

IKIGO CY'IGIHUGU GITSURA UBUZIRANENGE



**UBURYO BUBONEYE BWO KWENGA INZOGA
Z'IBITOKI NA DIVAYI ZONGEWEMO
IBIKOMOKA KU BIMERA**

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Kigali, Rwanda

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1 IRIBURIRO

Ibitoki ni kimwe mu bihingwa ngenga bukungu kandi bikaba ngandurarugo byiganje mu Rwanda. U Rwanda ruza ku mwanya wa kabiri nyuma ya Uganda mu bihugu birya cyane ibitoki mu karere k'Afurika y'i Burasirazuba aho umunyarwanda umwe arya ibiro 144 by'ibitoki ku mwaka (NISR, 2015). Mu w'2015, urutoki rwari ruhinzwe kuri 23% by'ubuso bw'ubutaka buhingwa, rugatanga 27.9% by'umusaruro mbumbe w'igihugu rukurikira imyumbati (NISR, 2015).

Mu Rwanda, dufite amoko atandukanye y'ibitoki bikoreshwa mu buryo butatu. Hari ibitoki byo guteka, iby'imineke n'ibyo kwengamo inzoga ari na byo byiganje kuruta ibindi. Raporo y'Ikigo cy'Igihugu cy'Ibarurishamibare (2015) yerekana ko ubwoko bw'ibitoki bwengwamo inzoga buhingwa ku buso bungana na 11.8% by'ubutaka bwose buhingwaho nyuma y'imyumbati n'ibishyimbo. Ibitoki byo guteka bihingwa ku buso bungana na 8.5% mu gihe iby'imineke bihingwa ku buso bungana na 2.9% (Ikigo cy'Igihugu cy'Ibarurishamibare, 2015). Nk'uko Nsabimana (2001) yabigaragaje, mu Rwanda hari amoko arenga 67 y'ibitoki. Muri yo 67% ni ibitoki byengwamo inzoga. Byongeye kandi, Kanyana (2013) agaragaza ko inzoga z'ibitoki zigira uruhare mu kuzamura imiryango. Nk'uko abigaragaza muri raporo ye yo mu w'2013, umusaruro w'ibikomoka ku bitoki (umutobe, divayi, urwagwa n'izindi nzoga ziva mu bitoki) ku mwaka wabarirwaga kuri litiro miliyoni 700 mu gihugu hose, bityo rero umunyarwanda akaba anywa ku kigero cy'impuzandengo ya litiro 1.2 ku munsu. Yagaragaje kandi ko isaranganya ry'umusaruro mbumbe w'ibitoki mu ngo riri hagati ya 24% na 43%.

N'ubwo kongerera agaciro ibikomoka ku bitoki byateye imbere, haracyariho inzitizi nyinshi ku bijyanye n'ubuziranenge, zishingiye cyane cyane ku mikorere, uburyo bwo gufunyika, gutwara no gucuruza butanoze ari byo bishobora kwagiza ubuziranenge bw'ibyo binyobwa.

Mu rwego rwo kongera ubwiza bw'ibikorera mu Rwanda ("Made-In-Rwanda") bibifasha guhangana ku masoko n'ibindi bicuruzwa, no kubungabunga ubuzima bw'abakoreshe ibikomoka ku bitoki; Ikigo cy'Igihugu Gitsura Ubuziranenge cyashyizeho amabwiriza y'ubuziranenge by'umwihariko y'ibinyobwa bikomoka ku bitoki na divayi zongewemo ibikomoka ku bimera agaragaza imiterere n'uburyo buboneye bwo kubikora kandi akanashyiraho ingero genderwaho. Cyashyizeho nanone amabwiriza y'ubuziranenge agenga imikorere kugira ngo inganda zibashe

gukora ibinyobwa byujuje kandi bifite ibirango by'ubuziranenge. Mu rwego rwo gufasha ishyirwa mu bikorwa ry'ayo mabwiriza hateguwe agatabo gasobanura amabwiriza y'ubuziranenge mu buryo bworoheye buri wese kakaba kibanda ku mahame rusange mu kuboneza aho bakorera izo nzoga hamwe n'indangamiterere z'ibyo binyobwa.

Icyitonderwa: Ni ngombwa cyane kumenya ko aka gatabo kadasimbura amabwiriza y'ubuziranenge ya ngombwa mu mikorere runaka.

Muri ayo mabwiriza harimo:

- a) RS CAC RCP 1, Amahame rusange y'isuku mu gutunganya ibiribwa, (*General principles of food hygiene*)
- b) RS 184, Gusesengura no kugenzura ibyiciro by'ingenzi byagira uruhare mu kwangiza ibiribwa, (*Hazard Analysis and Critical Control Points*)
- c) RS 358, umutobe w'ibitoki — Indangamiterere, (*Banana Juice — Specification*)
- d) RS 224, Urwagwa — Indangamiterere, (*Urwagwa — Specification*)
- e) RS EAS 138, Divayi ikomoka ku mbuto — Indangamiterere, (*Still table wine — Specification*)
- f) RS 343, Inzoga zengwa mu bitoki — Indangamiterere, (*Banana based alcoholic beverages — Specifications*)
- g) RS ISO 22002, Uburyo bwo kubungabunga ibiribwa (*Food safety management systems*) — and
- h) RS 344, Divayi yongewemo ibikomoka ku bimera — Indangamiterere, (*Plant flavoured wine — Specification*).

2 AHO AKA GATABO GAKORESHWA

Aka gatabo kanditswe mu gufasha umuntu wese ukora ibinyobwa bikomoka ku bitoki; hari mo umutobe, urwagwa, inzoga, divayi ari ikomoka ku bitoki ndetse n'iyongewemo ibikomoka ku bimera; gukora ibinyobwa byujuje indangamiterere zemejwe mu mabwiriza y'ubuziranenge yabugenewe.

3 AMAGAMBO N'IBISOBANURO BYAYO

Amagambo n'ibisobanuro byayo bifasha umusomyi kumva neza ibisobanuro by'amagambo yakoreshejwe mu mabwiriza y'ubuziranenge.

3.1 Ibinyobwa bikomoka ku bitoki

Ibinyobwa bikomoka ku bitoki harimo umutobe, urwagwa, divayi hamwe n'izindi nzoga zengwa mu bitoki.

3.1.1 Umutobe w'ibitoki

Ikinyobwa kidasembuye ariko gishobora gusemburwa cyengwa mu bitoki ghiye neza

3.1.2 Urwagwa

Ikinyobwa gisembuye cyengwa mu mutobe ufunguye w'ibitoki ubeteje amasaka akaranze cyangwa se adakaranze

3.1.3 Butunda

Ikinyobwa gisembuye cyengwa mu mutobe udafunguye w'ibitoki ubeteje amasaka akaranze cyangwa se adakaranze

3.1.4 Inkangaza

Ikinyobwa gisembuye cyengwa mu mutobe w'ibitoki ufunguye cyangwa udafunguye ubeteje amasaka akaranze cyangwa se adakaranze hongewemo ubuki

3.1.5 Divayi y'ibitoki

Ikinyobwa gisembuye cyengwa mu bitoki bihiye neza hongewemo cyangwa hatongewemo indyoshyandyo (Food additives)

3.2 Izindi nzoga zishamikiye ku bitoki

Ibinyobwa bisembuye byengwa mu bitoki bihiye neza bivanzwemo ibindi bikomoka ku bihingwa nk'isukari cyangwa ubuki

3.3 Divayi yongewemo ibikomoka ku bimera

Ikinyobwa gisembuye gikorwa hifashishijwe divayi yongewemo indyoshyandyo zikomoka ku bimera.

*Imfashanyigisho ya 1 - Uruganda
ntirukorera ahantu hashobora kwanduza
ibinyobwa*



4 INYUBAKO N'IMIKORERE

Ubuziranenge bw'ibinyobwa bukomoka ku byo bikoze, inyongeramirire zakoreshejwe, aho bikorerwa hamwe n'uko bikorwa kuva mu itangira kugera birangira. Umuntu wese bireba asabwa kubahiriza amabwiriza abigenga kugira ngo ikinyobwa kibe kiboneye kandi cyujuje ibisabwa n'amabwiriza y'ubuziranenge.

