	Uburyo bwo gukusanya, gutunganya no gukwirakwiza amakuru kuri filiyeri y'imbuto mu Rwanda	Kode y'inyandiko: 41KR118I127v0
	IGICE CYA 4: UBUMENYI BW'IMIKORERE MU BYA TEKINIKI	Itariki yo kujyanisha inyandiko n'igihe UKUBOZA 2007
IFISHI IRANGA ITUBURA RY'IMBUTO ZIFITE ICYEMEZO : Ingano		Inyandiko ikomatanyije

Inkomoko y'inyandiko	Projet AFSR

Itariki inyandiko yasohokeyeho	Ukwakira 2007

Umubare w'amapagi	4

IFISHI IRANGA ITUBURA RY'IMBUTO ZIFITE ICYEMEZO *(Semences certifiées)*

Ingano *(Triticum aestivum L.)*

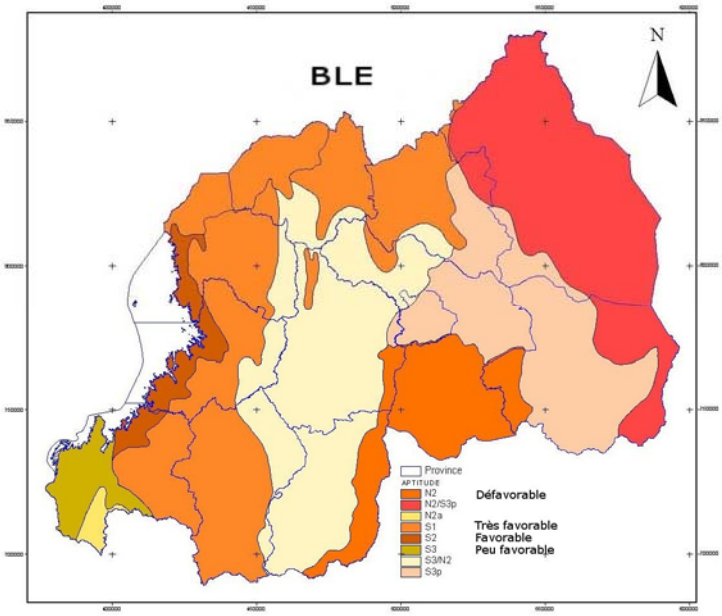
Appui à la Filière Semencière du Rwanda

Ingano za Musama

1. AHO ZIHINGWA

1.1. Akarere :

Ingano zishobora guhingwa mu turere twose turi hagati ya m 1800 na m 2500 z'ubutumburuke ; byaba byiza ari mu turere tw'ubutaka bw'amakoro, mu misozi miremire ya Buberuka, no mu misozi y'isunzu rya Congo Nil iri mu nkengero z'ishyamba rya Nyungwe.



1.2. Ubutaka :

Bugomba kugira ibitunga ibihingwa byinshi, kuba burebure kandi bworoshye. Ni ngombwa kwirinda ubutaka bushaririye.

1.3. Umurima zihingwamo :

- Ugomba kuba utarangwamo ibishibu by'ingano n'ibindi byatsi bishobora gukwirakwiza indwara.
- Ugomba kuba uri kuri m5 uvuye ku yindi mirima y'ingano z'ubwo bwoko ariko zitarobanuye cyangwa y'ubundi bwoko.
- Nyuma yo gutera, urangwa n'icyapa cyanditseho : izina ry'imbuto, itariki itereweho, ubuso, ubwoko bw'imbuto zisarurwa, na nomero iranga umuhinzi n'umurima.

2. UKO ZISIMBURANA N'IBINDI BIHINGWA

Umurima utuburirwamo ingano **ugomba kuba udaherukamo ingano nibura igihe cy'ihinga kimwe.** Ni ukuvuga ko ingano zikurikira ibinyamisogwe cyangwa ibirayi. Ntizera neza ahantu hatahinzwe ibindi bihingwa cyangwa haraye. Ntizigomba guhingwa ahavuye amashaza.

3. IBIRANGA AMOKO ABONEKA MU RWANDA

UBWOKO	IBIBURANGA		
	Igihe bwerera (Iminsi)	Umusaruro (Toni/Hegitari)	Kwihanganira umuyaga
Musama	125	3,5	Zitinya umuyaga
Uganda 6	125	3	Ntacyo uzitwara
Bisagi	115	3	Zitinya umuyaga

4. UBURYO ZIHINGWA

4.1. Itera

- Hakoreshwa **imbuto shingiro** zo mu mufungo umwe zabanje guterwamo umuti wa Thiram (g 1-3 ku kiro cy'imbuto) cyangwa Benlate (g 10-15 ku kiro).
- Igihe cyo gutera: mu ntangiriro z'Ukwakira mu gihe cy'ihinga A, no mu ntangiriro za Werurwe mu igihe cy'ihinga B bitewe n'igihe imvura igwiriye.
- Igipimo cy'imbuto : Ibiro 100/hegitari.
- Umwanya hagati y'ibihingwa: gutera ku mirongo ikomeje itandukanijwe na cm 20.
- Ubujyakuzimu : cm 3.

