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AKARANGA KO MU BIHUGU VYA AFRIKA YO MU BUSERUKO

AKARANGA K IVYIMBURWA KAMA VYO MURI AFRIKA Y UBUSERUKO

AFRIKA YO MU BUSERUKO

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AKARANGA KO MURI AFRIKA Y UBUSERUKO

Akaranga k ibihingurwa (ivyimburwa) kama vyo muri Afrika y ubuseruko

1. Ibituraba ahanini

Aka karanga ko muri i Afrika y ubuseruko kerekana ibikenewe kugira haboneke ivyimburwa kama.
Aka karanga karaba ahanini ingene horonkwa ivyo vyimburwa, ubworozi, ukuronka inzuki, ugushirahamwe ibintu vyo mw ishamba, n ugushirako udupapuro twerekana ico kintu cabonetse.
Urwo rugero ntiruraba ingene babisuzuma kugirabarabe ko bimeze uko vyategerezwa kuba.

2. Ivyisunzwe mugutegura ako karanga

Urwo rugero rwo muri Africa y ubuseruko rurerekana ivyo bisunga n amatariki canke amatariki y ivyo basomye ku bandi. Izo ngero bisunga baraza barazivuga iyo bikenewe muri bino bigabane biza gukurikira.
Kuri izo ngero bisunga ziba zifise amatariki, hari ivyo bagiye barongeramwo canke bakabisubiramwo kuri ivyo vyari vyasohowe kandi bavyemera ko arivyo bisunze urwo rugero birinze gusuzumwa muri ubwo buryo.
Kuri izo ngezo zitaba zifise amatariki, igitabo casohotse ubwanyma cisunze ivyo vyari vyashizwe mu ngiro.

CAC/GL 32, codex Alimentarius: Ibikenewe kugira haboneke umwimbu, ingene bitegurwa, ingene bashirako udupapuro tuvyerekana, ingene bagurisha infungurwa baronse muri ubwo buryo kama.
IFOAM: Ingene bategura umwimbu bakoresheje ubwo buryo kama ku ngero ngenderwako(bisunze igitabu casohotse muri 2005)

3. Amajambo n insiguro yayo

Kugira bitahurike neza ivyerekeye ako karanga, izi nsiguro zikurikira zitegerezwa gukoreshwa.

3.1
Ibinyabuzima (Biodiversite)

Ingene ibinyabuzima bihindagurika, ingene les genes zitanye n ukuvuka mu ma especes canke mu bwoko n ukuvuga ingene zingana n ingenezihindagurika, n ingene ecosysteme itanye(n ukuvuga igiharuro kiri hamwe c ubwoko bwose bugize ecosysteme.

3.2
Irondoka
Gutora ibiterwa canke gucagura ibiterwa canke ibikoko bakoresha mu kurondoka kugira baronke ibitrérwa canke ibikoko bifise ivyo bifuza mw irondoka rikurikira.

3.3
Ikibanza kiba catowe
Kuzitira ikibanza kiba cizwe neza kugira bagiharire iryo rondoka n ikindi kibanza co hirya yaco kugira bagerageze kwigizayo ibintu vyotuma vyandukirwa muri iry rondoka hanyuma ntiriba nkuko bavyifuza.

3.4
Umwana
Umuntu wesw afise munsi y imyaka iba yemewe n amategeko y igihugu, mu bihe vyisungwa mu kazi, n uwo muntu wese afise munsi y imyaka 18.

3.5
Akazi k umwana

akazi kose katorohereza agateka n ubwigenege bw umwana n ibikenewe mu kwiga ufatiye ku mica ibereye.

3.6
Ukwandukirwa

Iyononekara y ivyo bihingurwa canke ukwandukirwa kw isi ntoya canke kuba habaye ugukoranako n ikintu ico arico cose gishobora gutuma ivyo bihingurwa (ivyimburwa) bita akaranga bashaka hanyuma ntibiba nkuko bavyifuza.

3.7
Le conventionnel

Ikintu cose gikoreshwa mu kuronka uwo mwimbu canke uburyo bwo kubihingura butari kama canke butari kama babihinduye.

3.8
Igihe co guhindura

Umwanya hagati yo gutangura gukwirikirana ivyo bintu canke ivyimburwa kama n umwanya wo gushika aho ivyimburwa n ivyavuye mu bikoko bashobora kubifata nkuko ari kama.

3.9
Ugukurakuranya ivyimburwa

Uburyo bwo gukuranya ivyimburwa canke imiryango y ivyimburwa ku mwaka canke ku myaka ibiri birimwe kw isi imwe kugira batuze ibiterwa bidakenewe, akaranda canke ugukwirikirana kw indwara kugirango haboneke hakarusho n uburyohe bw isi n ibigize ico kintu kama.

3.10
Ivyo bongera mu bifungurwa (additives alimentaires)

Ikintu ico arico cose batariye nkuko kiri kandi kitari nk ikintu congereza uburyohe(ingredient) nyene y ico kiribwa kuko gifise uburyohe bwaco, gucanga n ikindi kintu kukugomba ko ubuhinga, gutegura ukubuka neza n ugutwara ico kiribwa. Urumva birashobora kwandukira canke ivyo bongeyeko kugira bongereze uburyohe canke ivyunyunyu vya chlorure de sodium.

3.11.
Ugukomeza infungurwa

Ukwongerako iki canke ama nutriments nkenerwa ku
kiribwa n aho kiba canke kitari muri ico gifungurwa mu ntumbero yo gukosora ibibuze vya nutriment canke vy amanutriments mu Bantu canke mu mirwi y abantu batowe

3.12
Ugutunganywa kwa karonda (genetique)

Umurwi w ubuhinga buva muri biologie moleculaire, akarorero recombinant AND bivuye mu gikoresho ca karonda kw ibiterwa, ibikoko n utundi dukoko dutoduto(microorganismes) n ayandi ma unite biologiques birashobora guhindurwa iyo biriko biratunganywa canke n inyishu itaba yaronswe ukoresheje ubuhinga bwo guhuza ibitsina n ubwo kurondoka canke bwa recombinaison naturelle. Ubuhinga bwo guhindura karonda mugabo ntibagarukira kuri recombinant AND, gusukiranya ama cellules , gutera gatoya canke kanini muncamake gukura iyo karonda canke igwizwe kabiri. Izo organisme zisubiwemwo hakoreshejwe uburyo bwa genetique ntizirimwo ama organismes ava mu buhinga bwa conjugaison, bwa transuction na hybridation naturelle

3.13
Ivyo bintu bihinduwe ku buryo bwa karonda(Organisme genetiquement modifies OGM)
Igiterwa, igikoko, umu microbe wahinduwe n ubwo buryo bwa karonda

3.14
Umwavu uvuye mu vyatsi no mubindi biterwa

Umwavu washizwe mu kuzimu kugira haboneke akarusho mw isi ndimwa kandi bigashobora gutanga ivyimburwa biza n ingoga, ibiterwa canke ivyatsi bibi.

3.15
Uburaro (habitat)

Ikibanza igiterwa canke igikoko ico arico cose gishobora kubamwo. Ico kibanza ico arico cose aho bimera kikongera kigakoreshwa kugirango berekane ubwoko bwaho kiba

3.16

Ivyo bongeramwo

ikintu icoarico cose kirimwo igifungurwa congewemwo mu gukoresha n ugutegura infungurwa n ivyahinguwe. Kitari ikiribwa kandi kidaseruka mu kiribwa canyma cahinguwe (naho bishoboka mu buryo buhinduwe)

3.17

La radiation par ionisation

Ubuhinga bwo guhingura ibifungurwa ukoresheje imishwarara bita gamma, imishwarara bitaX canke amaelectrons anyaruka arashobora gusambura ingene molecule y ikiribwa ikoze kugira bacunge bihweze neza ibishobora kucandukira, ama microbes, ama pathogens, ama parasites, n ibindi vyose bishobora kugirira anabi ico kiribwa, kandi ugakingira ico kiribwa mu kubuza ubwo buryo physiologique nko gututura no kwera(murissage)

3.18

Ikiranga ikintu (etiquette)

Ikintu cose canditswe, impapuro banditseko ibintu bakazisohora canke ikintu cose bashushanije na graphique kikaba kigisigura neza.

3.19

Nyene guhingura canke nyene kubitunganya (Operateur)

Umuntu canke aho batunganiriza bakaba aribo bashinga ingene bahingura ibintu kugira bishikire urwo rugero bafatirako.

3.20

Ibintu kama (Biologique)

ivyo bintu kama vyisunga ivyerekeye uburimyi n ibivuyemwo mugabo hisunzwe urwo rugero. Ntijanye na gato n ubuhinga bwa chimie oganique.

3.21

Uburimyi kama

Ivyerekeye uburimyi vy isunze neza na neza ako karanga

3.22

Ivyakozwe biciye mu buryo kama

Icakozwe mu buryo kama bakagihindura, bakongera bakagitanga bisunze urugero ruzwi.

3.23

Imbuto kama n ivyo bakoresha mu gutera

Imbuto n ibikoreshwa mu gutera bibonetse bivuye mu burimyi kama.

3.24
Iyimbura ribangabanganwa

Umwimbu uwo ariwo wose, akantu kamwe gatewe, kakavyara kandi kagatanga ibindi vyimburwa naho biba vyaciye mu buryo kama canke butari kama uko vyifashe niyo kama canke uko vyabonetse mukwihindura bica vyitwa iyimburwa ribangabanganwa.

3.25.
Ibikoreshwa mu nteguro

Ikintu ico arico cose mugabo hatarimwo ibintu vy ivyuma bakoresha kandi kitameze nk ico kiribwa kikaba gikoreshwa mu gutera ibintu vya mbere bikoreshwa mugutanga ikiribwa canke birya bakoresha mu kubiryohora kugira bashike kuvyo bifuza mu buhinga.
Mugutegura kandi bashobora gukuramwo ibisigara canke ibishusha muri ico cimburwa canyuma.

