero cyiza iyo itunda ryacyo rifite sentimetero 10 z’uburebure, ariko rikiri icyatsi kibisi. | Vitamines C, ubutare, kalisiyumu na potasiyumu. Ni nziza mu guha umubiri ubuzima bwiza ikanafasha kuvura ibisebe. Irinda ubwandu.Iteza imbere imikurire y’umuntu. Ifite calcium ituma amagufa n’amenyo bikomera. | Yitwara neza mu gihe cy’izuba.Biroroshye kubika imbutozayo. Imiteja iyo imaze kuba minin urayanika. Ukuramo imbuto uza tera ubutaha. |
| **Corn/Maïs****/Ikigori***Zea mays***Yera hejuru ku butaka** | Gikenera imirasire y’izuba, aho cyeruruka.Ubujyakuzimu bw’imizi ni butoUbutaka bwo hejuru bugomba kuba buhehereye. Gutera imbuto imwe gusa muri buri cyobo. | Iminsi hagati ya 70 na 90Kugica igihe imisatsi yacyo yabaye ikijuju kandi ihundo ryujuje imbuto | Gitanga ingufu, potasiyumu n’imigozi ituma amazi yo mu mubiri ajya mu buryo ikanafasha mu kugogora ibiryo. | Gutwikira imizi igihe igaragara hejuru butaka.Ibihingwa by’ibibanyi byiza ni ibishyimbo na za concombres. |
| **Pinapple / Inanasi***Ananas comosus***Yera hejuru ku butaka** | Ikenera imirasire y’izuba, aho yeruruka.Ubujyakuzimu bw’imizi buraciriritseUbutaka bugomba kuba buhehereye munsi ya sentimetero 2. | Iminsi hagati y’100 na 180Kuyica igihe igitunda cyabaye kinini kinatangira guhindura irangi | Ituma amenyo n’ishinya bigumana ubuzima bwiza.Ifasha mu kuvura ibikomere n’ibisebe. Ikumira ubwandu. IGIRA Indodo byinshi. Ni inkomoko ihanitse ya Vitamini C. | Aho gutera imbuto, batera ibishishwa, amabere, imitwe cyangwa ibyana. Ikimera cy’ikibanyi cyiza : Igikakarubamba |

Ibimera byurira

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| *Izina Risanzwe & Izina ry’Abahanga* | *Izuba n’ubuhehere mu butaka* | *Iminsi yo gusarura & Uburyo* | *Akamaro bifitiye ubuzima bwiza* | *Ibindi bisobanuro & Ibihingwa bikurana* |
| **Cucumber/ Concombre***Cucumis sativis***Yera hejuru ku butaka** | Ikenera imirasire y’izuba, aho yeruruka.Ubujyakuzimu bw’imizi ni Bugufi/BuraciriritseUbutaka bugomba kuba buhehereye munsi ya sentimetero 2. | Iminsi hagati ya 50 na 70Kuzisarura igihe ari icyatsi kibisi cyerurutse kandi zikomeye – mbere y’uko izo concombres zihisha.Kuzisarura kenshi/buri cyumweru kugirango ikimera gikomeze gutanga umusaruro.  | Ihanitse mu kugira potasiyumu n’imigozi ituma amazi yo mu mubiri aringanira kandi igafasha mu kugogora ibiryo. Zituzanira imbaraga na za vitamini A, B na C. | Ibihingwa hamwe nayo: ibishyimbo, ibigori, ibitunguru, na za *rose d’inde / marigold.**Kugirango mubike imbuto, murareka igitunda kigahisha.* |
| **Pumkin/ Ikidegede***Cucurbita maxima***Yera hejuru ku butaka** | Rikenera imirasire y’izuba, aho ryeruruka.Ubujyakuzimu bw’imizi buraciriritseUbutaka bugomba kuba buhehereye munsi ya sentimetero 2. | Iminsi hagati ya 600 na 180Gusarura amadeged ni igihe yugaye kandi yahinduye irangi | Ahanitse muri Vitamine A. Ni meza cyane ku maso cyane cyane mu kureba nijoro.Afite akamaro ku magufa, uruhu n’imikaya y’umubiri itoshye ahantu hose.Rifasha mu budahangarwa bw’umubiri.Inkomoko iboneye y’indodo. | Ibimera bihingwa na cyo : ibigori/ ibishyimbo, *margolds* cyangwa *rose d’inde* mu gifaransa.Biroroshye kubika imbuto. Na zo ziraribwa ; ziryoha cyane cyane iyo zikaranze. |
| **Watermelon/ Mélon d’eau****/Pastèque***Citrulus lanatus***Yera hejuru ku butaka** | Ikenera imirasire y’izuba, aho yeruruka.Ubujyakuzimu bw’imizi buraciriritseUbutaka bugomba kuba buhehereye munsi ya sentimetero 2. | Iminsi hagati ya 60 na 100Kugisarura igihe igitunda cyugaye | Kirinda abantu ubwandu. Gifasha mu kuvura ibikomere n’ibisebe.Gifasha umubiri kwakira ubutare.  | Gikomoka muri Afurika yo agati!Ibihingwa hamwe: ibigori, *marigold!rose d’inde, nasturtium*.Biroroshye kubika imbuto. |

