ENKOLA ENNUNGAMU

Green Rodent Control

Engeri y'okwanganga/ okulwanyisa obulungi Emmese nga tukozesa Enkola ez'obutonde

Ekikyuse kya Uganda 2020

AMHARA NATIONAL REGIONAL STATE
Mekelle University
META META
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Pursuing Excellence
NARO
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Green Future Farming

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01. Ennyanjula

Ekitabo kino kinnyonnyola engeri y'okukeendeeza ebizibu ebiva ku kutaataganyizibwa kw'emmese n'emisonso mu mbeera z'ebyobulimi ngatukozesa obukodyo obwenjawulo obutalina bulabe eri abantu, ebisolo bye tulunda mu maka gaffe, oba ebitundu ebitwetoolodde. Engeri y'okwangangamu ebisolo bino nga tukozesa enkola ez'obutonde kitundu ku kuzza obuggya eby'obulimi ebiruubirira okwongera ku makungula, nga twongera amaanyi mu byetusazeewo okukola, n'okwongera mu nkola y'obutonde era mu ngeri eno nga twewala okufiirwa nga tetunnakungula oba oluvannyuma lw'okukungula. Okukendeeza ku kufiirwa n'okwononeka kw'ebyobugagga bye tutaddemu, bye bintu ebikulu bye tussaako ennyo essira mu kwanganga emmese nga tukozesa enkola ez'obutonde (EBRM).

Emmese n'emisonso (ziyite emmese) bulijjo zoonoona ebintu by'abantu era zisaasaanya endwadde nnyingi ezikosa obulamu bw'abantu. Era emmese zivunaanyizibwa ku bulabe n'okwonoona ennyo ebirime nga bikyali mu nnimiro oba mu byagi. Okubeerawo kw'emmese kizibu ky'amaanyi nnyo mu balimi bangi okwetooloola ensi yonna. Ennaku zino, enkola ezibaddewo/enkadde ez'eddagala ezzungu erikozesebwa okutta emmese terikyakola, emmese zeyongedde okumanyiira/okugumira eddagala lino era likosezza nnyo ebisolo ebirala ebitagendereddwa kuttibwa wamu n'embeera etwetoolodde (Lemus ne banne 2011; Parshad 1999; Valchev ne banne 2008). N'olwekyo, kyetaagisa okukyusa mu ngeri y'okwanganga/okulwanyisa emmese nga tukozesa enkola ez'obutonde. Enkola y'okwanganga/okulwanyisa emmese nga tukozesa enkola ez'obutonde (ERBM) ng'ekitundu kunkola ez'obutonde ezirwanyisa emmese ekola bulungi, yeesigika. Ekozesa enkola ennyangu zetulina mu bitundu byaffe, nga zigattibwa mu nnima eyabulijjo ezisobola okukendeereza ddala obulabe bw'emmese mu ngeri etekosa butonde. Kyetaagisa okussa essira ku ngeri y'okwanganga n'okukendeeza ku bungi bw'emmese. Ekitabo kino kiraga enkola ez'enjawulo ez'obutonde ezisobola okukozesebwa mu nju ne mu nnimiro okusobola okwanganga obulungi n'okukendeeza emmese.

Mu Uganda mulimu ebika by'emmese eby'enjawulo. Emmese ezimu zibeera mu nju, naddala mu byagi by'emmere. Emmese ezibeera okumpi n'abantu zirina obulabe bwamaanyi nnyo ku bulamu bw'omuntu era zisaasaanya endwadde eziwerako. Emmese endala zibeera mu nnimiro, era ebika by'emmese ebimu byetala nnyo emisana ate ebirala, ekiro. Olw'okuba emmese nnyingi nnyo, zisobola okulya ebibangirizi ebigazi eby'ebimera nezikola obulabe obw'amaanyi ennyo. Oluusi zisaanyizaawo ddala ebimera.