3.26.
Ingene bigwirirana

Irondoka ry ibiterwa hakoresheje ihuza bitsina (sexuellement) n ukuvuga ukoresheje imbuto canke atahuza bitsina ryabaye(asexuellement) ni ukuvuga ivyatemwe n ingene imizi y igabura.

3.27.
Icokorwa

Igikenewe gukorwa kandi gitegerezwa

3.29
Ico tegerejwe
ico umuntu yotegerejwe guykora kandi nkenerwa

3.30.
Ibintu biboneka hakoreshejwe ubuhinga bwo guhingura bwa none (synthetique)

Ivyatowe hakoreshejwe ubuhinga bwa chimie n ubwo mu mahinguriro: burimwo ivyahinguwe udasanga mw ishamba canke bagakoresha uburyo butari kama. Ivyakozwe mu bivuye mu bintu bitavuye mu bintu kamere(naturelle)

3.31.
Umuti utowe mu buhinga bwanone wica udukoko dutera ibiterwa

Uwo muti ushobora gukinga, gukuraho canke no gucunga ico giterwa gishobora kugirira nabi ibindi

3.32.
Ubushobozi bwo gukwirikirana ikintu (tracabilite)

Ubushobozi bwo gukurikirana inzira y ikiribwa, intambwe zibujijwe zo kuronka ibintu n ingene bitangwa.

3.33.
Guhindura (Conversion)

Igiterwa catewe atamwavu waroyemwo n ikindi catewe bakoresheje uburyo bwo gutabira kizungu. Ivyo bikabera mu murima umwe.

4. Ibikenewe bikurubikuru mu kuronka uwo mwimbu kama

4.1. Ibikuru bikuru

Ibikenewe muri iyo ntumbero birashobora gukoreshwa kuri izo ntambwe zose zo kurondera umwimbu kama kandi no kuri bene kubitunganya.

4.2. Ugushakashaka no gukorera ahabona

4.2.1. Nyene kubitunganya yotegerejwe gukora kugira agumize umwimbu hejuru(aronke vyinshi) kugira bihe igiciro uko gukora kandi bihe ubushobozi nyene kubitunganya.
4.2.2. Nyene kubitunganya yotegerejwe guha ibice biboneka bishimishije bikenewe n inkuru ku vyerekeye gukora uronka ibintu.
4.2.3. Nyene kubitunganya yotegerejwe kuguma akora ibintu vyiza mu kuronka ivyo bindi kama.

4.3. Ukwandukirwa (contamination)

4.3.1. Nyene kubitunganya yo tegerejwe gukinga ikoreshwa ry ibintu vy ubuhinga bwa chimie kuko bishobora kubangamira ubuzima bw abantu canke bw ibidukikije. Ahari ivyo bintu bifashe ko bidakaze cane, aho barashobora ku bikoresha

4.3.2. Nyene kubitunganya ategerezwa gufata ingingo zikomeye zotuma aho bakorera n ivyakozwe bitandukirwa. Aho boba bicuze ko hoba handukiwe nk akarorero isi, amazi, impwemu (air), ivyo bakoresha vyambere muguhingura ni ivyo bacanga. Ibikorwa biboneka vyotegerezwa gukorwa. Ifumbire no kuronka ibisigazwa (nk umwavu) vyose muri aho hantu bakorera kandi bariko barabihingura birashoboka ko bitokwandukiza ivyo bintu kama canke n ibidukikije, ivyo bintu vyo mu buhinga bwa chimie vyotegerejwe gushikwako amazina yavyo kandi bakabishingura neza cane.

4.3.3. Ukwandukirwa kw ivyo bintu kama biva mu bihe bimwe bimwe hejuru y umwitwarariko wa nyene kubitunganya kandi bishobora kubuza kuba neza ivyo bintu kama canke uko ari bibiri.

4.4. Ibintu bihinduwe karonda (organismes genetiquemet modifies OGMs)

4.4.1. Ivyo bintu bihinduwe karonda canke n ibibikomotseko ntibishobora gukoreshwa canke ngo vyinjizwe ku gusamara. Ibi biraba ibikoko, imbuto, ibikoreshwa mu kubimemera, n ibintu vyo mu ndimo nti bituma isi imera, ibihindura isi ndimwa hamwe n ibindi bikingira ivyimburwa.

4.4.2. Ivyo vyo kubiryohora nivyo bongerako canke ingene bategura ivyo bintu biva mu bihinduwe karonda ntibishobora gukoreshwa muri iyo nteguro kama.

4.4.3. Ivyo bikoreshwa vyambere n ingene bitegurwa n ivyo bashiramwo bishobora kuva ku rugero rumwe mugukurikirana kw ingene biribwa (chaine alimentaire) guhera aho bikorewe kugire basuzume ko bitava muri ivyo bintu karonda

4.4.4. Ivyo bintu bihinduwe karonda ntibitegerezwa gukoreshwa mu gukora ibindi bashiramwo ivy ikizungu harya barima canke bakahagirira ubworozi kuko bitaba vyahinduwe ngo bikore ibintu kama.

4.5. Kwitaho agateka ka abakozi

4.5.1 Gutunganiriza abantu mu vyAbakoreshwa n abakozi bategerezwa kuronswa amateka y abantu n uburyo bwo gukora bwemewe bisunze amateka n amasezerano y igihugu n amakungu.

4.5.2 Nyene gutunganya ibikorwa ntashobora gukoresha ibikorwa uwudashaka canke ibikorwa vyo kunguvu.

4.5.3 Abakoresha n abakoreshwa bo kugihe n abakozi bahuje akazi nko kuvyerekeye ibice kama bategerezwa kuronka ubwigenge bwo gushira hamwe, ubwigenge bwo gukorera n ugusaba ivyo bakeneye hamwe

4.5.4 Abakoreshwa bategerezwa kuronka ibingana, imishahara ingana nk iyo abakora akazi kamwe bataravye urukoba,amadini,ubwoko canke igitsina.

4.5.5. Nyene gutunganya ibintu ntategerezwa gukoresha abana bafise imyaka mike.
Abana barashobora gukora mu mirima canke mu mpongore z abavyeyi babo canke z ababanyi mugabo bakaraba ico gikorwa ko kitaba intambamyi ku buzima bwabo no kwigenga kandi ntihagire ico vyica mu mashure, mu mibano,no ku mubiri.
Ivyo bikorwa bitegerezwa kuba bicungerewe n abantu bakuze kandi bikaba vyemejwe n umuntu azwi n amategeko.

4.5.6. Umukoresha ategerezwa gutegura ingingo z amagara meza ku bakoreshwa, ku bakozi na barya bkora ku munsi ku munsi.

4.5.7. Umukoresha afise abakozi batanu canke barenga atari abakora kumunsi kumunsi ategerezwa kugira integuro yanditse yerekana neza ingene umugabane 4.5 utunganijwe

4.6 Kuja mw itunganya nyakuri

Nyene gutunganya canke uwuriko arakora ategerezwa gukora yisunze itunganywa nyakuri

4.7 Kumenya ibijanye n umwimbu kama

Nyene kubitunganya ategerezwa kurabako abantu bose barabwa n umwimbu kama bafise ubushobozi n ubumenyi bikwiye kuvyerekeye uyo mwimbu hamwe n ibice nyamukuru vy iyo ngingo

5. Umwimbu canke kuronka umwimbu

5.1.1. Ibikenewe hamwe n igihe co guhinduka

Igihe co guhindura uburyo bwo gukoresha isi gitegerezwa kuba n imiburiburi icumwaka isi iriko irakoreshwa hisunzwe iyo ngingo.
Iyo naho isi yarajwe mu kiringo kingana umwaka, ikaba isubiye gukoreshwa, ntagihe co guhindura uburyo bwo gukoresha gitegerezwa kubaho kuri iyo si.

5.1.2. Igihe co guhindura uburyo bwo gukoresha kirashobora kuba kirekire bivuye kukugene iyo si yakoreshejwe muri kahise(nk akarorero, ikoreshwa kenshi ry imiti yo gupompa ishobora kwanduza ivyimburwa hamwe n akaranga k ivyanduza)

5.2. Guhindura uburyo bwo gukoresha (indimiro) hamwe n urubangabanganwe rw umwimbu

5.2.1. Iyo ahantu canke aho barima hatahinduwe n uburyo bwo gukora, igice kiriko kirahindurwa be n ibice bikorwa n uburyo bwa kijambere bitegerezwa gutandukanywa ibihe vyose.

5.2.2. Ahantu hahinduwe, uburyo bwo gukorwa kugira haboneke umwimbu kama hategerezwa guta kudakuranirizwa ko umwimbu kama n umwimbu w ikizungu

5.2.3. Igiterwa catewe kivanze kuba kama n ukutaba kama hakoreshejwe guhindura canke hakoreshejwe kudahindura kigaterwa ahantu hamwe ntigishobora kudandazwa nk ikidandazwa kama kiretse iyo umwimbu utunganijwe muburyo bwiza kandi bwo gushobora gutandukanya umwimbu kama n uwutari kama (akarorero, ubwoko bw igiterwa kama n ikitari kama ntibisa kuburyo ushobora gutandukanya kimwe n ikindi

5.3. Ibinyabuzima

5.3.1. Nyenekubitunganya ategerezwa gufata neza ibinyabuzima(biodiversite) ufatiye ku buryo afata umurima wiwe.
5.3.2. Uburyo ibidukikije nyamukuru bibanye bitegerezwa ubwambere gukingirwa mu mibereho no mu burenganzira dukurikije iyo ngingo, amashamba n imyonga, ibitegerezwa kudatemwa canke kutagazurwa kugira hashirweho umwimbu.