Ibisabwa byose ku buryo burambuye biboneka ku mugereka w'aka gatabo.

4.1 Inyubako

4.1.1 Aho zihereye

Inganda zikora ibinyobwa bikomoka ku bitoki na divayi yongewemo ibikomoka ku bimera zigomba kuba zubatse ahantu hatuma ibinyobwa bitandura. Mu guhitamo aho zubakwa bagomba kwirinda kuzishyira ahantu hakurikira:

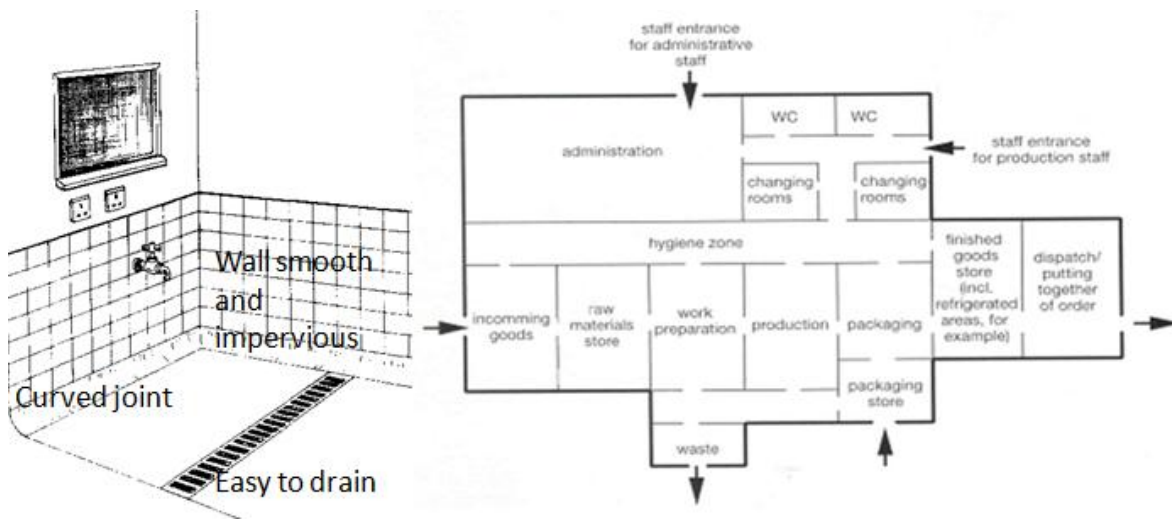
- ahashobora kuba imyuzure mu gihe nta buryo bwo kuyikingira;
- ahari izindi nganda zishobora kwanduza ibinyobwa;
- hafi y'ahantu hateganyirijwe kujugunywa umwanda;
- aho ibisigazwa (bisukika cyangwa se bikomeye) bitakurwaho ku buryo bworoshye ntihemerewe kubakwa urwengeru;
- ahorohera ukororoka k'udukoko n'ibyonnyi.

4.2 Imiterere y'inyubako

Inganda zikora ibinyobwa bikomoka ku bitoki na divayi zongewemo ibikomoka ku bimera zigomba kuba zubatswe ku buryo bworohereza ibikorwa by'isuku kandi burinda icyakwanduza ibinyobwa mu byiciro bitandukanye (Reba Umugereka wa mbere).

Urugero rw'imiterere iboneye y'uruganda

Imfashanyigisho ya 2 - Imiterere iboneye y'uruganda



Imfashanyigisho ya 3 - Ibikoresho byemewe n'ibitemewe gukoreshwa

4.3 Ibikoresho byo mu ruganda

Ibikoresho birimo ibitonora, ibyenga, ibikamura, ibiyungurura, ibitekwamo, ibitarwamo, imashini zisuka mu macupa n'ibigega bikoreshwa mu gukora ibinyobwa bikomoka ku bitoki divayi zongewemo ibikomoka ku bimera bigomba kuba bikoze ku buryo bworoshya isuku, bikoze mu bikoresho bitahumanya (toxic)



ku binyobwa, ibikoresho bitafata umugese mu kwenga, ibigega byabugenewe mu gutwara, gutara no kubika umutobe. Ibikoresho bishobora kwimurwa bigomba kuba biramba, kandi bishobora guhamburwa mu gihe cyo kubisana no kubisukura.

Ku bikoresho bitimurwa, ahantu bishyirwa hagomba kuba horoshya ibikorwa by'isuku.

4.4 Ibikorwa remezo

Ibikenerwa mu gusukura nk'amazi, amashanyarazi n'ibikoresho by'isuku bigomba kugezwa ku ruganda.

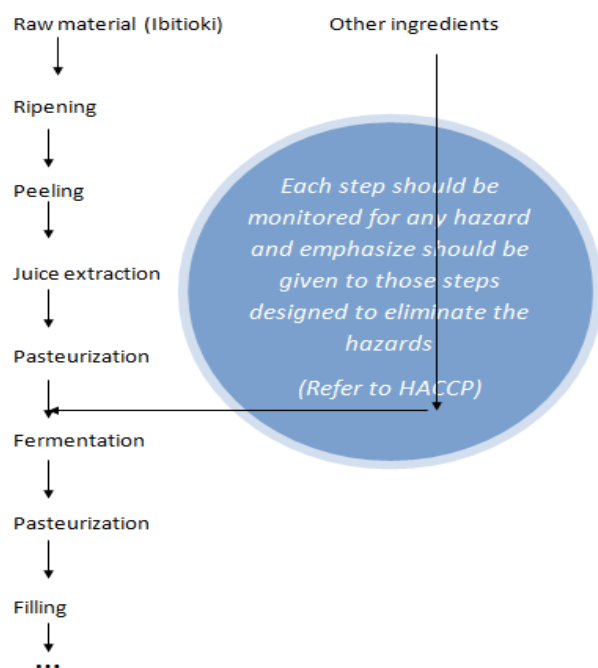
Hagomba kubakwa kandi ibitembo bitanga amazi meza n'uburyo buboneye bwo gutwara imyanda mu rwego rwo kwirinda kwandura kw'ibinyobwa mu byiciro bitandukanye.

Ibifasha mu isuku y'abakozi bigomba kuba bihagije kandi bikorerwa isuku kugira ngo habungwabungwe isuku yabo no kwirinda kwandura kw'ibinyobwa mu byiciro bitandukanye. Muri byo harimo urwambariro, ubwiherero, aho gukarabira n'aho kumutsa intoki.

4.5 Kugenzura imikorere

4.5.1 Kugenzura ibyiciro by'ingenzi

Imfashanyigisho ya 4 – Ibice by'ingenzi mu gukora ibinyobwa biva mu bitoki



Abantu bose bakora ibinyobwa biva mu bitoki na divayi yongewemo ibikomoka ku bimera bagomba kugenzura buri cyiciro cy'imikorere yabyo kuva ku itangiriro kugeza ku iherezo. Bagomba kwitondera buri cyiciro gishobora kugira ingaruka ku buziranenge bw'ibinyobwa, bakubahiriza ibisabwa kuri ibyo byiciro no guhora bagenzura uko byuharizwa ku buryo buhoraho no kubinoza kurushaho igihe cyose imikorere ihindutse.

Ibyifashishwa mu kwenga ibinyobwa nk'ibitoki, amasaka, ibibabi, imizi n'ibihimba by'ibimera ndetse n'inyongeramirire bigomba kugenzurwa neza, bigatoranywa mu rwego rwo gukuramo ikintu cyose cyakwangiza ibinyobwa. Iryo toranya/genzura rishingira ku gukuramo ibyangiritse, ibyatoye uruhumbu n'ibyafashwe n'indwara kuko ibyo byose bishobora kugira ingaruka mbi ku buziranenge bw'ibinyobwa.