Imboga rwatsi

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| *Izina Risanzwe & Izina ry’Abahanga* | *Izuba n’ubuhehere mu butaka* | *Iminsi yo gusarura & Uburyo* | *Akamaro zifitiye ubuzima bwiza* | *Ibindi bisobanuro & Ibihingwa bikurana* |
| **Amaranthe***Amaranthus spp.***Yera hejuru ku butaka** | Ikenera imirasire y’izuba, aho yeruruka.Ubujyakuzimu bw’imizi : Bugufi/BuciriritseUbutaka bugomba kuba buhehereye munsi ya sentimetero 2. | Iminsi 30+Soroma ibyatsi bitarakururumba. Kuyica umutwe igihe igihimba gitanga uburabyo gikomeza gukura nokazana ibindi bibabi.Gusarura kenshi kugirango haze ibindi bibabi | Ikomokaho za Vitamini nyisnshi n’imyungungugu bifasha mu kurwanya ubwandu no kuvura ibikomere n’ibisebe. | Biroroshye kuyihinga no kubona imbuto zayo. Yitwara neza ahantu hatumye cyane.Igira Oxalic acid/Acide Oxalique; igomba kwitazwa igihe ufite arthrite. Ntigomba kongera gucanirwa kuko ishobora kuba yakwangiza abana. Kwigizayo amazi akoreshwa mu guteka. |
| **Beet (Beetroot)/****Beterave***Beta vulgaris***Yera hejuru ku butaka** | Ikenera imirasire y’izuba, aho yeruruka.Ntikunda ubutaka. Ishaka ubutaka buhehereye, bunatwikiriye. | Hagati y’iminsi 50 na 60Imboga z’icyatsi ziri ku mitwe y’amashami zishobora gutekwa. Kuzisarura igihe zifite hafi sentimetero 5 z’uburebure. | Umutobe wayo ubereye gukora umuti uburizamo umugese. Imboga rwatsi zikorwamo *calcium.*  | Kuyirinda ibyatsi bibi. Kuyihinga ahantu hagufi. |
| **Cabbage/ Amashu***Brassica oleracea***Yera hejuru ku butaka** | Izuba: si cyaneUbujyakuzimu bw’imizi: Bugufi / BuciriritseUbutaka bugomba kuba buhehereye munsi ya sentimetero 2. | Iminsi hagati ya 60 na 90Kuyica umutwe wayo umaze gukomera. Reka ibibabi bishaje bigumeho, ibiti n’imizi kugirango bizatange ibyana mu gihe cy’umumero gitaha. | Vitamine C ifasha mu kuvura ibikomere n’ibisebe. Arinda ubwandu. Atuma ishinya iguma kumera neza. Akomeza ubudahangarwa. Afite *Zinc* ifasha mu kurwanya malariya n’izindi ndwara. Indodo zifasha kugogora ibiryo.Vitamini A ifasha amaso, cyane cyane nijoro. | Abana neza n’ibishyimbo, ibitunguru, amatomate, na za *marigolds*.Ishu ikura neza kurushaho mu bihe birimo ubukonje. |
