



REPUBLIKA Y'UBURUNDI
UBUSHIKIRANGANJI BW'AMAZI, IBIDUKIKIJE, IBISAGARA

N'UGUTUNGANYA AMATONGO

**IKIGO C'IGIHUGU KIJEJWE GUKINGIRA IBIDUKIKIJE MU
BURUNDI (OBPE)**

Dukingire ibinyabuzima bifasha kugwiza umwimbu w'ibiterwa



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Avec le soutien de
LA COOPÉRATION
BELGE AU DÉVELOPPEMENT





IKIGO C'IGHUGU KIJEJWE GUKINGIRA IBIDUKIKIJE MU BURUNDI (OBPE)

Agasandugu ka posita: 2757 Bujumbura-Burundi

Terefone: (257)22234304

E-mail: inecn.biodiv@cbinf.com

Site web: <http://bi.chm-cbd.net>

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amakuru kubijanye n'ibinyabuzima
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Icifashisho co kumenyesha abantu igaruka mbi z'ihungabanya ry'amashamba ku binyabuzima bifasha mw'irondoka ry'ibiterwa mu Burundi categuwe na NDAYIKEZA Longin afadikanije na NZIGIDAHERA Benoît mu « mugambi ujanye n'ubushakashatsi, guhanahana amakuru, kumenyesha no gukingira ibinyabuzima mu Burundi », umugambi washitswe ko habaye amasezerano hagati y'ikigo c'ighugu kijejwe gukingira ibidukikije mu Burundi (OBPE) n'ikigo c'ingoma y'Ububirigi kijejwe ubuhinga kama (IRSNB) kumfashanyo y'igisata kijejwe ivyo gufashanya mw'iterambere mu gihugu c'Ububirigi (CBD).



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INTANGAMARARA

Ibifungurwa, ibitegwa dutera canke ibiti vyo mu mashamba, ubwiza bw'ivyamwa canke imbuto dushobora gufungura biboneka kubera ibinyabuzima bifasha mw'irondoka ry'ibiterwa. Kuva kera cane, hamye hariho gukeneranira hagati y'ibiterwa n'ibinyabuzima bifasha mw'irondoka ryayyo. Ibiterwa birakenera ivyobinyamuzima igihe co kurondoka, ivyo binyabuzima navyo birakenera ibiterwa kuko bitanga ivyo bifungura. Igitangaje nuko abarundi twiyumvira gake akamaro kivyobinyabuzima. Ahubwo dukora ibikorwa bituma bibangamirwa , nk'akarorero mu guhonya amashamba.

Mu Burundi, amashamba arabangamiwe cane n'ibikorwa bijanye n'ukurondera amatongo yo kurimamwo no kwubakamwo amazu. Ikituraje ishinga n'ukumenya nimba guhonya amashamba atangaruka mbi bifise mu kubaho kw'ibinyabuzima bifasha mwirondoka ry'ibiterwa.

Twitwaje aka gatabu, dushaka kwereka abarundi na cane cane abanyenshure ingaruka mbi ihungabanywa ry'abamashamaba rigira mu kubaho kw'ibinyabuzima bifasha mw'irondoka ry'ibiterwa canke kubiterwa ubwavyo no kwikena ry'ibifungurwa mu Burundi.

Ibinyabuzima bidukikije



Ububiko bw'ibinyabuzima

Ibinyabuzima bifasha mw'irondoka ry'ibiterwa ni ibinyabuzima bikenerwa mu kurwiza umwimbu w'ibiterwa mbumba-rugo. Igikorwa nyamukuru c'-ivyobinyabuzima n'ugufasha mw'irondoka ry'ibiterwa bitari bike biba ivyo mu mirima canke mu mashamba. Ivyo binyabuzima bigizwe ahanini n'inzuki, n'ubwoko bumwebumwe bw'isazi n'amavubi birafasha mw'irondoka ry'ibiterwa turima canke mw'irondoka ry'ibiti vyo mw'ishamba bigafasha mu kurwiza umwimbu canke mu kubaho kw'ibiti vyo mw'ishamba mbere n'ukubaho kw'abantu.