Mu gihe igenzura risanzwe ridashobora kwizeza ubuziranenge bw'ibyifashishwa hakoreshewa gupima muri laboratwari cyane cyane nko gupima utugirangingo tutaboneshwa amaso (micro-organisms), imiti yica udukoko (pesticides), uburozi (toxin) nka Afulatogisine (aflatoxin).

Nyuma yo gutoranya, mu gihe bibaye ngombwa, ibyifashishwa n'ibigega bikoreshewa mu kubika no gutwara ibinyobwa bigomba kubanza gusukurwa hakoreshejwe amazi meza (RS EAS 12) yonyine cyangwa hakongerwaho kubisukura hakoreshejwe imiti yabugenewe.

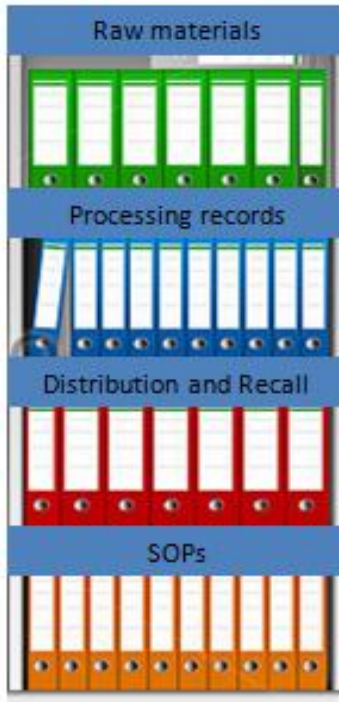
Ku mikorere imwe n'imwe isaba imikorere mbanziriza gikorwa, nko ku bitoki bigomba kubanza gushya neza, ni ngombwa gushyiraho amabwiriza ngengamikorere mu rwego rwo kubungabunga ubuziranenge bw'ibinyobwa bikomoka ku bitoki.

By'umwihariko abantu bagomba kwitondera ibyiciro byo kwica mikorobe nko ku cyiciro cyo guteka no ku cyo gukoresha ibinyabutabire byongera igihe ikinyobwa kizamara. Umukozi ubishinzwe agomba kugenzura neza iyubahirizwa ry'ibipimo ntarengwa, harimo igihe, igipimo cy'ubushyuhe n'ibipimo by'ibinyabutabire byongera igihe ikinyobwa kizamara byakoreshejwe.

Ibikoresho byo gupfunyikamo bigomba kuba bifite ubushobozi bwo kurinda ubwandu ubwo ari bwo bwose, kubungabunga ubuziranenge bw'ibipfunyitswe kandi bitabangamiye ibidukikije. Ku nzoga zisindisha amacupa y'ibirahure ni yo agomba gukoreshwa.

Ahantu ho kwitondera (sensitive areas) nk'ahatunganyirizwa ibinyobwa cyangwa se ahabitswe ibinyabutabire bishobora guteza impanuka hagomba kugenzurwa ku buryo bw'umwihariko. Kugira ngo bahabwe uburenganzira bwo kugera ahantu nk'aho, abakozi bagomba kwambara imyambaro yabugenewe ifite isuku, inkweto, uturindamunwa n'uturindantoki twabugenewe kandi bagakaraba intoki mbere yo kuhinjira. Umukozi ushaka kwinjira mu bubiko bw'ibinyabutabire bishobora guteza impanuka abiharerwa uruhushya n'urwego rubifititiye ububasha.

4.5.2 Uburyo bwo kubika inyandiko nkenerwa mu



mikorere

Inyandiko zose, haba izigaragaza ibikorwamo ibinyobwa, gutunganya ibinyobwa, kwirinda udukoko n'ibyonnyi, kugenzura uko imyanda icungwa ndetse n'izigaragaza uko isuku ikorwa zigomba kubikwa no gucungwa neza.

Inyandiko zigaragaza imitunganyirize y'ikinyobwa ndetse n'ikwirakwizwa ryacyo, zigomba kubikwa igihe kirenga icyo icyo kinyobwa giteganyirijwe kumara. Izo nyandiko zigomba kwerekana mu buryo bunononsoye, aho ibikorwamo ibinyobwa by'ibanze n'ibindi bivangwamo byaturutse, itariki byakiriweho, ingano y'ibyakiriwe, ibyavuye mu igenzura ry'ibyakiriwe, uburyo ibinyobwa byatunganyijwemo, itariki byatunganyirijweho,

ibyavuyemo (production output) ndetse n'umukozi wari ubishinzwe.

Umukozi ubishinzwe agomba gushyiraho uburyo bufatika kandi bwanditse bwo guhangana n'ikintu cyose gishobora kwanduza ikinyobwa (food safety hazard) kugira ngo ibinyobwa byose byagaragaye ko byanduye bibashe kuvanwa ku isoko mu buryo bwihuse.

Mu gihe ikinyobwa cyavanywe ku isoko kubera ingaruka zihuse cyagira ku buzima bw'abantu, ibindi binyobwa byose byatunganyijwe mu buryo bumwe na cyo kandi bishobora gutera ingaruka zimwe, bigomba kugenzurwa mu rwego rwo kubungabunga ubuzima bw'abantu ku buryo nabyo bishobora kuvanwa ku isoko.

Mu gihe hari ibyagaragaye ko byanduye kandi bitaravanwa ku isoko, abaturage bagomba kubimenyeshwa ku buryo bakwirinda kubikoresha. Ibyavanwe ku isoko bigomba kuba bicunzwe neza kugeza igihe bikuriweho burundu cyangwa bikoreshejwe ikindi kitari ukunyobwa ku buryo kitagira ingaruka mbi ku buzima bw'abantu cyangwa byongeye gutunganywa ku buryo ubuziranenge bwabyo bwakwizerwa.

4.6 Kwita no gusukura inyubako n' ibikoresho

Inyubako n'ibikoresho by'ahatunganyirizwa inzoga z'ibitoki n'izongewemo ibikomoka ku bimera, bikwiye kuba bikoze neza ku buryo bworoshya isukura kandi bikora neza icyo byagenewe gukoreshwa cyane cyane ku byiciro cy'imitunganyirize by'ingenzi mu kurinda ubuziranenge bw'inzoga z'ibitoki n'izongewemo ibikomoka ku bimera.

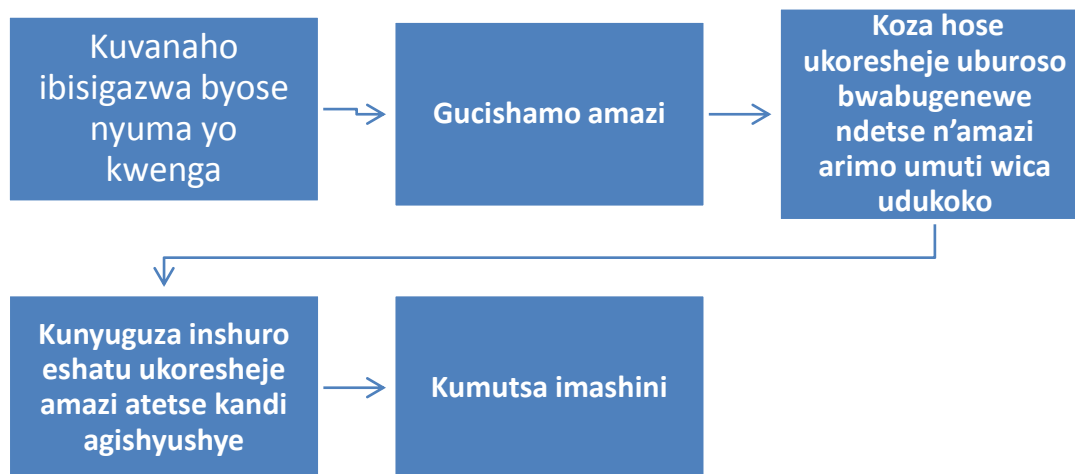
Gukora isuku bigomba kvanaho ibisigazwa byose n'indi myanda ishobora kuba isoko y'ibyakwanduza ibinyobwa, harimo utuvungukira tw'ibyuma, ibimene by'amata, ibisigazwa by'ibyatunganyijwe ndeste n'ibinyabutabire byakoreshejwe. Hagomba kubaho imikoresherezwe iboneye y'ibikoresho by'isukura, harimo uburoso, amasabune yabugenewe ndetse n'imiti yica mikorobe.