| **Cauliflower****/Choux-fleur***Brassica oleracea botrytis***Yera hejuru ku butaka** | Izuba: Si cyaneIkunda ubutaka butoshye, bufite amazi menshi | Iminsi hagati ya 70 na 80Gusoroma imitwe igihe ifite umubyimba ukwiye, hagati ya cm 12 na 15. Kuyitema ukoresheje imbugita, ikajyana n’ibibabi. | Ifasha mu kuvura ibikomere n’ibisebe. Irinda ubwandu. Ituma uruhu n’ishinya biguma kumera neza. Ni nziza mu gutanga indodo n’imiti biburizamo umugese, bityo bigafasha kuburizamo kanseri yo mu rura rukuru. | Kugira ngo umweru w’umutwe uboneke, hambirira amababi y’inyuma kuri uwo mutwe, bituma imirasire y’izuba iburizwamo. |
| **Collards /****Choux cavalier***Brassica oleracea var. acephala***Yera hejuru ku butaka** | Izuba: si cyaneUbujyakuzimu bw’imizi:Bugufi /BuciriritseUbutaka bugomba kuba buhehereye munsi ya 2cm. | Iminsi hagati ya 50 na 80Gusoroma gusa amababi abanza cyangwa ari inyuma kugirango igihingwa gikomeze gukura. Ibyo nibizarangira, uzateme igiti cyose hejuru y’aho cm 8 zigera uvuye hasi; ibyana bishyashya bishobora kuvuka kuri icyo giti. | Vitamini nyinshi, *calcium* na *potassium*. Ifasha mu kuvura ibikomere n’ibisebe. Irinda ubwandu. Ituma uruhu n’ishinya biguma kugira ubuzima bwiza. Igira calcium ifita akamaro ku magufwa n’amenyo. Ituma amaso areba nijoro. Ifasha umutimaItuma umuntu akura. Ifite Vitamine K n’ubutare bifasha amaraso gukora neza.  | Igomba Nitrogène nyinshi kugirango ibe icyatsi cyijimye.Ibihingwa bikurana: ibishyimbo, ibitunguru, amatomate, na *marigolds*. |
| **Endive na Chicory/ Sukumawici***Cichorium endiva* na *C. intybus***Yera hejuru ku butaka** | Bikenera imirasire y’izuba, aho byeruruka.Ubujyakuzimu bw’imizi : Buciriritse/ BurebureUbutaka bugomba kuba buhehereye munsi ya 2cm. | Iminsi 30+Gusoroma ibibabi mbere y’uko bikura cyaneGusukira igihingwa amazi bihagije mbere yo yo kugisoroma kugira ngo ibibabi bigire amazi. | Birahanitsse mu gutanga za Vitamini A, K, na *Folate*, bituma amaso areba nijoro, amaraso afata no kubaka udusoro tw’amaraso. | Imizi ishobora gukarangwa no gukoreshwa nk’insimbura y’ikahwa.Biroroshye kubika imbuto za sukumawici; barayireka ikarema imbuto hejuru mu burabyo. |