IRONDOKA RY'IBITERWA N'IBINYABUZIMA BIFASHA MURICO GIKORWA

Irondoka ry'ibiterwa

Irondoka ry'ibiterwa rishoboka habaye guhuza udutete tw'igitsinagabo tuva kw'ishurwe ry'igiterwa n'udutete tw'igitsinagore tw'ishurwe ry'ikindi giterwa bisangije ubwoko.

Utwo dutete duhuye bituma haba irondoka rica ritanga ivyamwa canke imbuto. Irondoka ry'ibiterwa rero rishoboka kubera Ibinyabuzima cane cane inzuki biba vyafashije mu guhuza udutete tw'igitsinagabo n'udutete tw'igitsinagore tw'ishurwe.

Pollinisation



Fleur 1



Fleur 2

Ikinyugunyugu kiriko gihuza udutete tw'igitsinagabo n'udutete tw'igitsinagore.

Ibinyabuzima bifasha mw'-irondoka ry'ibiterwa

Ibinyabuzima bifasha mw'irondoka ry'ibiterwa n'ibinyabuzima bifasha guhuza udutete tw'igitsinagabo tuva kw'ishurwe ry'igiterwa n'udutete tw'igitsinagore tw'ishurwe ry'ikindi giterwa kuko igiterwa kidashobora kugenda kurondera ikindi giterwa bidasangije igitsina kugira bibihuze. Mubizwi cane murivyo binyabuzima n'inzuki n'amafunderi. Mu Burundi hakaba hamaze kumenyekana ubwoko mirongo ibiri na butandatu bw'amafunderi.



*Amoko y'amafunderi yo mu Burundi afasha cane
mw'irondoka ry'ibiharage*



Uruyuki rwo mu bwoko bw'amafunderi ruri kurondera ico rufungura mw'ishurwe

Izo nzuki rero ziva kw'ishurwe zija kurindi kurondrera ico zifungura kuzindi kurondera izo bidahuje igitsina canke kurondera aho zihungira ibihe beze nabi canke kurondera ibikoresho vyo kwubaka aho zizota amagi. Inzuki zishobora guta amagi mu biti canke mw'ivu.



Amagi y'inzuki zataye mw'ivu

AKAMARO K'INZUKI

Mukurwiza umwimbu



Imbuto z'ibiharage zabonetse kubera ibinyabuzima bifasha mw'irondoka ry'ibiterwa.



Umwimbu w'inanya wabonets kubera ibinyabuzima bifasha mw'irondoka ry'ibiterwa.

Mu burimyi, inzuki zirafasha mu kurwiza umwimbu w'ibiterwa bitari bike. Vyabonetse ko ica gatatu c'ibifungurwa v'y'igihugu icarico cose bibo-neka kubera inzuki zafashije mw'irondoka ry'ibiterwa.

Ibiterwa vyinshi birondoka kubera inzuki zabifashije ku-gira bitange ivyamwa abantu bafungura.



Ibigazi navyo bitanga umwimbu kubera ibinyabuzima vy'ubwoko bw'ibivumvuri.

abantu barakenera umwimbu w'ibiterwa kugira bafungure neza na cane cane aha mu Burundi harakenerwa cane umwimbu ukwiriy w'ibiharage, ubewishaza, ibigori, n'ibindi hamw n'ivyamwa nk'imyemebe, amavoka, inyanya,intore n'inibindi vyamwa.

Igihe irondoka ry'ibiterwa ritagenze neza, nta vyamwa vyiza biboneka kuko biba bifise ubumuga bwibonekeza. Ubwo bumuga buribonekeza inyuma ku camwa vyatumwe nuko ibice bimwe bimwe bitaba vyashikiw nirondoka rimeze neza.