5.3.3. Ku buryo bunini bushoboka kandi bukwiye kugira habe umwimbu mwiza ufise ibisabwa vyiza, ibiti bitegerezwa guterwa mu mirima

Raba neza: Ibiti vy ivyamwa bishaje birakenewe cane ku dukoko no kunyoni

5.3.4. Uburimbi kama, nk imikobeko, inzira hamwe (douves) ni ivyo guhimiriza

Raba neza: Imikobeko, inzira hamwe na douves bifise akamaro gakomeye ku biti n ibikoko hamwe n inzira zija mu mirima bifasha kugumizaho uburyo butandukanye bw ingene abantu n ibidukikije bibanye kandi bigaha uburaro ibikoko n udukoko tuguruka vyinshi hamwe n igitutu ku bitungwa

5.4. Uburyo butandukanye bwo kurima

5.4.1. Uburyo butandukanye bwo kwimbura igiterwa na matiere kama , ubutame bw isi, igikorwa c umwavu, isi hamwe n ugutotahara kw igiterwa bishobora gutumwa n ugukurakuranya imbuto, kuvanga ibiterwa, guhindura igiterwa, uburimyi bw ibiti n ibiterwa hamwe n izindi ngingo bijanye bitegerezwa gukoreshwa kugirango ibidukikije bikure neza. Ku biterwa vy umwaka, hategerezwa gukoreshwa gukuranya ibiterwa. Ku mbuto zimara igihe kirekire, harashobora gushirwamwo ibindi biterwa. Kubiterwa biteba kandi biterwa nk umurima umwe, aho kuvanga n ibindi biterwa bidashoboka(uturorero, imisigati n icayi), ubndi buryo bwo gukingira ubutandukanye(ubwinshi), butegerezwa kuri ubwo buryo bwo gukura.

5.4.2. Umurimyi canke nyene kubitunganya ahimirizwa gukoresha no kubungabunga ubwoko bwa kera, ubwoko butandukanye be n ubwoko bw ibiterwa be n ubwibikoko.

5.5. Isi n ibikwa ry amazi hamwe no kurwanya inkukura

5.5.1. Kubungabunga isi bitegerezwa kuba igice nyamukuru c uburyo bwo kurima kama, mu nzira yo kurwanya inkukura ivuye ku muyaga n amazi, umurimyi ategerezwa gufata ingigo bijanye n ibihe, n ibindi bisabwa bijanye n ikirere, isi n imimanuko n ingene agateka gakoreshwa.
Uburorero: Gukoresha ibikinga umuyaga, gusasira isi, gusasira ibiterwa, kuraza isi ndimwa (kugira isi ikingirwe n ivyatsi canke ishamba), gusakara, gutunganya ibivi hamwe n ugukoresha inzitiro mu gutera.

5.5.2. Ingingo zikenewe zitegerezwa gufatwa mu gukingira no gutorera umuti ukwononekara kw isi n amazi.

5.5.3. Igikorwa co guturira gitegerezwa kugabanywa no gukurikiranwa neza kugira hakingirwe ubwo buryo kama hamwe n ibinyabuzima.

5.5.4. Umurimyi ategerezwa kutagabanya canke ngo akoreshe amazi birenze kandi ategerezwa kurondera no kubungabunga aho amazi ava n ubwiza bwayo cane cane aho bikenewe, umurimyi ategerezwa kwegeranya canke kureka amazi y imvura.

5.6. Itunganywa ry uburyohe bw isi

5.6.1. Ikoreshwa ribereye hamwe no kwisubiriza kw ibitabizo, guhindura gukwiye kw ibiterwa hamwe no kugira inguvu mu kugerageza kugabanya ubuhombe bw ibitabizo bitegerezwa gushirwa mu ngiro n umurimyi.

5.6.2. Igikoresho ca microbe hamwe n amamuko ya plante animale bitegerezwa kuba ifatiro ku mugambi wo gutabira isi.
Ibitabizo vy ikizungu bitegerezwa gukoreshwa hafatiwe ku buryo bimeze kandi vyacaguwe. Bitegerezwa kutoroshwa hakoreshejwe uburyo bw ikizungu ariko hakoreshejwe gushiramwo amazi. Ibitabizo vy ikizungu bitegerezwa gukoreshwa gusa iyo hakenewe itabira ry ikiringo kirekire. Muri ivyo bitabizo harimwo ubundi buhinga bwo gushiramwo ibintu kama, ivyatsi bahamvye,guhindura imyimbu n ingene ibiterwa bikoresha ivyunyunyu vya azote kugira bikure neza.

5.6.3 Ibitabizo hamwe n ibituma isi imera bimaze kwemezwa n ikoreshwa ryavyo mu burimyi kama hishimikijwe ingingo nyamukuru za IFOAM canke CAC/GL32 zirashobora gukoreshwa. Ibitabizo n ibituma isi imera bifise inkomoko kama bishobora gukoreshwa naho biri murutonde rw umugabane C.
Ibitabizo n ibituma isi imera bifise inkomoko ku mahinguriro, bishobora gukoreshwa iyo biri murutonde rw umugabane B.

5.7. Igiterwa gitera ingorane ibindi,indwara hamwe no kubagara.

5.7.1. Uburyo bw inguvu, bw imico n ubw ingigo ku giterwa, indwara hamwe n ibagara, ushizemwo gukoresha ubushuhe birashobora gukoreshwa.

5.7.2. Iyinjira ry igiterwa gitera ingorane ibindi, ry indwara, ry ivyatsi bibi canke ikurikiranwa ryikuraravyo ryatejwe imbere kugira bikoreshwe mu burimyi kama hisunzwe IFOAM. Ingingo nyamukuru hamwe na CAC/GL32 rushobora gukoreshwa. Ivyo kuvanga (ibirungo) bikomeye bifise inkomoko kama vyo mw iyinjira (ishirwaho) ry igiterwa kibi, ry indwara ry ivyatsi bibi canke ikurikiranwa ryikura ryavyo bishobora gukoreshwa naho bitari mu mugabane B.

5.7.3. Ivyo kuvanga (ibirungo) bitibonekeza nk ibitwara n ibindi bitosa ntibitegerezwa kuba ibintu bishobora gutera indwara za cancer (cancerigenes) canke terotegenes, canke neurotonines

5.8. Imbuto, imivyaro hamwe n ibikoresho vyo gutera

5.8.1. Imbuto, imivyaro hamwe n ibikoresho vyo gutera biva mu mwavu kama bishobora gukoreshwa. Iyo imbuto kama n imivyaro bidashobora kuboneka mu bidandazwa, hakoreshejwe uburyo bwa kera bushaje, imbuto, imivyaro n ibikoresho vyo gutera bitandukanijwe mu buryo bwikizungu bishobora guca bikoreshwa mugabo mugihe conyene naho budashora kuboneka ku badandaza, imbuto, imivyaro hamwe n ibikoresho vyo gutera vyatunganijwe hakoreshejwe uburyo bw ikizungu bishobora gukoreshwa.
Umurimyi(uwukora) ategerezwa kwerekana biboneka ingene ubwo buryo bukenewe gukoreshwa.

5.9. Umwimbu w ibizinu

5.9.1. Uburimyi bw ibizinu bwategerezwa kuba bugizwe n ivyo kuvanga(ibirungo) kama nk ibitabizo kama imbuto zumye (zanikiwe) hamwe n ivyatsi vyumye. Ahadashobora kuboneka substrat kama zikwiye mu bwiza no mu bwinshi ku buryo bw ikizungu canke bifise inkomoko kama bidatera impungenge zo kwanduza ibiterwa, bishobora gukoreshwa.

5.9.2. Ivyakoreshejwe mu mwimbu w ibizinu bitegerezwa kuba bijanye n ibivurwa kuri 5.6,5.7,hamwe no muri5.8

5.10 .Ukwandukirwa

5.10.1. Aho babona hashobora kuba hari ikintu cerekana ko ibiterwa bishobora kwandukirwa, nyene kubitunganya (umurimyi) ategerezwa gushiramwo ingingo zishiraho inzitizi kugira babuze ukwo kwandukirwa.

5.10.2. Amamashini, ivyo bakoresha n ibindi bikoresho(akarorero: ivyo bateye ku mirongo, ibituma bamemera ifumbire, n ibindi kugira bakoresha mukuronka umwimbu w ikizungu bitegerezwa kuba vyogejwe neza imbere yo kubikoresha mu mwimbu kama.

5.10.3. Ibikoko birimishwa
Ibikoko birimishwa mu kuronka umwimbu kama bitegerezwa gufatwa neza ukwirikije ingero zogutuma igikoko ziri kuri 6.3 ingene ivyo bikoko bikora ntibishobora kugira nabi ubuzima bwavyo canke uguterimbere kw ibikoko.

6.Ubworozi

6.1 Guhinduka kw ubworozi

6.1.1. Ubworozi bw ibikoko vyirebanga bazanye mu rwuri bishobora gufata umwanya wo kwihindura ukwirikije iki gicapo gikurikira

Ubwoko bwibironkwa	**Ubwoko**	**Ikiringo co guhinduka**
Ibitanga inyama	Inka	12 months
	Ibiguruka	45 days
	Impene, Iintama n ingurube	3 months
	Ubukwavu	45 days
Ibitanga amata	Ubwoko bwose	3 months
Amagi	Ubwoko bwose	45 days

6.1.2. Ibikoko birashobora kurorwa mu buryo kama kuva bikivuka, gushika aho igikoko kama kitaba kikiboneka, ibikoko bitari kama birashobora kurorwa urabiye ku ngero y imyaka mike ikwirikira:

- Iminsi ibiri ku dushwi ku bitanga inyama

- indwi 18 ku nkoko ita amagi
- Impusha 2 ku kindi gikoko kiguruka cose
- Amezi atatu ku mitavu
- Amezi atatu kumpene n intama
- Ibikoko bikuze birashobora gushirwa mu bworozi

6.2. Urubangabanganwe rw umwimbu

Ibintu biva mu bwoko bumwe bw igikoko kandi bisangiye uburyo bwo kwimbuka, ibirimwo kuba kama no kutaba kama (vy ikizungu canke vyo mu buryo buhinduwe) vyo mw iyororero rimwe bitegerezwa kutadandazwa nkuko ari kama kiretse umwimbu ubonetse n uburyo butuma haba inzira itomoye kandi ibandanya yo gutandukanya ivyimburwa kama n ibitari kama.