| **Kale/Choux vert frisé***Brassica oleracea acephala***Yera hejuru ku butaka** | Izuba: Si cyaneIkunda ibintu bikomoka ku binyabuzima mu butaka, ari byo bikunze kuzana ubuhehere. Ikenera ubutaka butoshye n’amazi menshi. | Iminsi hagati ya 50 na 80Amababi, ibyana bitangiye kuzana ururabyo n’igihimba, byose bishobora gusarurwa bigatekwa. | Vitamini nyinshi n’ imyunyungugu. Ifasha mu kuvura ibikomere n’ibisebe. Irinda ubwandu. Ituma uruhu n’ishinya bigumya kugira ubuzima bwiza. Ifasha mu kwakira ubutare. Ifasha amaso kureba nijoro. | Yihanganira ubushyuhe buri hejuru cyane. |
| **Sorrel/Oseille / Umufumba***Rumex spp.***Yera hejuru ku butaka** | Ikenera imirasire y’izuba, aho yeruruka.Ubujyakuzimu bw’imizi : Bugufiya/ BuraciriritseUbutaka bugomba kuba buhehereye munsi ya sentimetero 2. | Iminsi 30 +Gusoroma ibibabi bitarakura.Gutema umutwe w’ikimera igihe igiti gitangiye gukura kugira ngo hashobora kumera ibindi bibabi.  | Itanga neza za Vitamini, imyunyungugu, n’indodo. | Kimwe na amaranthe, ifite acide oxalique.Biroroshye kubika imbuto: kureka uburabyo, amatunda n’ imbuto bigakura.  |
| **Spinach/****Epinard/ Sipinaci***Spinacia oleraea***Yera hejuru ku butaka** | Izuba: Si cyaneUbujyakuzimu bw’imizi bugufi/ BuciriritseUbutaka bugomba kuba buhehereye munsi ya 4cm. | Iminsi hagati ya 45na 50Gsoroma igihe ibinini mu bibabi bifite 15-20cm z’uburebure. Kurandura uvana mu murongo ibihingwa byose birusha ibindi ubunini kugeza igihe uzaba wabisaruye byose. Gusarura kenshi kugirango sipinaci ikomeze gutanga umusaruro. | Nziza mu gutanga za Vitamini A, B, C, K, ubutare, calisiyumu, *folate* na potasiyumu bifitiye akamaro uruhu, amaso, amagufwa, amenyo n’amaraso. Ifasha mu kuvura ibikomere n’ibisebe. Ikumira ubwandu. Irinda ubusugire bw’uruhu n’ubw’ishinya. Izana ubutare mu maraso, kandi ituma amaraso atembera.  | Ibihingwa bikurana: ibishyimbo, ibitunguru, amatomate, na *marigold*. |
| **Swiss Chard/****Bette** *Beta vulgaris cicla***Yera hejuru ku butaka** | Ikenera imirasire y’izuba, aho yeruruka.Cyihanganira ubushyuhe buhanitse n’imvura nyinshi. | Iminsi hagati ya 60 na 70Guca ibibabi byo mu nkengero igihe kikiri gito, ntuce amababi y’imbere. Ishobora gutanga umusaruro wikurikiranya mu bihe byiza.  | Za vitamine A na C. Ifasha mu kuvura ibikomere n’ibisebe. Irinda ubwandu. Irinda ubusugire bw’uruhu n’ubw’ishinya. Ifasha umubiri kwinjiza ubutare. Ituma amaso arora nijoro. | Imizi iri bugufi.Yongera umusaruro ahantu hari inyongera ya *Nitrogène.*Ibyatsi bikuze biribwa neza iyo bitetse. |