Inyanya zifise ubumuga kubera irondoka ritagenze neza

Mu cugwa cakozwe mu bihugu birenga mirongibiri harerekanywe uruhara ntangere rw'ibinyanyabuzima bifasha mw'irondoka ry'ibiterwa mu kurwiza umwimbu n'ivyo dufungura. Kubwico cigwa

umwimbu utangwa n'ibice bine vy'a bitatu vy'ibiterwa mbumbarugo uturuka ku gikorwa c'ibinyabuzima bifasha mw'irondoka ry'ibiterwa na cane cane inzuki.

Ni muri iyo ntumbero ikigo c'ishirahamwe muzamakungu kijewje infungurwa (FAO) camenyesheje ko ibice birenga mirongirindwi kw'ijana vy'ubwoko bw'ibiterwa bituma haboneka imfungurwa kw'isi bitanga umwimbu kubera inzuki.

Ibarura ryabaye mu gihugu c'ubufaransa ryarerekanye ko ikirogarama kimwe c'ubuki gikorwa inzuki zidashe kubiti vyababa umuliyoni. Ivyo vyerekana gitigiri c'ibiterwa bitegerezwa kubaho kubera inzuki zabiciyeko ziriko ziradaha. Ni muri ako kamaro k'inzuki abantu biyumviriye guteza imbere ubworozi bw'inzuki. Nkuko twese tubizi ubworozi bw'inzuki ntibushoboka ibiti kama canke ibitegwa bifise amashugwe bitahari.

Mu Burundi, umwimbu w'ibiterwa mbumbarugo na cane cane ibiharage uboneka kubera ibinyabuzima bifasha mw'irondoka ry'ibiterwa.

Hari icigwa kiriko kirakorwa mu Burundi kubijanye n'umwimbu w'ibiharage. Murico cigwa mu murima w'ibiharage, twafashe igice kimwe turagifuka n'imisegetera ikindi gice tukireka kidafutse kugirango inzuki zishobore kudaha ku biharage.

Muvyambere tumaze kuronka murico cigwa nuko igice kidafutse n'imisegetera catanze umwimbu uruta kure uw'igice cafutswe

n'imisegetera haba mu bwiza canke mu bwinshi bw'umwimbu. Ivyo vyerekana ko ibinyabuzima bifasha mw'irondoka ry'ibiterwa bifise uruhara ntangere mu kugwiza umwimbu w'ibiterwa mbumbarugo.



Ibice vy'umurima bifutse ibindi bidafutse

Akamaro k'inzuki mw'irondoka ry'ibiti kama



*Ivyamwa vy'umunazi vyabonetse kubera
inzuki*

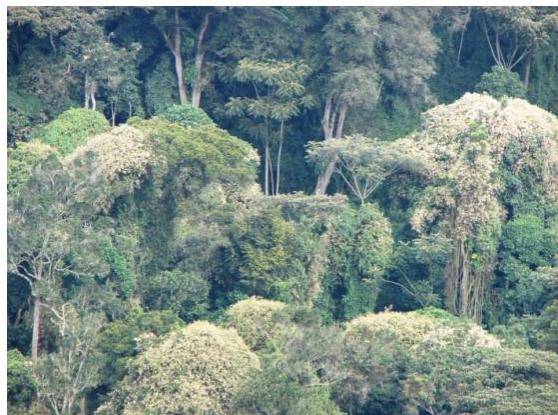
Ibiterwa vyo mu mirima sivyo vyonyene bikeneye inzuki mu gutanaga umwimbu. Ibiti kama navyonyene birakenera inzuki kugira zibifashe kurondoka no kubaho. Ni co gituma arivyhutirwa gukingira inzuki kugira umwimbu ugwire kandi n'ibiti kama bigwire vyo bituma habaho amashamba kama.



*Utwatsi twinshi turakenera
ibinyabuzima bitandukanye
bifasha mw'irondoka*

Mu bisanzwe amashamba afasha kubaho ubwoko bwinshibw'ibikoko n'ibiterwa bifise icobimarikiye mu kubaho. Ubwiza canke ubwinshi bw'ubuki bukorwa n'inzuki biboneka kubera zadashe kubwoko bw'ibiterwa vyinshi bitandukanye

Nayo mu mashamba kama, tuhasanga ubwoko butandukanye bw'ibiterwa bigatuma ibinyabuzima bifasha mw'irondoka ry'ibiterwa bimererwa neza igihe cose. Vyongeyeko, amashamba kama ashobora kuba aho ivyobinyabuzima bita amagi, aho birondokera canke aho biba.