Ekifaananyi 1: Emmese zonoona era zikyafuwaza emmere nga zziteka obubi mu materekero food by excreta in storage

Ekifaananyi 2: Emmese zonoona, zirya era zikyafuwaza emmere enfumbe mu nyumba

Ekifaananyi 3: Ebimera ebyononedwa emmese mu nnimiro: Ku kkono; kasooli omuto ayononedwa emmese e Mayuge, Ku dyo; omuceere ogusaliddwa emmese mu Doho rice irrigation scheme, mu disitulikiti ya Butaleja mu Uganda

Ekifaananyi 5: Emmese zonona ebibala n'enva endirwa mu nimiro ne mu materekero

Ekifaananyi 4: Enimiro za lumonde ne ebikajo ebikoseddwa emmese eziyitibwa enfuuko mu disitulikiti ye Kamulit

Ekifaananyi 6: Endwade ezisaasanyizibwa emmese;rat bite fever, Spirillum minus & Streptobacillus moniliformis

Ebimu ku bikulu ebikwata ku mmese/By'oteekeddwa okumanya ku mmese:

- Emmese zizaala nnyo. Emmese bbiri zisobola okuzaala endala 1250 mu mwaka gumu.
- Okubeerawo kw'emmese obulungi kwesigamizibwa ku kubeerawo kw'emmere ennungi n'ekifo we zisobola okuzaalira.
- Emmese zoonoona emmere ey'ensigo buli mwaka (kasooli n'omuceere) eteeberezebwa okuweza ebitundu 10-39 ku buli kikumi mu Uganda.
- Emmese zisaasaanya endwadde ezisukka mu bika 60.
- Emmese zitera okutambula ebifuba 30-100 buli lunaku mu bifo we zibeera okusinziira ku kubeerawo kw'emmere/omubeezi.
- Emmese nsolo z'amagezi nnyo era zisobola okuyiga okutebuka/okwebalama emitego egizitegeddwa.

Essuula ey'okubiri mu kitabo kino ennyonnyola ensonga enkulu ez'okulwanyisaamu emmese. **Waliwo ebintu ebikulu bibiri:**

1. Ekiseera ekituufu: Tuteekedwa okulwanyisa emmese nga tezinnawera nnyo era nga nnafu, nga tezinnatandika kuzaala.

2. Okukolaganira awamu: Emmese zitambula okuva mu nnimiro oba enju emu okudda mu ndala; n'olwekyo, abantu ffenna mu kitundu tusaana okukolaganira awamu okusobola okufuna ebivaamu ebirungi; bannakitundu bagwana kugatta maanyi.

Mu ngeri y'emu, ekitabo kino kinnyonnyola ebisobola okukolebwa okulaba nga: a) emmese ziziyizibwa okutuuka ku mmere, b) emmese tezirina kifo wakwekweka/zoolekeddwa eri abalabe baazo, c) zikendeera mu muwendo. Mu kulwanyisa/kwanganga emmese, waliwo **enkola enkulu ssatu:**

- Essuula 3: Okufaayo ku **buyonjo** bw'ebyagi by'emmere y'ensigo n'empya z'amaka
- Essuula 4: Okukyusa **embeera etwetoolodde** obutasikiriza bisolo bino kugafuula maka gaazo na kuzaaliraawo
- Essuula 5: Okubaako **enkola ez'enjawulo** okwangangamu n'okutta emmese

Enkola zonna ezirambikiddwa zetaaga ensimbi ntono era nnyangu okukozesa mu nju zaffe, mu byagi ne mu nnimiro. Ekigendererwa kwe kulima n'okutereka obulungi emmere n'okulaba nga teriibwa mmese. Mu ngeri y'emu, tuteekeddwa okussaawo embeera eterina bulabe n'okukuuma obutonde obutwetoolodde, nga tekosa bantu, n'okutangira endwadde ezisasaanyizibwa emmese.