Imiti ikoreshwa mu isukura igomba gukoreshwa neza hakurikijwe amabwiriza yatanzwe n'uwayikoze, ikabikwa neza, ndetse ikabikwa ahatandukanye n'ahabikwa ibizifashishwa mu gutunganya ibinyobwa cyangwa se ibinyobwa byarangije gutunganywa, kandi ikabikwa mu bintu bigaragaza neza ko harimo iyo miti.

Kugira ngo isuku ikorwe neza kandi mu buryo burambye, hakwiye kubaho uburyo bwanditse isuku ikorwamo ndetse n'ingengabihe y'isukura. Uburyo isuku ikorwamo bugomba kugaragaza ahantu cyangwa igikoresho cyo gusukura, ibikoresho n'imiti yo kwifashisha, uburyo ndetse n'ibyiciro igomba gukorwamo.

Urugero rw'uburyo bwo gusukura buragaragara mu mfashanyigisho ikurikira:

Imfashanyigisho ya 6: Urugero rw'uburyo bwo gusukura



Ingengabihe y'isukura igomba kugaragaza ahantu cyangwa igikoresho cyo gusukura, umukozi ubishinzwe, uburyo n'inshuro bigomba gukorwa ndetse n'uburyo bwo kugenzura ko byakozwe neza. Urugero rw'ingengabihe y'isukura murayisanga mu mfashanyigisho ya 7.

Imfashanyigisho ya 7 – Urugero rw'ingengabihe yo gukora isuku

Gahunda yo gukora isuku y'imashini yenga

Inshuro bikorwa	Igihe bikorewe	Umukozi wayisukuye	Uburyo yifashishije	Kwemeza ko byakozwe
Nyuma yo kwenga na mbere y'aho mu gihe imaze iminsi 3 idakoreshwa	12/10/2010	Niyonkuru	CLB 005	✓
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4.7 Kwirinda no kurwanya udukoko n'ibyonnyi

Udukoko n'ibyonnyi bigira ingaruka zikomeye ku buziranenge n'imiterere iboneye y'ibinyobwa. Ni yo mpamvu, ababishinzwe bagomba kumenya utwo udukoko n'ibyonnyi, imiterere yatwo n'uburyo tubaho kugira ngo hashyirweho uburyo buhamye bwo kutwirinda no kuturwanya. Hagomba gukoreshwa kandi uburyo bwubahiriza amabwiriza y'isuku kandi butakwangiza

ibikorera mu rwengero mu gihe hirindwa ko udukoko n'ibyonnyi byakwinjira mu rwengero, kurwanya indiri yatwo ndetse no kubihashya aho byamaze kugaragara.

Inyubako zigomba kuba zubatse neza ku buryo udukoko n'ibyonnyi bitabasha kwinjiramo cyangwa kororoka. Imyobo, imiyoboro itwara amazi yanduye ndetse n'ahandi hose udukoko n'ibyonnyi bishobora kwinjirira hagomba guhora hafunze neza. Urugero ni nko gushyira utuyunguruzo ku madirishya n'inzugi bifungurwa no mu myanya yegenewe gutangirwamo. Aho bishoboka hose amatungo agomba kuba kure y'ahatunganyirizwa inzoga z'ibitoki n'izongewemo ibikomoka ku bimera.

4.8 Uburyo bwo gucunga neza y'imyanda

Inzengero z'inzoga z'ibitoki n'izongewemo ibikomoka ku bimera, ziri mu nganda zigira ibisigazwa byinshi. Muri ibi harimo ibisigazwa bituruka ku gutonora, gukamura no kuyungurura. Iyi myanda ishanguka vuba kandi ikurura udukoko n'ibyonnyi; byongeye kandi imyanda ituruka mu gusukura no kwica udukoko n'ibyonnyi igira ingaruka zikomeye ku buryo yakwangiza ubuziranenge bw'ibinyobwa. Niyo mpamvu hagomba kubaho ingengabihe n'uburyo busobanutse bwo kuvanaho no kujugunya iyo imyanda ahabugenewe.

Imfashanyigisho ya 8 - Uburyo bwo kwirinda



4.9 Isuku y'abakozi

Imirimo yo gutunganya inzoga z'ibitoki n'izongewemo ibikomoka ku bimera ikorwa n'abantu.

Ubuziranenge bwabyo bushobora kwangizwa mu buryo bworoshye n'abantu babikora. Byongeye kandi imiterere y'ibi binyobwa ituma bishobora kwandura vuba bitewe n'uburyo bikorwamo.

Ni yo mpamvu, abantu bakora mu nzengero zitunganya ibi binyobwa, cyane cyane ku byiciro byagenewe kunoza ubuziranenge bwabyo (twavuga nko guteka, kuyungurura,

gusuka mu macupa no gupfunyika) bagomba kwambara imyambaro yabugenewe harimo udupfukamunwa, uturindantoki ndetse n'inkweto zabugenewe. Byongeye kandi, bagomba kuba badafite indwara zandura zakwanduza ibinyobwa, kugira ngo bigerweho bisaba ko abantu bisuzumisha kwa muganga mu buryo buhoraho kandi bakamenyekanisha uburwayi cyangwa ibikomere bishobora kwanduza ibinyobwa.



Abakozi n'abashyitsi bagomba kwirinda imyitwarire ishobora kwanduza ibinyobwa mu gihe bari mu rwengero. Muri icyo myitwarire harimo kunywa itabi, gucira hasi, kurya, kwimyira no gukorora. Amasaha n'ibirimisho ntibigomba kwambarwa ahatunganyirizwa ibinyobwa.

Ni ngombwa kugira isuku ku mubiri, guca inzara, gukaraba intoki mbere yo gutangira imirimo na nyuma yo gukora ku bintu byakwanduza ibindi (nka nyuma yo kuva mu bwiherero, gukora ku bikorwamo ibinyobwa bitarunganywa) ibyo bigomba kuba ari itegeko mu rwengero.

5 IMITERERE Y'IBINYOBWA

Yaba umutobe, urwagwa, inzoga cyangwa divayi y'ibitoki ndetse n'inzoga zongewemo ibikomoka ku bimera byose bifite ibibiranga kandi bitandukanye. Ariko kubera ko bimwe muri ibyo binyobwa bihuje ibyo bikorwamo n'uburyo bwo kubikora (gutara), bigira ibisabwa n'amabwiriza y'ubuziranenge amwe n'amwe bihuriyeho.

5.1 Amahame rusange

5.1.1 Itende

Imfashanyigisho ya 9 - Ingaruka zo kutayungurura neza ibinyobwa



Kubera kutayungurura neza ibinyobwa bimwe bishobora kugira amatende arenze ibipimo bisabwa

Uretse umutobe na divayi bituruka ku bitoki; n'inzoga zongewemo ibikomoka ku bimera, urwagwa n'ibindi binyobwa bisembuye bituruka ku bitoki ntibigomba kugira itende rirengeje 5% by'ingano yose y'ikinyobwa. Ibi ni ukubera ko kugoresha ifu y'amasaka bishobora gusaba uburyo bwo kuyungurura budasanzwe kugira ngo itende ryose rishobore gushiramo.

5.1.2 Urugero rwa aside(acidity)

Ntibishoboka ko aside itaboneka mu binyobwa bisembuye, kuko ituruka ku miterere y'ibikorwamo ibyo binyobwa n'uburyo bikorwamo kandi ikaba igira uruhare mu bwiza no kubikwa igihe kirekire. Ariko ingano yayo igomba kugenzurwa neza kugira ngo itaza kurenga igipimo cyagenwe bikangiza ikinyobwa ndetse bikaba byakwangiza urwungano ngogozo rw'ubinyweye.