Gusigamo akayira ka cm 80 z'ubugari kuri buri m 4 kugira ngo babone uko bazikenura.

4.2. Ifumbire no gutunganya umurima

- Mu butaka bushaririye, haterwamo byibuze toni 2 z'ishwagara kuri hegitari mu gihe cy'itabira, bitewe n'ubusharire bw'ubutaka.
- Kunyanyagiza toni 15 kugeza kuri 20 z'ifumbire y'imborera kuri hegitari imwe mu gihe cyo gusanza.
- Mu gihe cy'itera, gushyiramo ibiro 250 by'ifumbire ya NPK17-17-17 cyangwa ibiro 100 bya DAP kuri hegitari.
- Gushyiramo ibiro 50 by'ifumbire ya Ire kuri hegitari mu gihe cy'ibagara-isukira mu gihe cyo kuzana ibihagi.

4.3. Kubagara no kuvanamo izindi mbuto zidakenewe

- Kumenera zimaze kumera kugira ngo ubutaka bworohe bitume n'imizi imera.
- Kuvanamo ibishibu, imbuto zitandukanye n'izihingwa, n'ibyatsi bibi bishobora kubamo udukoko dukwirakwiza virusi.
- Imbuto zidakenewe (ibihigwa by'ubundi bwoko, imvage) ntizigomba kurenza 2 %. .
- Igihigwa cyose gifashwe n'indwara nk'inopfu kigomba kurandurwa mbere y'uko impeke ziza.

4.4. Isurwa ry'umurima

- Umurima ugomba gusurwa nibura kabiri : ubwa mbere igihe cy'iterera, ubwa kabiri igihe ingano zitangiye gukomera kugira ngo barebe niba intera itandukanya umurima n'indi yubahirizwa, niba ibindi bihingwa byarakuwemo no kureba niba ibihingwa bimeze neza.

4.5. Kurwanya indwara n'ibikoko byangiza

Hagomba gukorwa ibishoboka byose kugira ngo umurima urindwe indwara n'ibikoko byangiza :

- Gutera umuti wica udukoko inshuro ebyiri igihe hagaragaye udukoko tw'ubuhunduguru n'utundi dutera virusi hakoreshejwe Dursban 48%EC cyangwa Sumithion 50% EC cyangwa Rogor 40% EC (Diméthoate), ml 15 kuri litiro 15 z'amazi kuri ari imwe. Guteramo umuti inshuro ya gatatu igihe ari ngombwa bitewe n'uko udukoko twiyongera.
- Guteramo inshuro 3 cyangwa 4 umuti urwanya indwara z'ibihumyo nka septoriose, umugese, n'uruhumbu (oidium) hakoreshejweTilt cyangwa Impact, ml 10 kuri litiro 15 kuri ari 1.
- Kwirinda kuzinyuramo zimaze kwegerana kubera ko virusi zishobora gukwirakwiza no gukoranaho byonyine.
- Kuvanamo ibihingwa byose byafashwe na virusi cyangwa bagiteri cyangwa izindi ndwara z'ibihumyo zituruka ku mbuto nk'inopfu na septoriose. Ibihingwa byafashwe n'indwara ntibigomba kurenga 2%.

5. GUSARURA, KWANIKA, GUTORANYA NO GUHUNIKA

- Isarura rikorwa ingano zeze neza, zitakiri ntoto, impeke zimaze gukomera, zifite ubuhehere bwa 16% kugeza kuri 18%, ibiganagano bifite ibara ry'umuhondo.
- Bishobotse guhura byakorwa n'imashini kugira ngo impeke zitamenagurika.
- Kuvanamo imbuto zishidikanwaho n'izindi zidakenewe mu itoranya n'igereranya.

- Uzuza kandi wohereze uru rupapuro rwo **kumenyekanisha umusaruro**.
- Kuzihungiza Actellic 2% , g 2 ku kiro cy'imbuto, guzipfunyika no komekaho udupapuro twanditseho ibi bikurikira : izina ry'ubwoko bw'imbuto, igihe yerera, umusaruro, aho ihingwa, nomero y'umufungo n'ibiro.
- Kugenzura kenshi niba harimo imungu, udukoko turya impeke (teignes) n'ibindi bikoko byangiza;
- Imifuka igomba kuba itondetse k'uburyo ugenzura ashobora kuyigeraho yose.