Essuula 2-5 zinnyonnyola enkola ez'enjawulo mu bulambulukufu bwazo n'ebyokulabirako ebiri mu bifaananyi. Essuula ey'omukaaga lukalala kwetupimira engeri ekitundu gye kyanganga/kirwanyisa emmese.

Ekifaananyi 9: Ku kkono Dasmys, ne ku dyo ye Gramommys, ezakwatibwa mu distulikiti y'e Mayuge mu Uganda 2017

Ekifaananyi 7: Arvicanthis

Ekifaananyi10: Mus musculus

Ekifaananyi 8: Mastomys

Ekifaananyi 11: Rattus rattus

02. EBYETAAGISA: EKISEERA EKITUUFU N'OKUKOLAGANIRA AWAMU OKWANGANGA/ OKULWANYISA EMMESE

1. **Okusobola okulwanyisa emmese, kikulu nnyo okukolaganira awamu nga bannakitundu.** Waliwo emirimu gy'osobola okukola kinnoomu mu nnimiro/mu makaago ate waliwo egyetaagisa okukwasaganyiza/okukolaganira awamu ng'abalimi/amaka (eky'okulabirako mu baliraanwa n'ennimiro z'ebirime eziriraaniganye).

Okugeza, ssinga amaka agamu gasalawo okuba n'enkola y'okwanganga/ okulwanyisa emmese mu nju yaabwe/ekyagi kyabwe, emmese zisooka ne zeewala amaka ago okumala akaseera ne zigenda (zeeyiwa) mu nnyumba eziriraanye/ ebyagi awatannateebwa biziziyiza/mitego. Okufaanana ku ekyo, singa omulimi yeeteerawo enkola erwanyisa emmese mu nnimiro, emmese zisooka ne zeewala ennimiro eyo okumala akaseera ne zigenda (zeeyiwa) mu nnimiro eziriraanye. Oluusi emmese ezimu ziddayo mu nju oba mu nnimiro gye zaasookera ng'enkola z'okuzirwanyisa ziweddewo. Emmese nsolo njagujagu nnyo. N'olwensonga eyo, enkola ez'okulwanyisa emmese kinnoomu ng'amaka/ennimiro eyetongodde tetera kukola bulungi nga bwekisuubirwa, eweweeza okumala akaseera katono.

Okuteekerateekera awamu ne baliraanwa ne bannannyini nnimiro kikulu nnyo. Ng'ekitole, abantu basobola okuwa ebirowoozo ku nkola ez'okukozesa n'ebiseera lwezinaakozesebwa. Kino kisobola okwawulwamu mu nkola ezikkaanyizibbwako/ ez'okussa mu nkola ng'ekibiina n'enkola ezikkaanyizibbwako/ez'okussa mu nkola kinnoomu. Nga tewannabaawo nkola zikkaanyizibwako, kikulu nnyo okusooka okufuna obukakafu obumala/okumanya enneeyisa y'emmese okuva ew'omulimisa: ebiseera mwe ziwerera ennyo (okwaala), engeri gye ziryaamu, gye zeekweka, n'engeri gye zitambulamu.

Okusobola okulaba nga buli omu yeenyigidde mu kaweefube w'okwanganga/ okulwanyisa emmese, bannakitundu basobola okukkiriziganya ku mateeka agakwata ku nkola ey'awamu ey'okulwanyisa emmese mu nnimiro. Kino kiyamba abalimi bonna mu buli kitundu okukwatagana nebakola ekitundu kyabwe, ekisobola okuyamba ennyo mu kukendeeza ku muwendo gw'emmese.

2. **Lwanyisa emmese nga tezinnawera nnyo.**

Tuweebwa amagezi entakera okweyambisa kaweefube n'engeri ez'enjawulo okuziyizaamu emmese mu kiseera nga zikyali ntono/tezinnayala nnyo, ng'ebimera (omuddo) gukyali muto, era ng'enkuba ntonotono (nga tetunnasiga). Kaweefube yenna akolebwa mu kiseera kino ajja kuba wa mugaso nnyo.