Urugero rw'ubusharire (pH) rugomba kuba hagati ya 4 na 5, amabwiriza y'ubuziranenge ashiraho ingero ntarengwa za aside zose mu kinyobwa (ari izitsitse (fixed) n'izitumuka (volatile)) ko zitagomba kurenga garama 12 muri litiro imwe. Aside asetike (acetic acid) igomba kuba iri ku rugero rwo hasi kubera ko iyo irengeje urugero rwagenwe, ituma ikinyobwa gisharira cyane, ni yo mpamvu amabwiriza y'ubuziranenge asaba ko itagomba kurenga garama 2 muri litiro imwe ya divayi y'ibitoki; garama 3 muri litiro imwe y'inzoga z'ibitoki na garama 2,16 muri litiro imwe ya inzoga zongewemo ibikomoka ku bimera. Aside ishobora kwiyongera mu gihe hatagenzuwe ubwiyongere bwa mikorobe mu binyobwa. Ku bijyanye n'umutobe w'ibitoki, ibipimo ntarengwa byaaside bitewe n'ubwoko bw'umutobe turabisanga mu mbonerahamwe ya 2 mu gika cya 7.3.1.2.

5.1.3 Ibipimo ntarengwa ku byangiza ibinyobwa

Imfashanyigisho ya 10 - Gutera umuti urwany indwara mu rutoki



Ibinyobwa bikomoka ku bitoki ndetse n'inzoga zongewemo ibikomoka ku bimera bigomba kuba bidafite ubwandu buri ku bipimo byagira ingaruka ku buzima bw'ubinyweye. Ibi binyobwa bishobora kwangirika bitewe n'ibyo bikoze cyangwa uburyo bikorwamo. Ibikunze kugaragara cyane n'ibisigazwa by'imiti irwanya indwara z'ibihingwa (pesticides residues), ubutare (heavy

metals/toxic metals) ndetse n'uburozi buterwa n'uruhumbu (mycotoxins).

- a) **Ibisigazwa by'imiti y'ibihingwa** bishobora kugaragara mu kintu cyose cyakozwe hifashishijwe kimwe mu bikigize cyatewe iyo miti. Ibipimo ntarengwa ku bisigazwa by'imiti y'ibihingwa mu byasaruwe igaragara ku rubuga rw'ikigo mpuzamahanga cyita ku buziranenge bw'ibiribwa (Codex Alimentarius Commission).

Ubutare (Heavy metals or toxic metals) bushobora kugaragara muri kimwe mu binyobwa

Imfashanyigisho ya 7 - Ibipimo ntarengwa ku butare

As	Cd	Pb
Arsenic	Cadmium	Lead
0.01 mg/kg Max.	0.1 mg/kg Max.	0.2 mg/kg Max.

bikomoka bitoki cyangwa inzoga zongewemo

ibikomoka ku bimera. Bishobora guturuka ku mafumbire atujuje ubuziranenge yakoreshejwe, aho imirima iherereye, ku mazi akoreshwa mu kuhira cyangwa ayakoreshejwe mu rwengero. Bishobora kwirindwa hubahirizwa amabwiriza akubiye mu gika cya 4.1

kugeza ku cya 4.5 cyangwa kugenzura imikorere nk'uko bigaragara mu gika cya 4.6 cy'aya mabwiriza byadufasha kwirinda ubwo butare. Ubutare bushobora kugaragara mu binyobwa bikomoka ku bitoki n'inzoga zongewemo ibikomoka ku bimera hamwe n'ibipimo ntarengwa byabyo nk'uko bigaragara mu mfashanyigisho ya 10.

- b) **Uburozi bwa afulatogisini (Aflatoxins) (bugaragazwa n'uruhumbu** bushobora kugaragara mu binyobwa bikomoka ku bitoki, mu gihe amasaka cyangwa ibindi byifashishwa (nk'ibindi binyampeke cyangwa tangawizi (ginger)) bifite uruhumbu byakoreshejwe mu gukora ibyo binyobwa. Ibipimo ntarengwa ni 10 µg/kg ku burozi bwose hamwe na 5 µg/kg ku bwoko bw'uburozi afulatogisini B1 (aflatoxin B1).

- c) **Ubwandu bwa mikorobe zikomoka ku binyobwa:** Ibinyobwa bituruka ku bitoki n'inzoga zongewemo ibikomoka ku bimera bigomba gutunganywa mu buryo bufite isuku ihagije kugira ngo hirindwe ko byakwandura mikorobe zishobora gutera kwangirika kw'ibinyobwa bikaba byagira ingaruka mbi ku babinywa. Bumwe muri ubwo buryo harimo nko guteka ibinyobwa bikarushaho kuba byiza iyo bikozwe nyuma yo gushyirwa mu macupa.

Imfashanyigisho ya 8 – Ibipimo ntarengwa bya mikorobe mu mutobe w’ibitoki no mu binyobwa

Mikorobe nyinshi ntizishobora kororoka



cyangwa kubaho mu binyobwa bifite alukoro irengeje 10%, ariko kubiteka ni ngombwa cyane kugira ngo bihagarike kwiyoungera kw’igipimo cy’alukoro ku buryo itarenga igipimo cyagenwe.

Ibi bivuze ko ibipimo ntarengwa nk’uko bigaragara mu mfashanyigisho ya 11 bireba umutobe w’ibitoki n’ibinyobwa bisembuye bifite alukoro iri muni ya 10%.

6 UBURYO BWO GUPFUNYIKA

Imfashanyigisho ya 13 – Ibikoresho byo gupfunyikamo

Umutobe w’ibitoki ni wo wonyine ushobora gupfunyikwa mu macupa ya pulasitiki. Urwagwa,



divayi yo mu bitoki, izindi nzoga zengwa mu bitoki hamwe n’nzoga zongewemo ibikomoka ku bimera bigomba gushyirwa mu bintu bitateza ingaruka ku buzima bw’abantu, byaba akarusho akaba ari ibirahure. Alukoro ibitse mu macupa ya pulasitiki igenda igabanuka kubera guta umwuka kw’ayo macupa ibyo bigatuma igihe icyo kinyobwa cyakagombye kumara kigabanuka. Ku bijyanye n’ingaruka ku buzima bw’abantu, pulasitiki ikozwe mu binyabutabire bya (ethylene glycol and terephthalic acid and bisphenol-a(BPA)), iyo bihuye na alukoro bishobora kwihutira kujya mu kinyobwa cyane cyane mu gihe ubushyuye bwiyongereye. Ikindi kandi amacupa ya pulasitiki ashobora kubyimba mu gihe cyo guteka ibyo bikaba bidashoboka ku macupa y’ibirahure.

7 UBURYO BWO GUTANGA UBUSOBANURO KU GICURUZWA

7.1 Ubusobanuro rusange

Amabwiriza y'ubuziranenge nimeru RS EAS 38 agaragaza ubusobanuro rusange bugomba kugaragara ku bipfunyitsemo ibinyobwa kandi akagaragaza uburyo ibyo bisobanuro bigomba kuba byanditsemo. Muri ibyo bisobanuro harimo:

- a) Izina ry'ikinyobwa nk'uko biteganywa n'amabwiriza y'ubuziranenge akigenga;
- b) Izina ry'urwengeru, aho ruherereye n'agasanduku k'iposita;
- c) Igipimo nyacyo y'ikinyobwa muri litiro cyangwa mililitiro;
- d) Igipimo cya alukoro irimo ku ijana, ku binyobwa bisembuye;
- e) Igihe ikinyobwa cyengewe;
- f) Igihe ikinyobwa kizarangiriza igihe, ku binyobwa bifite alukoro iri muni ya 10%;
- g) Uburyo ikinyobwa kigomba kubikwamo;
- h) Amagambo aburira abantu;
- i) Urutonde rw'inyongeramirire uko zikurikirana mu bwinshi bwazo.