Imboga

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| *Izina Risanzwe & Izina ry’Abahanga* | *Izuba n’ubuhehere mu butaka* | *Iminsi yo gusarura & Uburyo* | *Akamaro zifitiye ubuzima bwiza* | *Ibindi bisobanuro & Ibihingwa bikurana* |
| **Green Bean / Haricot Vert / Imiteja***Phaseolus vulgaris***Yera hejuru ku butaka** | Ikenera imirasire y’izuba, aho yeruruka.Ubujyakuzimu bw’imizi : Bugufiya / BuciriritseUbutaka bugomba kuba buhehereye munsi ya 2 cm. | Iminsi hagati ya 45 na 70Gusoroma igihe imisogwe iri hafi gukura, ariko mbere y’uko imbuto zitangira gufata umubyimba.Kudasoroma imiteja itose cyangwa ifite urume; ibi bituma haza umubore.Totora kenshi kugirango indi miteja ikure. | Ihanitse mu kugira indodo, ubutare na potasiyumu. Ubutare cyane cyane bwiza ku bagore ngo batagire ibura ry’amaraso. Zinki ifasha kurwanya malariya n’izindi ndwara. | Ibishyimbo bihemberwa bituma umuntu akura kurusha ibishyimbo by’imbuto ngufi bitewe mu buso bungana. Zirika ibimera ku mihembezo y’imigano.Ibihingwa bikurana: amashu, karoti, ibigori, *cocombres*, ibibiringanya, *marigolds*. |
| **Peanut/****Arachide/ Ubunyobwa***Arachis hypogea***Yera mu butaka** | Ikenera imirasire y’izuba, aho yeruruka.Ubujyakuzimu bw’imizi : Buciriritse/ BurebureAmazi arakenerwa cyane hagati y’iminsi 50 na 100 nyuma yo kubutera kubera y’uko imisogwe igenda ikura. Amazi akenerwa arushaho kuba make mu byumweru 2 mbere yo gusarura. | Iminsi hagati ya 70 na 140Reba niba ubunyobwa bukuze kandi niba imbuto zigaragara mu bishishwa byazo mbere yo gusarura. Kura ubunyobwa ku giti cyabwo, ubwanike igihe kirekire kugirango butabora. | Ni bwiza cyane mu gutanga intungamubiri (proteines) zituma umuntu akura. Ni bwiza mu kugira indodo, ubutare, amavuta akomokaho ibinure na vitamini B isana imikaya y’umubiri | Igihingwa cyiza cyane mu kunoza uburumbuke bw’ubutaka. Kugarura imizi mu butaka bw’ubusitani. Koresha ibice byose by’igihingwa uko byakabaye mu gukora ifumbire harimo n’ibishishwa. |