Ennimiro z'ebirime eziri mu mbeera y'okuliikirizibwa enkuba, omuwendo gw'emmese guba wansi nnyo mu ntikko y'ekyeya, ng'ebula ekiseera kitono

Ekifaananyi 12: Okukolera awamu mu kuteekateeka n'okussa mu nkola engeri y'okulwanyisa emmese nga tukuuma obutonde

ekiseera ky'enkuba okutandika (okuva ku kusiga okutuuka ku makungula). Enkuba nga tennatandika, tewaba mmere nnyingi oba ebirime/omuddo mu nnimiro. N'olwensonga eyo, emmese tezizaala era ziba nnafu. Ku mbalama z'ennyanja Nnalubaale ne mu nnimiro z' e Mbale, enkuba gy'etonnya kumpi buli kiseera, ennima ey'ekintabuli, ebiseera eby'amakungula (ng'amakungula gaakaggwa) kye kiseera ekisinga obulungi okussa mu nkola enkola ez'okwanganga/okulwanyisa emmese.

Mu bitundu by'eggwanga ebirala, okugeza mu bukiika kkono, okuva December okutuuka February kiseera kirungi nnyo okulwanyisizaamu/ okutegeramu emmese. Emmese eziba zeekwese mu bunnya bisobola okuttibwa mu kulongoosa/okuteekateeka ennimiro ng'enkuba ennyingi tennatandika/ ekiseera ky'okusiga ekitandika April/May okutuuka mu November. Enkola yonna ey'okulwanyisa emmese ekozesebwa mu kiseera kino okuva ku kusiga okutuuka ku kukungula ejja kutangira emmese nnyingi okuzaalibwa, kubanga kino kikendeeza omuwendo gw'emmese enkulu (ezizaala). Era kyansonga nnyo okussaawo enkola ezirwanyisa mu nnaku asatu ezisooka oluvannyuma lw'okusiga (ng'emmese tezinnazaala). Enkola z'okwanganga ezissibwawo/ ezikozesebwa oluvannyuma ennyo tezitera kuvaamu bulungi kye twagala.

Wekkaanye, enkola ez'okwanganga/okulwanyisa emmese zisaana kukolebwa ku nkomerero y'ekyeya ne ku ntandikwa y'ekiseera ky'enkuba. Mu kyeya, essira lisse ku nsolo ennafu, kendeeza omuwendo gwazo, era ozitangire okuddamu okuzaala. Ku ntandikwa y'ekiseera ky'enkuba, essira lisse ku mmese ezisimattuse okufa, ng'okozesa enkola ez'enjawulo ng'ekitundu ku kuteekateeka/kulongoosa ennimiro n'okusaanyawo amaka/ebisulo by'emmese. Enkola zino zinnyonnyoddwa mu ssuula 4 ne 5.

3. Enkola/emitendera gy'okwangangamu emmese gisaana okukozesebwa mu kiseera ekituufu okukendeeza ku muwendo gw'emmese nga tezinnazaala.

Okwongera ku ekyo, omuntu asobola okukozesa enkola/emitendera egy'enjawulo okumala ekiseera. Emmese bwe zaabulira amaka gaazo, ennimiro z'ebirime, oba bifo ebiriraanyewo, okugeza ng'enkuba etonnya nnyo, abalimi basobola okussa essira ku nkola ez'okuziyiza emmese mu bitundu ebyo. Eky'okulabirako: emmese bwezitambula okuva mu nnimiro (nga ennimiro z'omuceere) okudda mu maka, osaana okutandika okutega oba okutta emmese eziri mu maka. Bwezigenda mu nnimiro z'ebirime okwekweka n'okulya, osaana otege oba otte emmese eziri mu nnimiro/ebifo ebyetooloddewo. Kino kitegeeza nti emmese tezirina kifo kyekusifu era ziri ku muyiggo gwa kugobwa kufuluma. Kino kizikugira okwaala.