*Ishamba ryo mu Kibira rirabitse
ubwoko bwinshi bw'ibinyabuzima
bifasha mw'irondoka ry'ibiterwa*

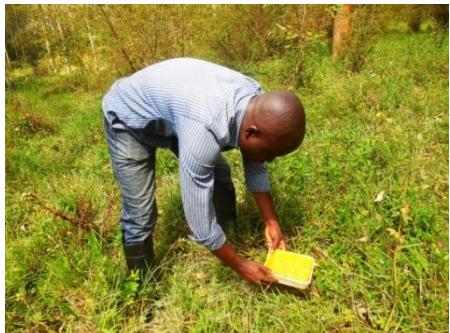
Ivyirwa vy'ibinyabuzima vyacu bifasha
mw'irondoka ry'ibiterwa

GUFATA IVYO IBINYABUZIMA

Mu Burundi, harakozwe ivyirwa kubinyabuzima bifasha mw'irondoka ry'ibiterwa vyatumye hegeranywa ibitigiri bitaribike vy'ivyo binyabuzima. Ivyo binyabuzima bishobora kwegeranywa hakoreshejwe uburyo bwinshi. Umugono ukozwe mu musegetera niwo ukoreshwa cane ariko n'udugopo dusize ibara risa n'umuhondo turashobora gukoreshwa.



Ikoreshwa ry' Umugono ukozwe mu musegetera



Ikoreshwa ry' udugopo dusize ibara risa n'umuhondo

KWITA IZINA IVYOBINYABUZIMA

Ibinyabuzima biba vyafashwe mu mashamba atandukanye bica bijanwa mu gisata kijejwe ubushakashatsi kugira bihabwe amazina. Ico gikorwa gitunganywa n'abashakashatsi b'ibigo kijejwe gukingira ibidukikije mu Burundi hamwe n'abanyenshure barangije ivyigwa vyabo vy'a kaminuza y'Uburundi baba bari kwandika ibitabo canke mu myimenyerezo.



UBUBIKO BW'IVYO BINYABUZIMA

Muriki gihe, ubwoko bugera kuri 107 bw'inzuki buramaze kwegeranywa n'ukwitw'amazina bувuye mu bice bitari bike vy'Uburundi. Izo nzuki zikaba zubitswe mu gisata c' ubushakashatsi mu kigo kijejwe gukingira ibidukikije mu Burundi.



Ububiko bw'ibinyabuzima mu kigo kijejwe gukingira ibidukikije mu Burundi

Ibinyabuzima vyacu birabangamiwe

Ibinyabuzima vyacu bifasha mw'irondoka ry'ibiterwa birabangamiwe bitumwe n'ihungabanywa ry'amashamba bivuye ku bikorwa bidandukanye umuntu akora. Ivyo bikorwa bikaba bigizwe n'ibijanye n'uburimvyi, ukwubaka ibisagara, guturira amashamba be n'ugukoresha imiti mu kwirukana udukoko dutera imirima. Hakiyongerako imiriro ya Nyakanga igisibije mu Burundi.

IBIKORWA BIJANYE N'UBURIMYI

Ibikorwa bijanye n'uburimyi bituma amashamaba ahindurwa ahantu ho kurimamwo canke kwororeramwo.

Murico gihe, mu mirima haba igabanuka ry'ubwoko bwinshi bw'ibiterwa bigatuma ibinyabuzima bironka infingurwa mu gihe gito mu nyuma bikabura ico bifungura mu gihe imirima yimbuwe.

Ikindi naco, mu mirima ibiterwa birimburwa iyo vyeze ntiha hakiri igiterwa nakimwe. Ivyo biba kubiterwa mbumbarugo nk'ibiharage, inyanya n'ibindi. Ibindi biterwa bigira amashurwe rimwe mu mwaka nk'ikawa canke ibiti vy'ivyamwa nk'imicungwe, amavoka n'ibindi.