 Imbogarwatsi z’Ibinyabijumba

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| *Izina Risanzwe & Izina ry’Abahanga* | *Izuba n’ubuhehere mu butaka* | *Iminsi yo gusarura & Uburyo* | *Akamaro zifitiye ubuzima bwiza* | *Ibindi bisobanuro & Ibihingwa bikurana* |
| **Carrot / Karoti***Daucus carota spp. Sativus***Yera hasi mu butaka** | Ikenera imirasire y’izuba, aho yeruruka.Ubujyakuzimu bw’imizi : Bugufiya/ BuraciriritseUbutaka bugomba kuba buhehereye munsi ya 4cm. | Iminsi hagati ya 70 na 80Kuzisukira amazi mbere yo kuzisaruraKuzirandura igihe imizi ifite hafi diyametero ya 5 cm cyangwa zirenga.  | Nziza cyane mu gutuma umuntu abona, cyane cyane kubona nijoro. Itera uruhu kumera neza kandi irinda ubwandu. Ni nziza ku ruhu no ku mikaya y’umubiri muri rusange.  | Ihinganwa n’ ibishyimbo, ibitunguru, itomate. |
| **Garlic / Tungurusumu***Allium sativum***Onion /** **Ibitunguru***Allium cepa***Yera hasi mu butaka** | Ikenera imirasire y’izuba, aho yeruruka.Ubujyakuzimu bw’imizi : BugufiyaUbutaka bwo hejuru bugomba kuba buhehereye. | Iminsi hagati ya 90 na 120Kurya ibitunguru na tungurusumu igihe bitarakura. Cyangwa: Gusarura ikijumba cyumye igihe umutwe wacyo utagifashe. Kuvana umutwe ku kijumba no kukireka kigakomeza kuma. | Vitamini C na potasiyumu. Ni ikirungo cyiza cyane.  | Gikunda ubushyuhe burimo akabeho. Ibihingwa by’ibibanyi byiza ni : amashu, karoti, *concombres*, insenda, amatomate. |
| **Sweet potato/ Patate / Ikijumba***Ipomea batatas***Yera hasi mu butaka** | Gikenera imirasire y’izuba, aho yeruruka.Ubujyakuzimu bw’imizi : BugufiyaUbutaka bwo hejuru bugomba kuba buhehereye  | Iminsi hagati ya 60 na 100Gukura ibijumba hanyuma ukongera ugatera imigozo yabyo | Birahanitse mu gutanga Vitamine A ituma umuntu abona neza, cyane cyane nijoro. Bifadha mu gukomeza amagufwa n’amenyo. Ni byiza ku ruhu no ku mu biri muri rusange.Ibimera byabyo bishobora kuribwa nk’imbogarwatsi bikiri bito kubera y’uko bihanitse mu kugira ubutare, za vitamines A na C no gutanga ingufu. | Gutera ibice by’igihingwa cy’ikirandaryi.Ibihingwa bijyana na byo : ibigori, ibishyimbo, *concombres,* amadegede, *pastèques.* |
| **Yams / ignames/ ibikoro***Dioscorea spp.***Yera hasi mu butaka** | Bikenera imirasire y’izuba, aho yeruruka.Ubujyakuzimu bw’imizi : BurebureUbutaka bugomba kuba buhehereye munsi ya 4cm. | Iminsi hagat ya 100 na 130Ntibikenra amazi mu byumweru bya nyuma mbere yo kubisarurra.Gucukurana ubwitonzi kugirango utabitema, kubikomeretsa no gucamo kabiri ibijumba byabyo. Kubirya bikimara gusarurwa kubera bitamerana neza n’ubushyuhe bwo muri Afurika. | Bifasha mu kuvura ibikomere n’ibisebe. Birinda ubwandu. Bituma uruhu n’ishinya biguma kugira ubuzima bwiza.Ni byiza mu gutanga. Indodo.Amoko yabyo ajya gusa n’icungwa cyangwa n’umuhondo ni yo afite intungamubiri nyinshi kurusha ayandi. | Kubihata no kubitogosa mu kuvanamo za oxalates.Birahanitse mu kugira intungamubiri kurusha ibindi bihingwa by’ibinyabijumba.Mu kubikwirakwiza, koresha ibice by’ikinyakijumba bifite ibyana. |