03. OKUFAAYO KU BUYONJO BW'EBYAGI BY'EMMERE Y'ENSIGO N'EMPYA Z'AMAKA

Emmese kizibu kinene nnyo mu nnyumba nnyingi. Emmese zoonoona engoye, ebibajje, wwaya z'amasannyalaze, n'empapula. Emmese zirya ku mmere eri mu byagi by'amaka ne zigyonoona. Emmese zikyankalanya buli kimu mu nju. Oluusi ziruma abaana n'abakadde mu kiro. N'olwensonga eyo, zisaana okugobebwa mu nju, mu maka, mu luggya, ne mu byagi by'emmere. Tezisaana kubaako kizisikiriza kusembera; n'olwekyo, kyansonga nnyo okulaba nga teziwunyiriza mmere yadde okutuuka mu maka. Zino z'enkola ettaano z'osobola okweyambisa okuziyiza emmese:

1. **Obuyonjo:** Engeri gye tukwatamu emmese eziri munda n'okwetoolola enju, ekintu ekikulu ennyo ekisookerwako kwe kukuuma ennyumba n'ebifo ebyetoolodde ennyumba (ennimiro, ebyagi by'emmere y'ensigo, enkomera, ensalosalo, n'ebirala) nga biyonjo. Tewasaana kubaawo mmere efisse ng'eyasamye/nga tebikiddwaako, nga tewali ntuumu za kasasiro ayasamye/atabikiddwaako, nga tewali kirekeddwa awo nga kyasamye oba ekyagi ekyasamye. Bino byonna nsibuko ya mmere ya mmese era bwekweko bwazo. Emmere esaana kukuumibwa nga mbikkeko bulungi nga teyisa mpewo emmese zireme kugiwunyiriza. Ebintu byonna ebisikiriza emmese bigwana kuggyawo oba okuterekebwa mu bintu ebibikka okubuniza/bbokisi/ebibya/n'ebirala.

Ekifaananyi 13:Eky'okulabirako ekyomuliraano omukyafu nga kiraga ensibuko y'emmere n'ebifo emmese we zizaalira ne zaala

2. **Engeri y'okutangira emmese okuyingira enju:** Kyansonga nnyo okuleetawo embeera ekaluubiriza emmese okuyingira enju n'ebyagi. Tusaana okuziba ebituli byonna weziyita n'emiwaatwa mu bisenge wamu n'emidumu gya kazambi. Era kikulu nnyo okuziba ebitundu by'enju weegattira oba ebyagi nga tukozesa enkokoto okutangira emmese okuyingira. Bw'ozuula nti emmese weeziri (omuli obubi bwazo obubisi, amakubo/enkuubo) mu mpya z'amaka, amangu ddala ggala (ziba oba jjuza) ebituli byonna emmese wezisobola okuyita ng'okozesa enkokoto era oggyewo ebifo byonna mwezisobola okwekweka

Okutwaliza awamu, kirungi nnyo okutaataganya entambula y'emmese mu nnyumba ne mu byagi. Okugeza, teeka ebimera ebirina amaggwa mu kakomera/olukomera oluzimbibwa. Kino kiremesa emmese ne kizikuumira wamu nga tezitambula, ekikaluubiriza emmese okutuuka ku nnyumba oba ekyagi. Tuweebwa amagezi okukozesa enkola ezisukka mu emu mu kuziyiza emmese.