6.3. Itunganywa ry ibitungwa

6**.3.1. Ibitungwa bitegerezwa gufatwa mu buryo bujanye n ibikorwa vyiza bijanye n ubworozi bw ibitungwa.**
Ibitungwa bitegerezwa gukingirwa izuba ribibabaza, urwamo rwinshi, ubushuhe,imvura, ivyonda be n umuyaga kugira umuntu abigabanirize kumererwa nabi kandi abihe kubaho neza.
Ibitungwa bitegerezwa kutabaho nabi canke ngo bikubitwe.

6.3.2. Ibitungwa bitegerezwa gufita ibisabwa kugira bibeho kandi bigatunganywa hakurikijwe uburyo bw inyifato yavyo kama kuvyo bikenewe nk uburorero:
- Ingurube zitegerezwa kuronka ivyo zimba
- Impene zitegerezwa kuronka uburyo bwo kwishinza
- Inkoko zitegerezwa kuronswa uburyo bwo kwiyagaza be n ubwo kuronka aho zisura inkugugu

Ibikoko bitegerezwa kuronka ibisabwa kugira bibeho kandi bigatunganywa mu buryo bwo kubuza inyifato idasanzwe, gukomereka canke kurwara.

6.3.3. Ibikoko bitegerezwa gufita ikibanza gikwiye co kugendagendamwo ufatiye kunyifato kama yavyo.

6.3.4. Uburaro butegerezwa gufita ibisabwa vyo kuryama neza be n ibibanza vyo kuruhukiramwo bijanye n ivyankenerwa kama vy ibikoko.
Ibitungwa bitegerezwa kuronka aho biruhukira humutse igihe cose bishoboka.
Bitegerezwa kuronswa kandi uburyo kama bwo kuryama aho bikwiye.

6.3.5. Uburaro n ibibanza vy ubunywero bitegerezwa gukuburwa iminsi yose

6.3.6. Kuzirika birashobora kugirwa, kuko ku bikoko ntaco vyonona ku kubaho neza kw igitungwa. Igitungwa gitegerezwa kuronka ingene gishika ahari ivyo kirya bikenewe, ahari igitutu n amazi, uburyo bwo kuzirika butegerezwa kurekurira igitungwa ko kigendagenda aho kirisha atangorane kuburyo kitizingira canke ngo kibabare.
Kuzirika kutegerzwa kudatuma ibitungwa bigira ibikomere canke ngo kubabaze imibiri yavyo.

6.3.7. Ibitungwa bitegerezwa kuronka akaryo ko kurya ufatiye ku nyifato kama yavyo.
Akarorero: Kurisha uko biri kose, iyo kwahira ariyo nzira ikwiye yo kuziganya uburagiro kurusha kuragira(guturutsa), ibitungwa bishobora kwahirirwa mugabo bikagira inzira yo kuja hanze mu kibanza kimwe.

6.3.8. Itunganywa ry uburagiro ritegerezwa kudatuma isi, uburagiro n amazi bitituka.

6.4. Kugwiza ibitungwa(irondoka)

6.4.1. Harashobora gukoreshwa gutera urushinge(insemination artificielle)
6.4.2. Uburyo bwo kwimura amezi be n uburyo bwo gushakashaka mukuronka ibikoko mu mazu ya bigenewe (laboratoire) .

6.5. Gukurako ibihimba vy umubiri

Kugira nabi canke gukurako igihimba c umubiri birashobora kutagirwa kiretse mu bihe bikurikira:

- Gukona
- Kwambika imbarati
- Gukura amahembe (ku bitungwa bitoyi gusa, akarorero: inyana)

Ivyo bikorwa bitegerezwa gukorwa mu buryo igitungwa kigira ububabare buke. Ivyo gutimbisha bitegerezwa gukoreshwa aho bikwiye.

6.6. Infungurwa z ibitungwa

6.6.1. Ibitungwa bitegerezwa kugaburirwa ibifungurwa kama ijana kw ijana. Iyo infungurwa kama zitaboneka kubadandaza ku buryo bukwiye mu bwinshi no mu bwiza, urugero ntarengwa rw infungurwa atari kama ku munsi rutegerezwa kuba mirongo ine kw ijana biharuwe bafatiye kuri matiere seche.

6.6.2. Ibitungwa vyose bitegerezwa kuba bitegerezwa kuronka ubwatsi bushasha Ibitungwa vyuza bitegerezwa kuronka ubwatsi busha ku munsi biciye mu kurisha canke kwahirirwa.
Aho ubwo bwatsi butari, ubwatsi bwabitswe ku buryo buguma ari bushasha bushobora gukoreshwa (kuziganya)

6.6.3. Kugirango haboneke ubufatane bw uburimyi n ubworozi n imiburiburi mirongo itandatu kw ijana (60%) ry infungurwa bitegerezwa kuva mw iyororero nyene canke bikava mu migenderanire iri hagati yaryo n ayandi mororero kama.

6.6.4. Ibintu bikurikira ntibishobora kuja mu nfungurwa:

- Inyama, amagufa hamwe n ibindi bicafu vyo mw ibagiro ntibihabwa ibikoko vyuza.
- Imicafu y inkoko n iyibindi bikoko ntishobora guhabwa ibikoko vyuza
- Ama amino acide(amino acides isoles)
- Uree n ibindi vyakoreshejwe ivyunyunyu vya azote
- Ibintu bituma ikura vyakozwe hisunzwe ubuhinga (synthetique)
- Ama antibiotiques
- Ibituma bigira akayabagu mu kurisha canke mu kurya

- Ibishobora guhindura ibara ry ivyo ibikoko birya
- Ibintu vyahinduwe hakoreshejwe uburyo karonda

6.6.5. Imiti yo kubuza infungurwa kubungwa bishobora kudakoreshwa kiretse:
- Ku bintu biva mu mahinguriro
- Ku bintu bisagara amahinguriro ahejeje gukora igifungurwa (sous produit) (akarorero: mellasse)
- Ama bacterie, ama champignon n amaenzymes

6.6.6. Ibitungwa bishobora kugaburirwa amavitamine

Ibisigazwa vy ibintu hamwe n ibindi biva mu bintu kama, vitamine, ivyunyunyu hamwe n ibindi vyo mu mahinguriro bishobora gukoreshwa ahakenye ivyo gukoresha kama haba mu bwinshi canke mu bwiza.

6.6.7. Ibiri mu bubiko bishasha biva mu vyonsa bitegerzwa gushirwa ku rugero rw amaberebere canke amata akwiye kama ava mu bwoko bwavyo nyene. Ibitungwa bikiri bitoyi bitegerezwa kurekurirwa kwonka.
Aho amata kama akwiye, amata yo mu mahinguriro ategerezwa gukoreshwa .
Ibishobora gusubirira amata bishobora gukoreshwa gusa iyo ari ivyihuta kandi ntibishobora kuba birimwo ibirungo twavuze ku mugabane wa 6.6.4
Ibitungwa bitegerezwa gucutswa honyene inyuma y umwanya mutoya ukwiye no kubona inyifato kama hamwe n ivyankenerwa vy ico gitungwa.

6.7. Inyondwe hamwe no kurinda indwara

6.7.1. Ikinga ry indwara hamwe n umwimbu w ibitungwa kama ritegerezwa gushingira kuri ibi bikurikira:
- Ugucagura ubwoko bubereye bw ibitungwa
- Ikoreshwa ry ibikorwa vy ubworozi bijanye n ubwoko bw ibitungwa, guhimiriza ukurinda indwara gukomeye hamwe no gukinga kwandura
- Ikoreshwa ry ingaburo nziza kama, umwimenyerezo wa minsi yose hamwe no guturuka canke gutembera hanze.
- Ubwinshi (igitigiri) bw ibitungwa bikwiye

6.7.2. Iyo bishitse iditungwa kikagwara canke kigakomereka naho hoba hari harafashwe ingingo zo kukikingira, gitegerezwa kuvurwa ubwo nyene kandi neza.
Uburyo bwa mbere, gukoresha ibiterwa bikiza be n ibindi bishoboka mukuvura bitegerezwa gukoreshwa iyo bimaze kugaragara ko bikiza indwara canke ngo bivure igikomere. Uwuriko arabivura ashobora gukoresha imiti gusa y ikizungu iyo ibikorwa vyo gukinga hamwe n ibindi bishoboka bidashoboye gukiza indwara canke ngo bivure igikomere.
Uwo muntu kandi ntashobora kwirengagiza umuti ku bikoko birwaye canke vyakomeretse, naho ikoreshwa ry uwo muti ryoba ryotuma igitungwa gitakaza ibintu mu bigize umubiri waco.

6.7.3. Ubuvuzi bw inyondwe hakoreshejwe ivyo gupopa vy ikizungu canke imiti y ikizungu y ibitungwa butegerezwa gufatira kukumenya inyondwe be n uburyo bwo kuvura bw ikizungu hakoreshejwe imiti y ikizungu yo gupopa canke imiti y ibitungwa bitegerezwa kwigwa neza.