6. IBIPIMO NGENDERWAHO BY'UBUZIRANENGE

Umufungo w'imbuto z'ingano zifite icyemezo ugomba kuba wujuje ibipimo ngenderwaho bikurikira**:**:

- Ubwimerere bw'ubwoko (kutavangwa n'andi moko) ntibugomba kujya mu nsi ya 98%.
- Ubwimerere bw'igihingwa (kutavangwa n'imbuto z'ibindi bihingwa) ntibugomba kujya munsi ya 98%.
- Imbuto z'indobanure zishobora kumera ntizigomba kujya munsi ya 75%.
- Ubuhehere ntibugomba kujya hejuru ya 15%.

7. IBIJYANYE N'UBUKUNGU

Igiciro cy'ibikorwa *(kuri hegitari)*		**Ingano**	**Igipimo**	**Igiciro kuri buri gipimo *(FRw)***	**Igiciro cyose hamwe *(FRw)***
Abakozi		400	Umubyizi	500	200000
Ifumbire y'ibibora		15000	Ikiro	10	150000
Imbuto		100	Ikiro	500	50000
Ifumbire y'imvaruganda					
	NPK 17.17.17	250	Ikiro	300	75000
	Ire	50	Ikiro	305	15250
Imiti					
	Diméthoate	3	Litiro	6000	18000
	Tilt	4	Litiro	10000	40000
Igiciro cyose *(FRw/hegitari)*					**548250**
Umusaruro					
Umusaruro ku mbuto *(FRw/Ha)*		2500	Ikiro	300	**750000**
Inyungu *(FRw/Hegitari)*					**201750**
Igicuruzo *(FRw/Kg)*					**219**

8. ICYITONDERWA CYA NYIRUBWITE

INGANO : Uko zihingwa

Umunsi

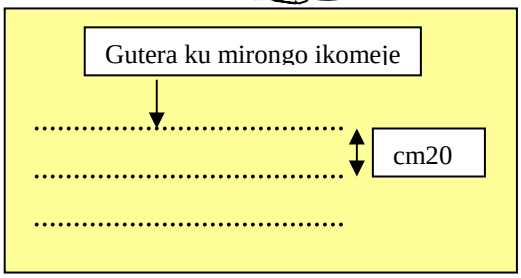
Guhitamo no gutegura umurima : zibanzirizwa n'ibinyamisogwe cyangwa ibirayi / Zitandukanywa n'izindi mbuto na m 5. / Itabira rya mbere

Aho imbuto zigurirwa : imbuto shingiro zihungiye zigurirwa mu bigo byemewe cyangwa mu bikorera ku giti cyabo bemewe

MUSAMA
10/09/06
Imbuto ifite icyemezo kuri ha 1
N° y'umurima MUS/05/07A
N° imenyekanisha umuhinzi

1

Itera : Itabira rya kabiri+gutera ifumbire y'imborera toni 15-20 kuri hegitari; gutera ku mirongo ikomeje itandukanijwe na cm 20; kg 100 z'imbuto kuri hegitari; Ibiro 250 bya NPK 17-17-17 kuri hegitari cyangwa ibiro 100 bya DAP kuri hegitari



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Kumenyekanisha igihingwa bitarenze ibyumweru bitatu kuva igihe cy'itera mu ishami rishinzwe igenzura ry'ibyemezo rya RADA (BP 538 Kigali)

Kumenera (binage)

40-45

Ibihagi: kubagara-gusukira +ibiro 50 by'ifumbire ya Ire kuri hegitari ; guteramo umuti wica ubuhunduguru inshuro 2 hakoreshejwe Rogor 40 EC cyangwa Sumithion 50 EC, L 1,5 kuri hegitari ; kongera gutera umuti buri minsi 15 ; gutera umuti urwanya indwara z'ibihumyo inshuro 3 kugeza kuri 4, hakoreshejwe Tilt cyangwa Impact, L 1 kuri hegitari.

75-90

Irabya n'iterera

Gutera umuti wo kurwanya indwara n'udukoko

Igenzura rya mbere kugira ngo hatangwe icyemezo

120-125

Iyera (*Maturation*)

Igenzura rya kabiri kugira ngo hatangwe icvemezo

130

Isarura no guhura: isarura rikorwa zeze neza (impeke zimaze gukomera neza) hagakurikiraho guhurisha imashini

Iyanika : Kwanika kugeza ku buhehere butarengeje 13%. Uzuza kandi wohereze uru rupapuro rwo **kumenyekanisha umusaruro**.

Kuzihungura, kuzanika no kuzihunika: kwanika, gutera umuti wa Actellic 2% (g 2 ku kiro); gupfunyika no komekaho udupapuro.

ICYAPA

Umuhinzi : ……..
Imbuto y'ingano ifite icyemezo ya Musama
Igihe yerera : iminsi 100 -125
Umusaruro : T 3- 3,5 kuri hegitari
Imisozi miremire
N° 25/07A/Ruh/20/C
Itariki: 04/08/2006
Kg 25

Gukomeza gukuramo izindi mbuto kugeza zeze