7.2 Ubusobanuro bw'umwihariko

Imbonerahamwe ya mbere: Ubusobanuro bw'umwihariko kuri buri kinyobwa gituruka ku bitoki n'inzoga zongewemo ibikomoka ku bimera.

Umutoke w'ibitoki	Urwagwa	Divayi y'ibitoki	inzoga zongewemo ibikomoka ku bimera
Izina rigomba kuba rimwe muri aya: • Umutoke w'ibitoki • umwikamire • Umutoke ufunguye	• Izina rigomba kuba: • Butunda • Inkangaza cyangwa • Urwagwa • Inyandiko igaragaza ko nta sukari yongewemo	• Izina rigomba kuba: Divayi y'ibitoki ari yo: • Divayi iryohereye • Divayi iryohereye buke, • Divayi ikakaye	Izina rigomba kuba: "inzoga zongewemo ibikomoka ku bimera"; Inyandiko yerekana ikimera cy'ibanze cyakoreshejwe

7.3 Indangamiterere y'ibinyobwa

7.3.1 RS 358, *Umutobe w'ibitoke* — *Indangamiterere*

Kubera ko umutobe w'ibitoki uhita unyobwa nyuma yo kwengwa utagize ahandi utunganyirizwa, ni ngombwa kubahiriza amabwiriza y'isuku aho wengerwa no mu buryo utwarwamo, mu rwego rwo kurengera ubuzima bw'abawunywa. Uburyo umutobe w'ibitoki wakwengwamo bwose, bwaba ubwa gakondo cyangwa se hifashishijwe ubundi buryo bugezweho, icy'ingenzi ni uko uwo mutobe utagira ingaruka mbi ku buzima bw'uunywa nk'uko iri bwiriza ry'ubuziranenge ribisaba.

7.3.1.1 Ubwoko bw'umutobe w'ibitoki

Ukurikije uburyo ufunguye cyangwa udafunguye, umutobe w'ibitoki ushobora kugabanywamo ubwoko butatu.

- a) **Umwikamire:** Ikinyobwa kidasembuye ariko gishobora gusemburwa cyengwa mu mineke ikomeye kandi ihiye neza nta kindi kintu cyongewemo
- b) **Umutobe udafunguye:** ni umutobe w'ibitoki uba wagabanyijwemo amazi ku buryo igipimo cy'isukari kirutaho nibura 50 % ku gipimo gisanzwe kiba mu mutobe w'ibitoki.
- c) **Umutobe ufunguye:** umutobe w'ibitoki wongewemo amazi. Uwo mutobe ushobora kongerwamo amasukari, ubuki cyangwa ibindi bintu biryohera. Hashobora kongerwamo amazi mu rwego rwo kugenzura urugero rukenewe rw'isukari nk'uko bigenwa n'amabwiriza y'ubuziranenge, umutobe w'ibitoki nyawo ugomba kuba ufite ikipimo kitari munsi ya 50%.

Isukari, ubuki cyangwa ibindi bintu biryohera byagenewe gukoreshwa mu biribwa byongerwa mu mutobe mu rwego rwokugarura uburyohe buba bwatakaye igihe umutobe wafungurwaga kandi igipimo cy' isukari nyuma yo kongerwamo(carbohydrates) ntikigomba kurenga icyari kirimo mbere yo gufungura.

7.3.1.2 Ibiranga imiterere y'umutobe w'ibitoki

Ubwoko bw'umutobe w'ibitoki bwavuzwe haruguru bugomba kuba bwujuje imiterere igaragara mu mbonerahamwe ya 2:

Imbonerahamwe ya 2 — Ibiranga imiterere y'umutobe w'ibitoki

Numero	Ibiwuranga	Imiterere y'umutobe w'ibitoki		
		umwikamire	Umutobe w'ibitoki	Umutobe ufunguye
1.	igipimo cy'aside (pH)	4 - 5	4 - 5	4,0 – 5,0
2.	Igipimo cy'ibidasukika (Total solids, max.)	30	20	10
3.	Sukoroze (Sucrose) %, m/m, max.	5,0 – 9,0	5,0 – 9,0	5,0 – 9,0
4.	Furigoze (Fructose), %, min.	10,5	7,0	3,5
5.	Gulukoze (glucose) %, m/m, min.	7,5	5,0	2,5
6.	Aside sitirike (Total Acidity as anhydrous citric-acid) %, m/m, max.	1,05	0,7	0,35
7.	Aside asetike (acetic acid (Volatile acidity as acetic acid, g/l, max.))	ntayo		

7.3.1.3 RS 224, Urwagwa — Indangamiterere

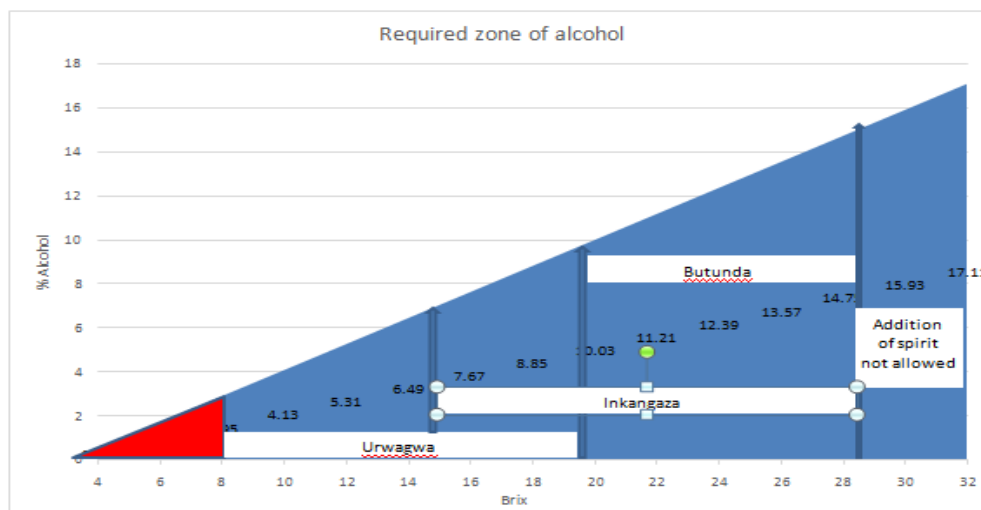
Nk'uko ibwiriza ry'ubuziranenge numero RS 224: 2016 ribisobanura mu gika cya 3.1, ukora urwagwa atara umutobe w'ibitoki akawubeteza amasaka. Uwo mutobe ushobora gushyirwamo ubuki n'amazi. Kongeramo isukari cyangwa inyongeramirire cyangwa indyoshyandyo ntibyumewe. Hagendewe ku bwiza bw'umutobe cyangwa ubuki bwakoreshejwe n'igipimo cya alukolo, urwagwa rushyirwa mu ubwoko butatu. Ubwo bwoko bukomoka ku buryo gakondo bwo kwenga Urwagwa.

Imbonerahamwe ya 3 — Ibyiciro by'Urwagwa

Ubwoko	Ubwoko bw'umutobe	Hongewemo ubuki	Igipimo cya alukolo (alcohol content)
Butunda	Umwikamire	Oya	$10,0 \leq B \leq 15,0$
Urwagwa	Umutobe ufunguye wongewemo amazi gusa	Oya	$3,0 < U \leq 9,0$
Inkangaza	Umutobe w'ibitoki	Yego	$7 < I \leq 15,0$

	Umutobe ufunguye		
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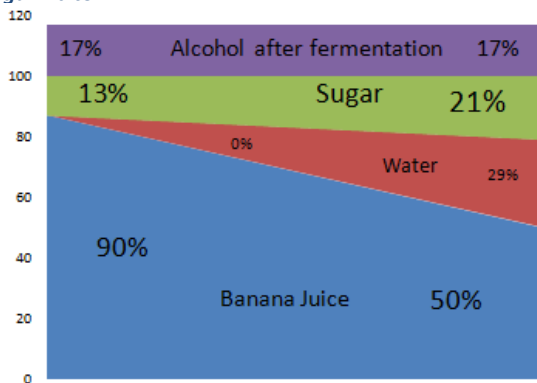
Imfashanyigisho ya 9 - Ibipimo bya alukoro mu rwagwa



Igipimo gito cya alukolo gishobora gusobanura ko urwagwa rutarashya, ko rurimo igipimo cy'ibisigazwa by'amasukari kiri hejuru kikaba gishobora kongera ingano ntarengwa y'ibidasukika kikagera hejuru ya 7%, bigatuma urwagwa rukomeza kubira. Igipimo gito cya alukolo kandi gishobora guterwa n'uko umutobe ufunguye cyane, ibi bikagabanya uburyohe bw'Urwagwa. Hagendewe ku bushobozi bw'imisemburo n'igipimo cy'isukari iri mu muneke, igipimo cya alukolo ntikirenga 15%. Igipimo cya alukolo kirengeje 15% gishobora gusobanura ko hongewemo alukolo y'umwimerere (neutral spirit) kandi ibi ntibyemewe.