6.7.4. Ibihe vyo kwitaho ibikoko inyuma yuko vyavujwe imiti y ikizungu y ibitungwa, antibiotique canke imiti y ikizungu yo gupompa ntibishobora kuja munsi y icakabiri c umwanya usabwa n amategeko canke umwanya muto ushoboka w amasaha 48 naho woba ari muremure.

6.7.5. Urucanco rushobora gukoreshwa gusa iyo:

- Iyo hari indwara ikaze izwi canke yicurwa ko ishobora kuba intambamyi muri ako karere k ubwororero: Kandi aho atabundi buryo canke ubuhinga buriho bwo gucungera iyo ndwara.
- Urucanco rusabwa n amategeko

6.7.6. Itunganywa ry imbuto z igitungwa rishobora kugirwa kubera ibituma vyo kuvura gusa kandi rihagarikiwe n ubuvuzi bw ibitungwa

6.7.7. Iinkabuzo z ikizungu zo gukuza canke ibindi bintu bikoreshwa kugira umwimbu ube mwinshi ntibishobora gukoreshwa

6.8. Ukunguruza hamwe no kubaga

Ifatwa ririmwo kunguruza hamwe no kubaga, bitegerezwa gushirwa mu ngiro buhorobuhoro kandi mu bwitonzi kandi rituma igitungwa kugira ububabare canke uruhagarara ku mubiri no mu mutwe bike bikeyi cane.
Ibitungwa bitegerezwa kuronswa ibikenewe bituma hagabunuka uruhagarara hamwe n izindi ngaruka mbi zijanye:

- n inzara n inyota
- n ubushuhe bwinshi canke imbeho
- no kuvanga imirwi itandukanye y ibitungwa, ibitsina, imyaka, hamwe n ingene amagara yavyo amaze.

7.Ubworozi bw inzuki

7.1. Guhindura hamwe n ukwegeka inzuki

7.1.1. Imirwi y inzuki ziri hamwe irashobora guhindurwamwo umwimbu kama. Igihe co guhinduka ku murwi w inzuki n umwanya w iboneka ry ubuki

7.1.2. Iyo ikimimamara candujwe n imiti yo gupompa gitegerezwa gusubirizwa n ikindi kimamara kama

7.1.3. Inzugi zinjijwe zitegerezwa kuba zivuye kumwimbu w umurwi w inzuki aho iri canke naho zivuye kubworozi kama bw inzuki.
Imirwi y inzuki iguruka iva mu bindi birere irashobora gukoreshwa hatabaye ihinduka rijanye n umwanya mugihe atangorane zo gushobora kwanduza izindi

7.2. Ikibanza hamwe n inyubako

7.2.1. Ibitiba vy inzuki bitegerezwa kuba biri mu bibanza biteguwe mu buryo kama kandi/canke mu bibanza biri mu gahinga. Ibitiba bitegerezwa gushirwa ahantu zironka ibikenewe haboneka amazi, ibiva mu mashurwe nk ubuki, nectar na pollen.

7.2.2. Ibimamara kama bitegerezwa gukoreshwa mu buki buri ku mirongo butangura. Aho ibimamara kama bitaboneka, ibimamara bitari kama birashobora gukoreshwa mugabo ivyo bimamara ntibishoborakuba vyandukiwe n imiti y ikizungu bakoresha mu gupompa.

7.3. Ingaburo

7.3.1. Utwuki, nectar na pollen bitegerezwa kuva ahanini mu biterwa vyo mw ishamba canke bikora ibisabwa n ibiterwa kama.

7.3.2. Ingaburo irengako y imirwi y inzuki ishobora gukoreshwa mugutorera umuti ikibazo cingaburo mugihe yakenye bivuye kukirere canke ibindi bihe bidasanzwe. Mubihe mweneivyo ubuki bwabonetse muburyo kama canke ibintu bisosa (biva mu biterwa) bitegerezwa gukoreshwa aho bishobora kuboneka.

7.4. Iingene zororwa

7.4.1. Ubuzima bw imirwi y inzuki butegerezwa gukomezwa n ibikorwa vyiza bijanye n itunganywa bishimikije cane cane mu gukinga indwara hakoreshejwe icagurwa ry inzuki hamwe n itunganywa ry igitiba.
Aha harimwo:

- Gukoresha ubwoko bw inzuki bumenyera neza ingene aho hantu hameze
- Guhindura umwamikazi w inzuki iyo bikenewe
- Kugira isuku kenshi be no kwica imicafu kubikoresho
- Gusubiriza kenshi ikimamara
- Kuba mu bitiba harimwo ifu iva mu mashurwe hamwe n ubuki bukwiye
- Gushira ibitiba ahantu hari ubushuhe bworohereza inzuki
- Kugendereza ko igitiba hari ibintu bidasanzwe vyagishikiye
- Ukwica imicafu, ugushira kure canke gusambura ibitiba n ibikoresho vyanduye

7.4.2. Mukurwanya udukoko n indwara ibikurikira bishobora gukoreshwa:

- Acide lactique, oxalique, acide acetique
- Ivyunyunyu vya soufre
- Amavuta kama avuye mu biterwa (huiles naturelles) Uburorero: nka menthole, eucalyptol, camphor,thymon,lemongrass
- Bacillus thuringiensis
- Umwotsi hamwe n urubeya
- Glycerol
- Gukoresha ibiti bivura
- Umunyota w ibiti

Iiyo ubwo buryo n ivyo bakoresheje binaniwe, ubumara bwahinguwe bw ibikoko , ama antibiotique canke ivyo bapompa bitegerezwa gukoreshwa. Iyo hakoreshejwe inzuki , kirya kiguri cazo gitegerezwa guhindurwa.
Amavuta y imashini yokereshwa mukurwanya indwara.

7.5. Iyimbura(ihakura ry ubuki)

7.5.1. Kwiyimbura(kwihakura) inzuki zitegerezwa gusigarizwa ubuki utuyuki tukivuka na pollen bikwiye kugira bigaburire izo nzuki.

7.5.2. Ivyirukana inzuki bitegerezwa gukoresha muguhakura ivyimburwa vy inzuki. Guturira bitegerezwa kugabanywa. Ivyo baturira bitegerezwa kuba ari kama.

8.Itororokanya kama.

8.1. Kama ko kwimbura ivyimburwa kama gategerezwa gufatira kwikura ry ibidukikije ridahinduka kandi ryo gushigikirwa.
Ukwimbura gutegerezwa kutaruta ubwoko bw ibiba ahadakikije hamwe n ibikoko bihaba n ingene bihabaye vyo gushigikirwa kandi ntigushobora kwononera ukubaho kw ivyimeza nk umunyare canke igihahe, canke ubwoko bw ibikoko ushizemwo n ibidashoka bikoreshwa.

8.2. Uwimbura ategerezwa kwimbura ivyimburwa biri mu kibanza kizwi neza gusa, ahatakoreshejwe ikirorina canke iyindi miti canke ibikoresho bitarekuwe n iyingingo ngenderwako n imiburiburi imyaka itatu imbere y iryo yimbura.
Iryo yimbura ritegerezwa kubera mu kibanza kiri ku butandukane bukwiye bwahari uburimyi bwa kijambere canke ahari ibindi vyokwanduza umwimbu.

9. Integuro y iminwe, iyegeranywa hamwe n itunganywa

9.1. Itandukanywa

9.1.1. Akaranga k icimburwa kama gategerezwa kugumaho baciye kumyanya y inyuma y iyimbura ariyo yo gutegura, kwegeranya, kubika no kunguruza icimburwa.

9.1.2. Ivyimburwa kama vyose bitegerezwa kumenywa neza ko ari kama biciye kunteguro yo kwegeranya no kungurunza ivyimburwa, bitegerezwa kwegeranywa no kunguruzwa mu buryo butuma bidakoranako canke ngo bivangane n ivyimburwa Atari kama.

9.2. Ibirungo

9.2.1. Ibirungo vyose vyakoreshejwe muvyimburwa kama bitegerezwa kuba vyabonetse mu buryo kama, ahashobora kuboneka urudandazwa rukwiye mu bwiza no mu bwinshi.
Raba neza: Ibisabwa mubishirwa mungiro z igice ca 10 mukwandika kubidandazwa. Amazi n umunyu wo gufungura birashobora gukoreshwa nk ibirungo mw ikorwa ry ivyimburwa kama kandi ntibiharurwa mu bigize ibirungo kama.

9.3. Ubuhinga

9.3.1. Ubuhinga bukoreshejwe mukubika no kuzigama ivyimburwa kama butegerezwa kuba ubw ubugingo, ubw igiharuro canke bw inguvu.
Imishwarara y ivyuma bihindura ubugingo bw ivyimburwa ntitegerezwa gukoreshwa.

9.3.2. Amazi, vitamine, ibiterwa n amavuta y ibikoko, vinaigr, dioxide de carbone, n ivyunyunyu vya azote bishobora gukoreshwa mukuyongesha mugihe c icukura.

9.3.3. Ibikoresho bitegerezwa kutaba birimwo ibintu vyonona icimburwa.

9.3.4. Kumenya gukurikirana ikirere bishobora gukoreshwa mw iyegeranywa ry ivyimburwa

9.4. Ibikoreshwa mw iyunganira itunganywa

9.4.1. Integuro z amaenzyme n ama microorganismes (havuyemwo ama microorganisme yagizweko ubushakashatsi hamwe n ibiciye bibivako) zishobora gukoreshwa mukubika ibifungurwa.

9.4.2. Ibintu vy ibihingurano(harimwo amabara kama, yo gutandukanya, ibintu vyo kuryosha ku rurimi, hamwe n ivyo kongereza ingene umuntu yumva ibintu mukanwa) bitegerezwa gukoreshwa.