 Ibiti

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| **Insina***Musa spp.***Yera hejuru ku butaka** | Ikenera imirasire y’izuba, aho yeruruka.Ubujyakuzimu bw’imizi : BurebureUbutaka bwo hejuru bushobora kuba bwumye | Amezi hagati ya 10 na 15Gusarura igihe amabere yakuze byimazeyo noneho agahinduka umuhondo. | Ifite potasiyumu nyinshi, ituma amazi yo mu mubiri akorana injyana.Nziza ku bana bato no ku basaza kuko kugogora ibitoki cy imineke byoroshye.Igipimo cya za Vitamines A na C ni gito. | Kongera ibimera by’insina ku ifumbire mu gufasha kugarura *calcium* mu butaka. Ubutumba bw’insina bushobora gukoreshwa mu kuboha ibiziriko n’ibirago.Amakoma akoreshwa mu gucana umuriro bagateka, hari ibindi bishobora kuribwa.Nyuma yo kumanura igitoki, tema insina yose ; izameramo indi nsina mu ntango yayo |
| **Indimu***Citrus spp.***Yera hejuru ku butaka** | Ikenera imirasire y’izuba, aho yeruruka.Ubujyakuzimu bw’imizi : Burebure | Gusarura amatunda igihe akuze bihagije; uruhu ruzahumura neza niba igishishwa gikozwehoIzana amatunda mu myaka (3) itatu + guhera igihe igihingwa cyaterewe; byarengaho niba harakoreshejwe urubuto. | Igira vitamine C byahebuje; iburizamo guhinamirana kw’ingingo z’umubiri.Ikenerwa mu gukura ubutare mu biribwa.Ituma indwara zikira vuba kandi ikomeza ubudahangarwa by’umubiri. | Uburyo bwo kuyikwirakwiza ni mu gusasira; gukoresha amashami ashaje cyane.Ibishishwa n’ibibbi ni ingirakamaro mu kwica utuyoka two mu nda. |
| **Mango / Umwembe***Mangifera indica***Yera hejuru ku butaka** | Ukenera imirasire y’izuba, aho yeruruka.Ubujyakuzimu bw’imizi : Burebure | Uzana amatunda mu myaka (3) itatu nyuma yo kuyihinga.Gusarurra amatunda igihe ibara ry’umuhondo ujya gutukura rigaragara ku gihu. | Utanga Vitamines A na C ku buryo buhagije, na potasiyumu.Ufasha mu kuvura ibikomere n’ibisebe, ugakomeza ubudahangarwa. Ufasha amaso n’imikaya. Kurinda iminwa igishishwa cy’iryo tunda – hari abo bitera kuribwa. | Hitamo ubwoko buzwi noneho ubufatishe mu mwaka wa 2 cyangwa wa 3 ku ngemwe wateguye.Igiti cyeze gitanga igicucu kidasanzwe n’amajana y’amatunda. |
| **Ipapayi***Carica papaya***Yera hejuru ku butaka** | Ikenera imirasire y’izuba, aho yeruruka.Ubujyakuzimu bw’imizi : BurebureUbutaka bwo hejuru bushobora kuba bwumye | Amezi hagati ya 7 na 11Gusarura itunda igihe rifite irangi ry’umuhondo ujya kuba orange. | Irahanitse muri Vitamini C na potsiyumu.Ifasha mu kuvura ibikomere n’ibisebe. Ikumira ubwandu. Ituma uruhu n’inyinya bigumana ubuzima bwiza;Ifasha mu kugogora ibiribwa. | Indabyo zigomba guhura n’umurama w’imbuto kugira ngo zizatange amatunda.Biroroshye kubika imbuto, ariko hakuweho igihande cy’umubiri gikikije buri rubuto kugira ngo kumera kw’imbuto kwihute, kandi neza.  |
| **Safu / Ikinyomoro***Dacryodesedulis***Yera hejuru ku butaka** | Gikenera imirasire y’izuba, aho cyeruruka.Ubujyakuzimu bw’imizi : Burebure | Kizana amatunda nyuma y’imyaka (3) itatu | Inkomoko ihanitse y’amavuta akomoka ku bihingwa (33-65%) n’intungamubiri.Gifasha umubiri gufata zimwe muri za Vitamine, cyane cyane Vitamine A. | Kiroroshye gukwirakwiza hakoreshejwe imbuto zateguwe cyangwa ingemwe zimurwa ndetse n’izo mu bihuru.Gikomoka muri Kongo! |

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KU NKUNGA Y’ABANYAMERIKA

Iki gikorwa cyatewe inkunga n’Umushinga Ugamije Uburezi muri Afurika w’Ibiro by’Iterambere Mpuzamahanga bya Leta Zunze Ubumwe za Amerika kandi ushyirwa mu bikorwa ku bufatanye n’Ikigo gishinzwe Ubuhinzi cya Leta Zunze Ubumwe za Amerika ; the University of Wisconsin-Extension ; Minisiteri y’Uburezi, Ikoranabuhanga n’Ubumenyi y’u Rwanda ; Minisiteri y’Ubuhinzi y’u Rwanda ; Forum for African Women Educationalists (FAWE Rwanda) ; Minisiteri y’Uburezi ya Repubulika Iharanira Demokarasi ya Kongo ; Minisiteri y’Ubuhinzi ya Kongo ; Ubufatanye Mpuzamahanga mu Iterambere ry’Abaturage, na Bay Mills Community College.

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