7.3.1.4 RS 343, Inzoga z'ibitoki — Indangamiterere

Imfashanyigisho 10 – Ibipimo byifashishwa mu gukora inzoga z'ibitoki



Mu kwenga ibinyobwa bikomoka ku bitoki,

uretse umutobe w'ibitoki, hashobora kongerwamo n'ibindi bintu bitabangamira ubuzima harimo isukari, ubuki n'inyongeramirire. Gusa kugira ngo ikinyobwa cyitwe ko gikomoka ku bitoki, igipimo

cy'ibitoki bikigize kigomba kuba kirenze 50%. Gukoresha isukari bituma ibinyobwa bimwe na bimwe bishobora kugira igipimo kiri hejuru gishobora kugira ingaruka mbi ku buzima bw'ababinywa. Ni yo mpamvu igipimo cy'isukari mu binyobwa bikomoka ku bitoki kigomba kuba kitarengeje 35g/l. Nubwo ibinyobwa bikomoka ku bitoki byakongerwamo alukolo, igipimo cya alukolo ntikigomba kurenza 17%. Imfashanyigisho ya 13 itanga ibipimo bitandukanye bishobora kuvangwa kugira bitarenza alukolo ya 17%.

7.3.1.5 RS EAS 138, *Divayi y'ibitoki — Indangamiterere*

Uretse ibigomba kubahirizwa byavuzwe haruguru, divayi y'ibitoki igomba kubahiriza ibisabwa biri mu mbonerahamwe ya 4:

Imbonerahamwe ya 4 — Ibyo Divayi y'ibitoki isabwa kuzuza

Nomero	Ibiyiranga		Ibipimo
i.	alukolo (Ethyl alcohol content), %		6,5 – 16,5
ii.	Amasukari (Total sugar as Invert sugar, g/l) %	Ikaramye (Dry wine)	< 4
		Ikaramye buhoro (Medium dry wine)	4 - 12
		Iryohereye buhoro (Semi-sweet)	12 - 45
		Iryohereye (Sweet wine)	> 45
iii.	Aside sorubike (Sorbic acid), mg/kg, max.		500
iv.	Free sulphur dioxide, mg/l, max.		70
v.	Total sulphur dioxide, mg/l, max.		350
vi.	Umuringa (Copper), mg/l, max.		2,0
vii.	Ubutare (Iron), mg/l, max.		8,0

7.3.1.6 RS 344, *Inzoga zongewemo ibikomoka ku bimera— indangamiterere`*

Mbere yo kwenga inzoga yongewemo ibikomoka ku bimera iyo ari yo yose, umwenzi agomba kwereka urwego rubishinzwe ibikoresho azifashisha kandi bitanga icyizere ko divayi izengwa itazabangamira ubuzima bw'abazayinywa.

Imbonerahamwe ya 5 — Ibyo divayi ifatiye ku bimera igomba kuzuza

Nomero	Ibiyiranga	Ibipimo
i.	Alukolo (<i>Ethyl alcohol</i> content), %, v/v, max.	14
ii.	Igipimo cy'ibidasukika (Total Soluble Solids (TSS) Brix), max.	5,80 – 6,20
iii.	Amasukari g/l (Total sugar as invert sugars) g/l, max.	35
iv.	Aside sorubike (<i>Sorbic acid</i>), mg/kg, max.	1 000
v.	Umuringa (<i>Copper</i>), mg/L, max.	2,0
vi.	Ubutare (<i>Iron</i>), mg/L, max.	8,0
vii.	Zinki (<i>Zinc</i>), mg/L, max.	5

UMWANZURO

Ibinyobwa bikomoka ku bitoki n'inzoga zongewemo ibikomoka ku bimera ni inkingi ikomeye mu guteza imbere gahunda y'ibikorera mu Rwanda. Ukurikije ukuntu abanyarwanda bakunda ibyo binyobwa, bitanga icyizere ko ababyenga bafite isoko rihagije. Nyamara ni ngombwa kwita ku kubungabunga ubuzima bw'ababinywa hakorwa ibinyobwa byubahiriza amabwiriza y'ubuziranenge yashyizweho. Ni byiza guteza imbere ubucuruzi ariko tunibanda ku buziranenge bw'ibinyobwa bikomoka ku bitoki n'inzoga zongewemo ibikomoka ku bimera aho gutegereza ko ibinyobwa bitujuje ubuziranenge bigira ingaruka mbi ku babinywa; “***kwirinda biruta kwivuza***”.

UMUGEREKA WA MBERE

IFISHI YIFASHISHWA MU KUGENZURA ISUKU N'IMIKORERE Y'IBIGO BITUNGANYA IBINYOBWA

UMWIRONDORO W'IKIGO

Izina ry'ikigo:.....

Uwagishinze:.....

Akarere:.....

Umurenge:.....

Aderese:.....

Nomero za telefone:.....

Itariki igenzura ryabereyeho:.....

S/N	Ibisabwa		Kuzuzwa ibisabwa Ku rugero rukwiye		Inama zitangwa/uburyo bwo gukosora n'igihe cyagenwe
			Yego	Oya	
1. IMITERERE Y' AHO IKIGO GIHEREREYE					
1.1.	Ikigo giherereye kure ya	Ahajugunywa imyanda			
1.2.		Ahasohokera imyanda ikomoka aho abantu batuye			
1.3.		Hasohokera imyanda itemba			

1.4.		Ikigo gitunganya ibinyobwa			
1.5.	Ikigo gishobora kubona amazi meza				
1.6.	Ikigo gishobora kubona umuriro w'amashanyarazi				
1.7.	Ikigo kiteguye neza guhangana n'ibura ry'umuriro wa hato na hato				
1.8.	Ikigo gifite uburyo bwo kuyobora imyanda igikomokamo				
1.9.	Ikigo gifite ibigega by'amazi bishobora kubika amazi yakoreshe mu gihe kiringaniye				
1.10.	Ikigo gifite urumuri n'umwuka bihagije				
1.11.	Ikigo gifite aho gutunganyiriza ibinyobwa hihariye kandi hubakitse ku buryo bitanduzanya	Ahakirirwa ibikorwamo ibikomkamku bitoki			
1.12.		Ibitoki bihiye neza			
1.13.		Gutunganya ibinyobwa hakoreshejwe imiti yabugenewe/kuronga/guhata			
1.14.		Ububiko buboneye			
1.15.		Gukamura			
1.16.		Gusembura			
1.17.		Kuyungurra/gushyira mu macupa			
1.18.		Guteka			
1.19.	Ikigo gifite ubwiherero n'ibindi bikoresho by'isuku y'umukozi	Ikigo gifite ibyumba byihariye byo guhinduriramo imyenda ku bagabo no ku bagore			
1.20.		Ikigo gifite ubwiherero buhagije bw'igitsina gabo n'igitsina gore, aho kwihagarika ku bagabo hamwe n'ibikoresho byumutsa intoki (imashini ikoreshe n'amashanyarazi cyangwa se impapuro z'isuku zabugenewe)			