Inyumay'amashurwe canke kwimburwa kw'ibiterwa, ibinyabuzima bifasha mw'irondoka ry'ibiterwa bikenera ahandi hantu bikura ico

bifungura. Bitegerezwa rero kw'ifashisha ibibara canke amashamba kama vyegereye imirima.

Mu mirima, ibinyabuzima bifasha mw'irondoka ry'ibiterwa bifise ibibazo vyo kuronka ivyo bifungura mu gihe gito ikindi gihe bikagira inzara.



Ahantu hahinduwe indimiro atamashamaba akihari

IBIKORWA BIJANYE NO KWUBAKA IBISAGARA

Ibikorwa bijanye no kwubaka ibisagara bituma ahantu hagabagurwa ivyo navyo bigatuma ibinyabuzima vyinshi bihona. Muri ibi bihe ibisagara biguma vyiyongera kurugero runini hatitaweho amashamba kama avyegereye.

Ihungabanya wa ry'amashamba kama kugira hubakwe ibisagara n'amabarabara biratera ingorane zikomeye kubinyabuzima bifasha mw'irondoka ry'ibiterwa. Vyarerekanywe ko ibinyabuzima bibangamirwa cane n'inkungugu yibonekeza mu nkengera z'amabarabara kandi ivyo binyabuzima birabangamirwa n'uruja n'uruza ku mabarabara.

Ikindi naco ibinyabuzima birabangamirwa n'imishwarara yamatara mu bisagara kuko atavyorohereza mu kwiyunguruza.

Ariko ibice vyubatswe birashobora kugirira akamaro ibinyabuzima bifasha mw'irondoka ry'ibiterwa mu gihe ivyo bice biba vyatunganijwe neza hinsunzwe kubungabunga ibinyamuzima.

Mu Burundi, ibisagara bigwiriymwo amazu yo kubamwo, inyubako za reta ni zo kudandarizamwo. Mu bisagara vyo mu Burundi haragwiriymwo n'amabarabara asize amakburimbocanke agizwe n'imisezero y'amabuye.

Imbere mu kigo c'amazu menshi yo mu bisagara no kunkengera z'amabarabara hagwiriye utwatsi twa « gazo » n'ibiti vy'amashurwe yo gushariza, ivyo bigatanga amashurwe make cane akenerwa n'ibinyabuzima bifasha mw'irondoka ry'ibiterwa.



Icirore c'igisagara ca Bujumbura

IMIRIRO YA NYAKANGA

Mu Burundi amashamba kama n'imyaba vyama biturwa mu gihe c'ici. Ico gihe amashamba kama yama aturirwa ku mwaka ku mwaka haronderwa uburagiro canke kubera ubugizi bwa nabi. Naho igihe

c'ici n'igihe kitoroshe kubinyabuzima aho amashurwe bikenera ataba aboneka. Imiriro ya Nyakanga iza kubangamira ibinyabuzima bifasha mw'irondoka ry'ibiterwa. Muri ico gihe, guturira ibice birimwo utwatsi canke uduti bituma ibinyabuzima bifasha mw'irondoka ry'ibiterwa biba bihari bihona na cane cane amagi n'abana bavyo.



Imiriro ya Nyakanga

IKORESHWA RY'IMITI YIRUKANA UDUKOKO DUTERA IMIRIMA

Imiti ikoreshwa mu kwirukana udukoko dutera imirima nayo nyene irabangamira ibinyabuzima bifasha mw'irondoka ry'ibiterwa. Vyarerekanywe kuva kera ko ikoreshwa ry'yo miti kugira imirima ikingirwe udukoko tuyibangamiye bishobora kugira ingaruka mbi ku nzuki zifasha mw'irondoka ry'ibiterwa. Kuva kera na rindi, ugupfa ku bwinshi kw'inzuki kwarabonetse ahantu hose hakoreshejwe imiti yirukana udukoko tubangamira imirima.