9.4.3. Infashanyo z ivyo kongera ku bifungurwa n ibikwa ryazo, ufatiye ku ngingo ngenderwako nyamukuru za IFOAM canke za CAC/GL 32, zirashobora gukoreshwa . Umugabane D urimwo ivyo kongera ku nfungurwa n ivyo kongera kw ibika ryazo, vyemewe igihe cisohoka ry iyi ngingo ngenderwako.
Mugihe ibintu vyashizwe ku rupapuro rw inyongera D bishobora kuva mu bidukikije nko mu mashamba, nivyo vyoshirwa imbere.

9.5. Ikomezwa ry infungurwa

Ivyunyunyu vy ibihingurano(harimwo n uduce duto tutaboneka: les traces) vitamine, amino acide, hamwe n ibindi bibanza birimwo akayaga bishobora gukoreshwa gusa mugihe vyemewe canke mubihe ubukene bw ivyo kurya canke kurya nabi bishobora kwigaragaza.

9.6. Ibikoresho vyo gutekera

9.6.1. Ibikoresho vyo gutekera bitegerezwa kutanduza icimburwa canke ikiribwa

9.6.2. Ivyimburwa kama nti bitegerezwa gutekerwa mu bintu vyakoreshejwe n umwavu w ikizungu canke ikirorina, canke ibindi bintu bishobora konona kamere k icimburwa

9.6.3. Uburyo bwo gutekera bukwiye hakoreshejwe ibidukikije bwoja imbere, ibintu bikoreshejwe ivyunyunyu vya clore bitegerezwa kudakoreshwa

9.7. Isuku no kurwanya ikiza

9.7.1. Ingingo zo kurwanya udukoko zitegerezwa gushirwaho kandi zikagumizwaho kugira bimenywe ko ibibanza vyakoreshejwe mukwegeranya, gutegura no kubika ivyimburwa kama bikingiwe neza udukoko.

9.7.2. Kugwanya ubukoko, bitegerezwa gukorwa cane cane hakoreshejwe uburyo bw isuku ryitondewe, bwo gukubura n ubwo amagara meza.

9.7.3. Mukurwanya ubukoko, uburyo bukurikira burashobora gukoreshwa:

- Uburyo bwo kurwanya inzira bwocamwo nko gushiraho icotuma butaza

- Mugukuraho aho bushobora kuba
- Uburyo bw inguvu, bw igihagararo canke bw ubugingo.

9.7.4. Hamwe ubu buryo duhejeje kuvuga ataco bushitseko, uburyo bw ikizungu(akarorero:gupompa) burashobora gukoreshwa harimwo ubwitonzi bwinshi, kandi hakurikije ingingo zikurikira:

- Oxyde d ethyl, bromure de methyl,phosphate d aluminium na radiation ionique ntibishobora gukoreshwa
- Ivyimburwa kama bitegerezwa kungururizwa kure yahariko haratunganywa.
- Uwuriko arabikora ategerezwa kugira ubwitonzi kugira ntihagire ivyandukirwa, harimwo n ingingo zo gusukura ibikoresho n ibindi bibanza vyose ahejeje gupompa
- Ico gikorwa gitegerezwa kuba gihagarariwe n umuntu canke ishirahamwe ribifitiye ububasha
- Kumenyesha canke kwandika itariki, ikintu n ikbanza capompwe, bitegerezwa kuja mungingo zose zafashwe mu bikorwa vyose vyo kurwanya ubukoko hamwe n ivyo gupompa.

10.Gushirako ivyandiko

10.1. Ivyo gukoresha mu guhingura, canke icimburwa giteguye canditseko "kama" gitegerezwa kuba kiriko, ibiro, hatarimwo amazi n umunyu wo kurya,bitari munsi ya 90% y ibirungo kama. Ibirungo bisigaye bishobora kuba birimwo ibirungo Atari kama mugabo bikora ibikomeye mubigize iyi ngingo.

10.2. Icimburwa canditseko "hakoreshejwe ibirungo kama" gitegerezwa kuba hariho ibiro, hatarimwo amazi n umunyu wo gufungura ibingana n imiburiburi 70% y ibirungo kama.
Ibirungo bisigaye bishobora kuba birimwo ibirungo Atari kama ariko bikora ibikorwa bikomeye mubigize iyi ngingo.

10.3. Kucimburwa kirimwo munsi ya 70% y ibirungo kama, ijambo kama rishobora gukoreshwa kubirungo atari nyamukuru canke biri hagati y ibirungo kama.

10.4. Ibirungo vyose vy icimburwa kigizwe n ibirungo vyinshi bitegerezwa kuja kuvyandiko kugirango hamenywe ibiro vyavyo n ukugene bingana ugereranije n ibindi hategerezwa kugaragara ibirungo ari kama n ibitari kama. Ivyongewemwo vyose bitegerezwa gushirwako hamwe n amazina akwiye yavyo aho ivyatsi canke/ hamwe n ibirungo biri munsi ya 2% muburemere bwose bugize icimburwa, harashobora kwandikwako nka "ibirungo" canke "ivyatsi" mugabo hatavuzwe urugero rwavyo mu cimburwa.

10.5. Izina n ingene uwabiteguye ashobora kuboneka bitegerezwa kumenyeshwa ku rwandiko ruri ku bidandazwa mugihe biriko bitekerwa ubwanyuma kugira bidandazwe.

10.6. Kwandika ku bidandazwa bitegerezwa gukwirikiza amategeko asanzwe ahari

10.7. Ukuvuga ko icimburwa"caboneste hakurikijwe ingingo kama ya Afrika yo mu buseruko" bishobora gushirwa mu vyandiko biri kucimburwa.

U**mugabane A**(Ibimenyeshejwe)

Ingingo ngenderwako za IFOAM k uburimyi kama

A I: Intangamarara

Izo ngingo ngenderwako niyo mizi uburimyi kama bukuriramwo bugatereramwo imbere: zerekana intererano uburimyi kama bushobora kugirira isi yose hamwe n intumbero yo guteza imbere uburimyi bwose n uburyo bwa rusangi uburimyi ni kimwe mu bikorwa bikomeye vy umuntu kuko abantu bose bakeneye gufungura ku munsi ku munsi. Agaciro k akahise, k umuco hamwe n akabantu babanye bifatanye n uburimyi. Izo ngingo zikoreshwa kuburimyi mu buryo bwagutse harimwo n uburyo abantu babungabunga isi, amazi,ibiterwa n ibikoko kugira bimbure, bategure kandi batange infungurwa canke ibindi bintu (ibikoresho).
Ziraba ingene abantu bakoresha isi ibakikije, ibihuza umuntu n ibidukukije hamwe no gutomora iragi ku Bantu n ibidukikije hanwe no gutomora iragi ku Bantu bo muri kazoza.
Ingingo ngenderwako z uburimyi kama zifasha muguha iciyumviro umurwi kama mubutandukane bwawo bwose. Ziraja imbere mungero, integuro n ingingo z iterambere za IFOAM. Vyongeye iyerekanwa ryazo ririmwo ririmwo intumbero yuko zemerwa henshi kw isi uburimyi kama buhagaze kuri ibi:

- Ingingo ngrnderwako y amagara meza
- Ingingo ngenderwako y ibiba ahadukije
- Ingingo ngenderwako yo kwitwararika(kwitonda)

Ingingo ngenderwako yose itegerezwa kuvurwa biciye kumvugo irikumwe n insiguro.
Izi ngingo ngenderwako zitegrezwa gukoreshwa zirikumwe nk urunani.
Zigizwe n ingingo ngenderwako zigaragaza ikintu ciza n ikitari ciza kugira zitume haba igikorwa.

A.2. Ingingo ngenderwako yerekeye amagara

Uburimyi kama butegerezwa gushigikira no guteza imbere uburyohe bw isi, ubuzima bw igiterwa,bw igikoko, bw umuntu n isi yose nk ikintu kimwe kandi kitagaburwa.
Iiyo ngingo ngenderwako irerekana ko ubuzima bw abantu ku biti vyabo n ubwo mu murwi w abantu babana bidashobora kutandukanan uburyo ibidukikije bibayeho, isi y akanovera yimbuka ivyimburwa vyiza bituma ibikoko n abantu babaho neza.
Ubuzima bwiza n isanganiro n ubukomezi bw uburyo bwo kubaho. Sikubera haba hatagira indwara gusa, mugabo kubera ukugumya ukubaho kwiza mugihagararo, n ukwiyumvira, mu mibano no mubidukikije kurinda indwara, gusubira itoto be no kwisubiriza nivyo bintu nyamukuru biranga ubuzima bwiza.
Igikorwa c uburimyi kama, haba mukurima, mu gutegura no guteza imbere ubuzima bw ibintu biba hamwe n ibinyabuzima kuva kuri gitoya cane kiri mukuzimu gushika ku biremwa muntu. Na canecane uburimyi kama bisabwa gutanga ibintu vyiza, infungurwa zirimwo ingaburo zifasha mukwitegura gufata neza ubuzima n ukubaho neza. Dusubiyemwo ibi, uburimyi kama butegerezwa kwirinda umwavu w ikizungu, imiti yo gupompa ibikoko, hamwe n ibindi bishobora kwongerwa kunfungurwa bishobora kugira ingaruka mbi kumagara.