1.21.		Ikigo gifite ubwiherero buhagije bw'abakiliya bw'igitsina gabo n'igitsina gore , aho kwihagarika ku bagabo hamwe n'ibikoresho byumutsa intoki (imashini ikoreshe n'amashanyarazi cyangwa se impapuro z'isuku zabugenewe)			
1.22.		Ubwiherero n'aho kwihagarika bufite ibikoresho bitabika amazi kandi byoroshya isukura			
1.23.		Ikigo gifite ibikoresho byumutsa intoki biherereye aho bikenewe hose			
2. IMITERERE Y'IMBERE AHATUNGANYIRIZWA IBINYOBWA					
2.1.	Inkuta z' ahatunganyirizwa ibinyobwa zigomba gukorwa mu bikoresho bitinjirwamo cyangwa ngo bibike amazi, bishobora kuzwa kandi zikaba zisennye				
2.2.	Idara n'ibindi bifashe ku idara cyangwa igisenge, bigomba kubakwa ku buryo bitabika umukungugu cyangwa amazi, bidatora uruhumbu cyangwa ngo bivunguke				
2.3.	Ibikoresho byubakishije hasi mu nyubako y'ahatunganyirizwa ibinyobwa bigomba kuba bitanyerera kandi hasukurwa ku buryo bworoshye				
2.4.	Inzugi z' ahatunganyirizwa ibinyobwa zigomba kuba zisennye neza kandi zitabika amazi				
2.5.	Amadirishya ndetse n'ahandi hashobora gufungurwa bigomba kuba byubatswe mu buryo butabika umukungugu bigomba kuba bifite ibibuza udukoko n'ibiguruka kwinjira ahatunganyirizwa ibinyobwa				
3. UMUTEKANO					
	ikigo gitunganya ibinyobwa kigomba kuba gifite uburyo bwo kuzimya inkongi y'umuriro (uburyo kumenya niba hari ahantu hahiye, ibyuma byo kuzimya umuriro, uburingiti bwagenewe kuzimya umuriro, imiyoboro y'amazi n'ibikoresho biyana na yo mu				

	kuzimya inkongi y'umurimo cyangwa ubundi buryo)			
4. ISUKU Y'ABAKOZI				
4.1.	Abakozi bakora ahatunganyirizwa ibinyobwa bagomba kwambara imyambaro y'akazi yabugenewe kandi ifite isuku hamwe n'ingofero n'inkweto zifunze zabugenewe zihorana isuku buri gihe			
4.2.	Abakozi bategura ibyo guteka ntibemerewe kwinjira ahantu hateye impungenge (ahatekerwa umutobe n'aaaaaaha bashyirira mu macupa) badahinduye imyenda ngo bambare iyagenewe aho hantu			
4.3.	Abakozi bakora ahatunganyirizwa ibinyobwa ntibagomba kwambara ibirimisho n'indi mitako			
4.4.	Ikigo gitunganya ibinyobwa kigomba gukora ku buryo buri mushyitsi wese winjira ahatunganyirizwa ibinyobwa yambara imyenda yabugenewe ifite isuku, ingofero n'inkweto zabugenewe kandi zifunze			
4.5.	Abakozi bakora ahatunganyirizwa ibinyobwa ndetse n'abakira abakiriya ntibagomba kugira imyifatire itaboneye ishobora kwanduza ibinyobwa (kurya, kunywa itabi, gukanjakanja, gukora mu misatsi, mu maso no mu mazuru, n'ibindi bari aho batunganyiriza ibinyobwa), bagomba gukora ku buryo ibitambara cyangwa impapuro bakoresheje mu gihe bakorera cyangwa bipfuna zijugunywa			
4.6.	Ikigo gitunganyirizwamo ibinyobwa kigomba kugira inyandiko igaragaza uburyo bwo gukaraba intoki ahantu hose ha ngombwa			
5. UBUZIMA BW'ABAKOZI KU NDWARA ZANDURA				
5.1.	Abakozi bakorera mu rwengero bisuzumisha indwara zandura ku buryo buhoraho, basuzumwe n'umuganga wemewe wa leta			
5.2.	Ikigo gitunganya ibinyobwa gifite ibikoreshe by'ubutabazi bw'ibanze kandi biherereye ahantu hakwiriye			

5.3.	Abakozi bakorera aho batunganyiriza ibinyobwa ntibagomba kugira ibisebe bidapfutse			
6. IBIKORESHO				
6.1.	Ibikoreshe byo mu rwengero bigomba kuba bikoze ku buryo bitabika amazi kandi ntibitore umugese			
6.2.	Ibikoreshe byose, interanyirizo n'ibindi byose bifite aho bihurira n'ibinyobwa			
6.3.	Ibikoreshe byo mu rwengero bikoreshe mu gupima bigomba guhora bisubizwa ku bipimo bikwiye			
7. ISUKURA				
7.1.	Ibikoreshe byo gukusanyirizamo imyanda bigomba kuba bifite isuku ihagije			
7.2.	Imyanda itegereje gukusanywa n'ababishinzwe igomba gushyirwa mu bikoreshe bifunze kure y'ahatunganyirizwa ibinyobwa kugira ngo hirindwe ukwanduza uko ari ko kose			
7.3.	Ikigo gitunganya ibinyobwa kigomba gushyiraho uburyo bwo kujugunya imyanda buri muni			
7.4.	Ikigo gitunganya ibinyobwa kigomba kugira ubwiherero busukuye kandi buteye umuti wica udukoko			
7.5.	Ibikoreshe by'isuku n' ibindi byose byifashishwa bigomba kubikwa kure y'ahabikwa ibinyobwa			
8. UBUBIKO BW' IBINYOBWA				
8.1.	Ububiko bw' ibinyobwa bugomba guhorana isuku			
8.2.	Ububiko ntibugomba kubamo ingugunnyi, ibinyenzi cyangwa udusimba utwo ari two twose			

8.3.	Ikigo gitunganya ibinyobwa kigomba gushyiraho uburyo bwo kumenya ibyinjiye mbere cyangwa ibiri hafi kurangiza igihe akaba aribyo bibanza gukoreshwa kugira ngo cyizere ko ntabyarangije igihe bihabwa abakiriya			
8.4.	Ikigo gitunganya ibinyobwa kigomba kugaragaza inyandiko yerekana uburyo ibinyobwa bibikwamo (Ububiko bugomba kuba bufite uburyo bugezweho bwo gucunga ubushyuhe n'ubukonje hamwe n'ubuhere aho biri ngombwa)			
9. UBURYO BWO KUBIKA INYANDIKO IGARAGAZA INKOMOKO				
9.1.	Ikigo gitunganya ibinyobwa gifite 'inyandiko igaragaza igenzurwa Ry'inkomoko (umwirondoro wa rwiyezeza milimo, ibikoresho byinjira , igenzura rishingiye ku rutonde rw'ibisabwa ;			
9.2.	Ikigo gitunganya ibinyobwa gifite inyandiko igaragaza imitunganyirize y'ibinyobwa kandi iri ahakorera hose			
9.3.	Ikigo gitunganya ibinyobwa gifite inyandiko igaragaza isimburana ry'abakozi kuri buri cyiciro			
9.4.	Ikigo gifite abakira abakiriya n'uburyo bw'imikorere bugenzurwa			
9.5.	Ikigo gitunganya ibinyobwa gifite uburyo bwo gusubiza imashini ku bipimo no kuzikorresha			
9.6.	Ikigo gitunganya ibinyobwa gifite gahunda y' ibikorwa by' isuku yanditse kandi iteguwe			
9.7.	Mu gihe cy' ibirori, ikigo gitunganya ibinyobwa kibika impagararizi ya buri bwoko bw' ibiryo byagabuwe			
9.8.	Abashitsyi binjira mu gikoni barandikwa n'urutonde rwabo rukabikwa			

IBIKWIYE KWITABWAHO

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Bikorewe.....

Ku wa.....

Amazina n'Umukono by'umugenzuzi.....

Amazina, umukono na kashi by'Umuyobozi w'Ikigo gitunganya ibinyobwa.....

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