Iyo miti igihe ikoreshewje ukutariko ishobora gushikira ibice bitarabwa



n'ico gikorwa bikongereza ingaruka mbi. Nk'akarorero mu gupompa mu mirima umuyaga urashobora gush-wiragiza umuti mu bindi bice bigatuma ibinyabuzima vyose vyegereye imirima bibangamirwa.

Ikoreswa ry'imi mu kwirukana udukoko dutera imirima

Dukingire ibinyabuzima bifasha mw'irondoka ry'ibiterwa

Gukingira ibinyabuzima bifasha mw'irondoka ry'ibiterwa n'igikorwa c'ugukingira ubuzima, ibidukikije n'ubutunzi. Ico gikorwa ntikiraba gusa abarimyi kiraba abarundi twese n'isi yose.

Mu bisanzwe, inzuki canke ibinyanbuzima vyose bifasha mw'irondoka ry'ibiterwa birakenera gukingirwa kugira kugira hakingirw ibiterwa vyo bitanga infungurwa kubantu n'ibiterwa. Kugira ibinyabuzima bifasha mw'irondoka ry'ibiterwa bikingirwe mu Burundi, hofatwa ingingo zikurikira :

1. Gukingira amashamba kama y'Uburundi yo atanga ubuhungiro y'ibinyabuzima bitari bike hakaba naho bishobora gukura ivyo bifungura bitandukanye n'aho bishobora guta amagi kugira birondoke.
2. Guteza imbere ibiti bibana n'imirimba bifise amashurwe akundwa n'inzuki mu ndimiro z'Uburundi kugira hakingirwe ibinyabuzima vyose mur'izo ndimiro.
3. Guteza imbere ibiti kama mu bisagara : Ibisagara birafita ubushobozi bwogutuma ibinyabuzima bifasha mw'irondoka ry'ibiterwa bibaho. Ibiterwa usanga mu bice rusangi vyo mu

bisagara canke mu hagati bigo vy'amazu n'ibiterwa biva hanze y'igihugu ata bitamenyerewe n'ibinyabuzima bifasha mw'irondoka ry'ibiterwa vyo mu Burundi. Birahimbay ko hobaho ibiterwa vyinshi kama bihurumbirwa n'ubwoko bwinshi bw'ivyo binyabuzima vy'Uburundi kandi bishobora gushurika mu bihebitandukanye.

4. Gutunganya ibibanza vyo gukingira ibinyabuzima mu ndimiro, atari ibibanza ngirakamaro krivyo binyabuzima ariko bifasha mukubikingira imiti iba yakoreshejwe mu mirima.

GUSOZERA

Ihonywa ry'amashamba rituma ibinyabuzima bifasha mw'irondoka ry'ibiterwa bihona. Ihona ry'ibinyabuzima bifasha mw'irondoka ry'ibiterwa riri mu bituma ibiterwa kama canke ibirimwa bitarondoka. Ibiti bitarondotse bituma ibiterwa bihona ivyo navyo bigatuma ivyo biterwa bidatanga umwimbu.

« Mugihe ibinyabuzima bifasha mw'irondoka ry'ibiterwa bihonye, umuntu azoba asigaranye imyaka mike yo kubaho ». nukuvuga ko Mugihe ibinyabuzima bifasha mw'irondoka ry'ibiterwa vyohona, ntabiterwa vyoba bikibaho, nta bifungurwa vyoboneka. Nuguhindura iviyumvira rero tugakingira tukongera tukabungabunga ibinyabuzima bifasha mw'irondoka ry'ibiterwa kugira ubuzima bwacu bubungabungwe.

Mu gusozenza, ihungabanywa ry'amashamba rituma ibinyabuzima bifasha mw'irondoka ry'ibiterwa bigabanuka mu gihe ivyo binyabuzima bikora igikorwa ntangere mu kubungabunga ubuzima bwaha kw'isi na cane cane ubw'ibiterwa, ubw'antu n'ubw'ibikoko.