A.3. Ingingo ngenderwako y ibiba ahadukikije

Uburimyi kama bwategerezwa kugira ishingiro rifatiye ku buryo ibiba ahadukikije bibayeho kandi vyisubiriza, bugakorana navyo, bukishushanya navyo kandi bugafasha mukubishigikira. Iy ingingo ngenderwako iha imizi uburimyi kama n uburyo ibiba ahadukikije bibayeho . N ukuvuga ko umwimbu utegerezwa kuba ufatiye kw itunganywa n isubirizwa ry ibiba ahadukikije n ibihaba bijanye n icimburwa kanaka. Nk akarorero, imirima ikeneye isi ndimwa, ibikoko bikeneye ahadukikije hari uburyo bwo kubaho kubiha ……, ibikoko bikeneye kuba bikikijwe n amazi, uburimyi, ubworozi kama hamwe n uburyo busanzwe (kama) bwo kwimbura vyotegerezwa kujana no kwisubiza hamwe n itandukaniro ry ubungane bw ibiba ahadukikije ariho mugahinga. Ukwo kwisubiriza ni kimwe kw isi mugabo uburyo gikorwa bujanye naho kibera. Integuro kama itegerzwa kujana n ivyaho hantu hasaba, ibiba ahadukikije, imibereho hamwe n ingene hangana.
Iivyo gukoresha vyategerzwa ku gabanywa ugusubira gukoresha ivyari vyakoreshejwe, mugusubiriza hamwe n ingoga be n integuro nziza y ibikoresho kugira habungabungwe kandi hatezwe imbere ubwiza bw ibidukikije kandi hazigamwe ibituma ibindi biboneka(ibivamwo ibindi)
Uburimyi kama bwategerezwa gushigikira urugero rw ibiba ahadukikije n ingene bibayeho kandi bibanye, biciye kunteguro y uburyo bwo kurima, bw ishingwa ry ibibanza hamwe no kuzigama uburimyi kama butandukanye.
Abimbura, abategura,abadandaza canke abafungura ivyimburwa kama bategerezwa gukingira no kunguka kuhabakikije basangiye ushizemwo n isi ibakikije, igihe c ikirere, ibibanza vy indimo, ubwoko bw ibibakikije, impwemu n amazi.

A.4. Ingingo ngenderwako yo kutagira aho uhengamiye

Uburimyi kama butegerezwa kubakira ku mibano igaragaza ukudahengama, ufatiye ku bidukikije bisangiwe hamwe n ibituma ubuzima bubaho.
Kudahengama birangwa n ukungana, kubaho , ukuri hamwe n itunganywa ry isi isangiwe, n ukuvuga mu Bantu no mu migenderanire yabo hamwe n ibindi biremwa.
Iyi ngingo yemezako ibikoresho mu burimyi kama vyotegerezwa kujana imigenderanire y umuntu mu nzira igaragaza ukudahengama ku migabane yose be n ibice vyose, abarimyi, abakozi, abatunganya, abatanga, abadandaza be n abafungura.
Uburimyi kama bwotegerezwa guha ubuzima bwiza umuntu wese abukora, kandi bugafasha n ubwigenge bw infungurwa hamwe no kugabanganya ubukene.
Akamaro kabwo n ukwimbura infungurwa zikwiye kandi nziza cokimwe n ibindi vyimburwa.
Iyo ngingo ishimangira ko ibikoko vyotegerezwa kuronswa uburyo n ibituma bibaho bijanye n ingene biremye n ingene vyigenza muri kamere kavyo hamwe n ukubaho kwiza kwavyo.
Ibivamwo ibindu kama kandi bidukikije bikoreshwa mukwimbura be no gufungura(gukoresha) vyotegerezwa gutegurwa mu buryo bukwiye muvy umubano hamwe no muvy ibidukikije n umubano wavyo. Kandi mu buryo bushira ukwizigira mu Bantu bo muri kazoza, kudahengama bisaba ubuhinga bwo kwimbura, bwo gutanga be no kudandaza bwuguruye kandi bungana,hamwe no gukoresha agaciro nyakuri k ibidukikije be n akimibano.

A.5. Ingingo ngenderwako yo kwitwararika

Uburimyi kama bwotegerezwa gutegurwa muburyo bujanye no kwitonda kandi bwega nyene kurima kugira hakingirwe amagara be nokubaho neza kw abantu be n ibidukikije vya none hamwe n ivyo muri kazoza.
Uburimyi kama n ubuhinga buriho kandi buhinduka, butanga ibikenewe n ibisabwa kubabugira mbere no kubandi bahandi.
Abarimyi kama barashobora guteza imbere ubushobozi be no kongereza umwimbu mugabo nti vyotegerezwa kuba inyanduruko yo konona amagara be no kubaho neza, kubera ivyo, ubuhinga bushasha bukenewe kwigwa, ubuhasanzwe nabwo bugasubirwamwo.
Turavye ugutahura kudakwiye kw ibidukikije, ingene bibayeho n ingene bibanye, hamwe n uburimyi,ubwitonzi butegerezwa kugirwa. Iyi ngingo ivuga ko ubwitonzi no kwegwa n ibintu arivyo ry integuro, n iry ubuhinga vy uburimyi kama bihagazeko.
Ubuhinga burakenewe kugira bwemeze ko uburimyi kama ari buzima, butagira agatosi kandi buri mubisabwa vyiza n ibidukikije n ingene bibayeho.

N uko biri uko, ubumenyi bw ubuhinga bwonyene nti bukwiye kumenyera ingero, ubwitonzi umuntu afise hamwe n ubumenyi kamere bwa kera bitanga inyishu zikwiye iyo ubirabiye ku gihe.
Uburimyi kama bwotegerezwa gukinga impanuka zikomeye mugukoresha ubuhinga bubishoboye hamwe no kureka izo umuntu aticura nk ubushakashatsi bw amamuko.
Ingingo zifatwa zotegerezwa kwisunga agaciro n ibikenewe nabo bose ibikorwa bishikako, biciye kwitunganywa ririmwo bose kandi ryo kumugaragaro.

Umugabane B
(Ibimenyeshejwe)

Urutonde rw ibintu bakoresha mugukora ibiterwa kama
(igice ca 5.6, 5.7 na 9.7)

Urutonde rwerekana ko hashobora kuba ibindi bintu bikoreshwa mu mwimbu kama bisunze urwo rugero mugihe hisungwa ingero nyamukuru zo muri IFOAM canke CAC/GL 32.

Table B.1 – Umwavu hamwe n ibibungabunga isi

Kwerekana ibintu nyamukuru bigize ikintu	**Uburyo bikoreshwa**
i) Ibikomoka ku biterwa no mu bikoko	
Umwavu wo mu ruhongore (amaganga)	
Guano	
Ahantu hava umwanda mukuru w umuntu hatandukanye baravye ko hatanduye	Ntimubikoreshe bwango Ntimubikoreshe harenza indwi 6 imbere y isoroma
Vermicastings	
Ibifungurwa vy amaraso, inyama, amagufa n ibifungurwa vy amagufa	
Ibifungurwa vy ibinono,amahembe,ibifungurwa vy amababa,ifi n ibizikomokako, ubwoya bwa laine, imishatsi, ibikorwa mu mata	
Kwerekana ibintu nyamukuru bigize ikintu	
Igifungurwa bakoresheje ibintu bibora, ibikomoka kubiterwa no ku bikoko (akarorero: ibikorwa mu fungurwa, infungurwa, imbuto z amavuta, amahinguriro y ibinyobwa n amaganiro, n uguhingura impuzu)	
Ibisigarira vy ibiterwa, ivyatsi, umwavu mubisi, ibishishwa vy ibiterwa.....	
Ibiti,ibishishwa, ibisigarira vyaho babaziye, ibituturwa, iminyota, amakara	
Ivyatsi bibi vyo nyanja n ibibivamwo	
Ibizuku(birabujijwe mw itegurwa ry isi)	Ivyinganira bihinguwe ntibirimwo gusa bagomba kuronka ibumba rivanze
Itegurwa ry ibiterwa n ibivamwo	
Umwavu uva mu birungo muri uyu mugabane, ibisigarira vy ibizinu, uburyohe bw isi buva mu dukoko n utuyoka, umwavu wo mu bisagara uva	

mumihingo itandukanye.	
ii) **Ibiva mu butare**	
Terril bassic	
Ihindurwa ry ivyunyunyu vya calcaire na magnesium	
Ishwagara y amabuye, gypse, marne, mearl, ishwagara riva muri beterave y isukari, ivyunyunyu vya sodium	
Igitandara ca magnesium, umunyu wa kieserite na Epson (sulphate ya magnesium)	
Potassium mineral (akarorero: sulfate ya potasse, miriate ya potasse, kainte, sylvanite, potentkali	
Umwavu kama	
Ibinompo: intete	
Ibumba (uturorero: bentonite, perlite, vermiculite, zeolite	
Ivyunyunyu vya clorure de sodium	
Ibisigarira vy ibintu	
Ivyunyunyu vya soufre	

Kwerekana ibintu nyamukuru bigize ikintu	**Uburyo gikoresha**
iii) Ibiva mu buhinga bwa microbiologie	
Ibiva mu bisigazwa vy amahinguriro bishobora kubora Akarorero: ibisigazwa vyo mu mahinguriro y inzoga n ayandi mahinguriro nk aya distilerie	
Integuro microbiologique zifatiye ku buryo kama bwo gukora bw ibinyabuzima	
iv)Ibindi	
Integuro biodynamique	
Lignosulfonate ya calcium	

Tableau B.2. Ibikingira ibiterwa be n ibibikurikirana ikura

Kwerekana ibintu nyamukuru bigize ikintu	**Uburyo gikoresha**
i) Ibikomoka ku biterwa no ku bikoko	
Itegurwa ry inyonko	
Itegurwa ry ibikoko n amavuta	
Ibimamara vy inzuki	
Neamaticide ya chitin (biboneka bidahinguwe)	
Imirima y ikawa	
Infungurwa za gluten y ibigori (gukurikirana ivyatsi bibi)	
Ibihinguwa mu mata (akarorero: amata, caseine	
Gelatine	
Lecitine	
Acide idahinguwe (Akarorero: Vinaigre)	
Neem (Azadiractha indica)	
Amavuta y ibiterwa (aka: Amavuta ya castor	
Itegurwa ry ibiterwa n itera ry ikawa (aka: Chili tithomia (amashurwe yo muri Africa, Tagestes sp, souci yo muri mexique	
Ibiterwa bitemera umubano	
Propolis	
Pyrenthrum (chrysanthemum cinerarialfolium)	Urunani rwa butoxide ya piperonyle nti rutegerezwa gukoreshwa
Quassia (quassia amara)	
Rotenone (derris elliptica, Lonchocarpus spp, thephrosia spp	Ivyigwa vyerekana ko hariho ihuriro hagati ya rotenone n ingwara ya Parkinson muri ico gihe ikoreshwa utegerezwa kugira aho rigarukira rikanagira ingingo zo gukinga
Ryaria (ryaria speciosa)	
Sabadilla	
Ivyatsi bibi vyo mu mabahari, infungurwa zivamwo n ivyo babihinguramwo	
Icayi c itabi(nicotine nzima ntitegerezwa gukoreshwa	
iii) Ibiva mubutare	
Ivyunyunyu vya clorure yo mw ishwagara	
Ibumba (akarorero: tentonite, perlite, vermiculite	

Ivyunyunyu vya cuivre (akarorero: ivyunyunyu vya sulphate,hydroxide, oxychloride na octanoate ya cuivre)	8Kg/ha kumwaka ntarengwa (kurugero rugeze biduga bimanuka)
Isi irimwo amadiatomais	
Amavuta (huile minerale) ahwahwutse (paraffine)	
Sulfure y ishwagara (polysulfide ya calcium)	
Ivyunyunyu vya bicarbonate ya calcium	
Ivyunyunyu vya permanganate ya potassium	
Ishwagara ikaze	
Silicate(akarorero: silicate ya sodium, ya quartz)	
Ivyunyunyu vya bicarbonate ya sodium	
Ivyunyunyu vya soufre	
iii) Uduce dutoduto (microorganismes)	
Itegurwa ry amafira	
Itegurwa ry udukoko dutoduto twitwa bacteries	
Kworohereza udukoko dutunzwe n ibindi , uturya utundi n udukoko tutagira amagufa, tutagira amakari	
Itegurwa ry imigera (akarorero: umugera wa granulosis	
iv) Ibindi	
Itegurwa biodynamique , ihindagurika mubinyabuzima	
Ivyunyunyu vya hydroxide ya calcium	
Ivyunyunyu vya dioxyde ya carbone	
Alcol etylique	
Itegurwa homeopathique na ayurvediques	
Phosphate ya fer (ikoreshwa nka molluscicide)	
Umunyu wo mw ibahari, umunyu wo mu mazi	
Ifanta	
Isabuni yoroshe	
Ivyunyunyu vya dioxide ya soufre	
v) Imitego, inzitizi, gusubizwa inyuma	
Uburyo bwinguvu (aka: Imitego chromatiques, (imitego hakoreshejwe ibintu)	
Ivyatsi, insenga	
Pheromones (mu mitego no mubigabuzi gusa)	

Umugabane C
(Ibimenyeshejwe)

Urutonde rw ibintu kama bidakoreshwa mugutegura no kuronka ibiterwa kama.

Urutonde ruri kurugero, rurimwo ibinru (substances) bidakoreshwa mukuronka ibiterwa kama.
Ufatiye kuri uru rugero:

Ukwerekana ibintu nyamukuru bigize ikintu	**Ico umuntu yobivugako**
Nicotine idacanze	Icayi c itabi kirarekuwe. Aho rero ingingo zo kwikingira zitegerezwa gufatwa kugira ntibihura n urukoba
Nitrate yo muri Chili	Nitrate yo muri Chili (Ivyunyunyu vya nitrate ya sodium) ntibishobora gukoreshwa mu mararo kama yemewe kuko harimwo Ivyunyunyu vya sodium bishobora kwiyubaka kandi bikagirira nabi ibterwa.

Umugabane D
(Ibimenyeshejwe)

Urutonde rw ivyo kuvanga be n imfashanyo mw itunganywa riri mu gutunganya infungurwa kama.

Igice co gufatirako ca 9.4

Uru rutonde rurerekana ko hashobora kuba ibindi bintu bikoreshwa mu mwimbu kama hisunzwe iyo ngingo mugihe hakurikijwe ingingo nyamukuru zo muri IFOAM canke CAC/GL 32

Uburyo mpuzamakungu bwo guharura (INS)	**Icimburwa**	**Ivyobongeramwo**	**Infashanyo y itunganywa**	**Ingene bikoreshwa be n ibimenyeshejwe**
INS 153	Umunyota w igiti	x		Iforomage ya kera

INS 170	Carbonate ya calcium	x	x	
INS 181	Ttannin		x	Ku muvinyu gusa
INS 184	Acide tannique		x	Infashanyo yo kuyungurura ku muvinyu gusa
INS 220	Dioxyde ya soufre	x		Ku muvinyu gusa
INS 224	Metabisulfite ya potassium	x		Ku muvinyu gusa
INS 270	Acide lactique	x	x	
INS 290	Dioxyde ya carbone	x	x	
INS 296	Acide L malique	x	x	
INS 300	Acide ascorbique	x		
INS 306	Tocopheroles, umuvango w ibintu kama vyakuwemwo amazi	x		
INS 322	Lecithin	x	x	
INS 330	Acide citrique	x	x	
INS 331	Citrate ya sodium	x		
Uburyo mpuzamakungu bwo guharura (INS)	**Icimburwa**	**Ivyobongeramwo**	**Infashanyo y itunganywa**	**Ingene bikoreshwa be n ibimenyeshejwe**
INS332	Citrate ya potassium	x		
INS 333	Citrate ya calcium	x		
INS 334	Imyunyu n ama acide tartarique	x	x	Ku muvinyu gusa
INS 335	Tartrate ya sodium	x	x	
INS 336	Tartrate ya potassium	x	x	
INS 341	Phosphate ya mono calcium	x		Mu gukora ifu gusa
INS 342	Phosphate ya ammonium	x		Birekuwe gusa ku bice bingana 0.3 mg/l mu muvinyu

INS 400	Acide alginique	x		
INS 401	Alginate ya sodium	x		
INS 402	Alginate ya potassium	x		
INS 406	Agar	x		
INS 407	Carrageenan	x		
INS 410	Locust bean gum	x		
INS 412	Gur gum	x		
INS 413	Ttragacanth gomme	x		
INS 414	Gomme arabe	x		Honyene ku bintu bikorwa mu mata, kubirimwo ibinure, mw isukari no mu magi
INS 415	Xanthan gomme	X		Honyene ku bintu bikorwa mu mata, ibintu biva mu vyamwa n imboga,ama cake n ibisuguti
Ingene bikoreshwa ben ibimenyeshejwe	**Icimburwa**	**Ivyobongeramwo**	**Infashanyo y itunganywa**	**Ingene bikoreshwa ben ibimenyeshejwe**
INS 416	Karaya gomme	x		
INS 440	Pectin	x		Idahinduye
INS 500	Carbonate ya sodium	x	x	
INS 501	Carbonate ya potassium	x	x	
INS 503	Carbonate ya ammonium	x		Ku vyimburwa vy intete no ku bintu biva muntete nk ama cake n ibisuguti
INS 504	Carbonate ya magnesium	x		
INS 508	Clorure ya potassium	x		
INS 509	Clorure ya	x	x	

	calcium			
INS 511	Clorure ya magnesium	x	x	Ku bintu biva mw isoya
INS 513	Acide sulfurique		x	Kkuraba neza urugero rwa PH y amazi mw itunganywa ry isukari
INS 516	Sulfates ya calcium	x		Kuvyimburwa vy isoya, kubintu bisosa hamwe n umwanike wo gukora imikate
INS 517	Sulfate ya ammonium	x		K umuvinyu gusa, birekuwe gusa ku bice 0.3 mg/l
INS 524	Hydroxyde ya sodium	X	x	Ku nteguro y isukari be no munteguro y ikibanza gikorerwamwo ivyo muri boulangerie
Ingene bikoreshwa be n ibimenyeshejwe	**Icimburwa**	**Ivyobongeramwo**	**Infashanyo y itunganywa**	**Ingene bikoreshwa be n ibimenyeshejwe**
INS 525	Hydroxyde ya potassium		x	Gucungera neza PH mw itunganywa ry isukari
INS 526	Hydroxyde ya calcium	x	x	Ivyokwongera mw ifu y ibigori canke ya tortilla, gufasha mw itegurwa ry isukari
INS 551	Dioxyde ya silicon (amorphe)		x	Ku muvinyu, mw itugurwa ry ivyamwa n imboga
INS 553	Talc		x	
INS 901	Ikimamara		x	
INS 903	Ikimamara ca		x	

	carnauba			
INS 938	Argon	x	x	
INS 941	Azote	x	x	
INS 948	Oxygene	x	x	
	Carbone active		x	
	Bentonite		x	Mu biva mu vyamwa n imboga gusa
	Caseine		x	Ku muvinyu gusa
	Terre diatomee		x	Ku muvinyu gusa no kubintu vyongera akanovera (ingredients)
	Blanc de l oeuf		x	Ku muvinyu gusa
	Ethanol		x	
	Gelatine		x	Ku muvinyu gusa, ivyamwa n imboga
	Hazelnut shells		x	
	Isinglass		x	Ku muvinyu gusa
	Kaolin		x	
	Perlite		x	
Ingene bikoreshwa be n ibimenyeshejwe	**Icimburwa**	**Ivyobongeramwo**	**Infashanyo y itunganywa**	**Ingene bikoreshwa be n ibimenyeshejwe**
	Integuro z ibishishwa vy ibiti		x	
	Amavuta yo mubiterwa		x	
	Amazi		x	