Ekifaananyi 14: Ebyokulbirako eby'amaka amayonjo n'amayumba ag'enkokoto agaziyia emmese okuyingiramu

Ekifaananyi 15: Ekyokulabirako ekyamaka ageetooloddwa olukomera lw'amaggwa okuziyiza emmese

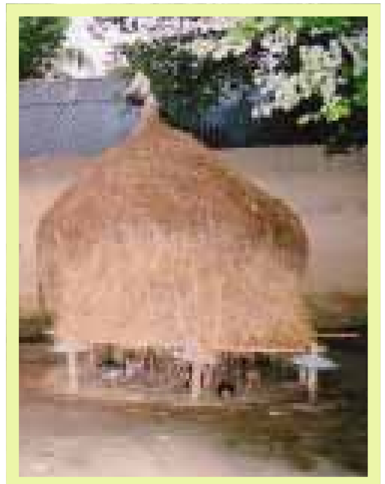
3. Ebyagi ebirungi: Eky'etaago eky'okusatu kwekuba n'ekyagi ekigumu omutayita mmese era nga n'ebikozesebwa mu kutereka emmere y'ensigo n'ebikunguddwa ebirala bigumu nnyo. Emmese tezisaana kuweebwa mukisa gwa kutuuka ku biterekeddwa.

<u>Okussaawo ebyagi eby'ebweru:</u> Ekyagi tekigwana kussibwa wansi wa miti, kubanga kino kisobozesa emmese okugwamu nga ziva waggulu. Ekirala, tewagwana kubaawo nsiko, kasasiro, oba ebifo ebirimu amazzi okumpi n'ekyagi kubanga bino bisikiriza emmese.

<u>Wanika ekyagi ku nkoondo:</u> Kyansonga nnyo okussaawo embeera ekaluubiriza emmese okuyingira ekyagi. Engeri esinga ey'okukikola obulungi kwe kuwanika ekyagi ku nkoondo, okugeza kitundu kya kifuba okuva ku ttaka, n'ossaako amabaati oba emitayimbwa gy'ekyuma, oba ssenngenge ku nkoondo eziwaniridde ekyagi. Kino kitangira emmese okuwalampa, olw'okubanga kungulu kuseerera nnyo ng'emmese ziseerera nezigwa, oba nga ssenngenge azifumita nnyo.

Ebikozesebwa ebirungi eby'ekyagi mulimu emiti/ amabanda, obusa, akasolya ak'essubi, n'enkoondo z'emiti okuwanika ekyagi.

Ekifaananyi 16: Eterekero eddungi eriwanikiddwa waggulu ku miti egisibiddwako obubaati okuziyiza emmese



Ekifaananyi 17: Ekyokulabirako ekyeterekero nga lirina amayinja ameetoolovu ku miti okusobola okuziyiza emmese okuwalampa waggulu

Ekifaananyi 18: Amaka mu disitulikiti ye Kweeni nga galina amaterekero g'emmere y'ensigo ebweru, nga gaazimbibwa mu miti era nga gaaserekebwa n'essubi n'amalala nga gaaserekebwa mabaati. Obugulumivu bw'amaterekero gano okuva wansi ku ttaka bwa njawulo (etterekero er'yessubi lyali sentimita 20 ate ery'amabaati lyali ekitudu kya mita waggulu)

<u>Ebyagi by'ebyuma ebinene ebiringa ppipa</u>: Enkola esinga okuba ennungi kwekukola ebyagi ebigumu ennyo ku nkoondo okuva mu mabaati. Ebyagi by'ebyuma nga bino birina ekifo eky'enjawulo we biggulira okufulumya emmere y'empeke bw'eba yeetaagibwa. Amabaati agalimu ebigulumu gatangira emmese okuyitamu okwonoona, ne kungulu okuseerera kuzitangira okwambuka okuyingira ppipa y'ekyagi. Osobola n'okukozesa ppipa z'ekyuma ng'ebyagi. Kakasa ng'olina ekisaanikira ekigumu era ekigyako okusaanikira obulungi omumwa omugazi ogw'eppipa.

Ekifaananyi 19: Ebyagi mu nyumba, ku kkono nga byakolebwa mu miti n'ebyuma, ku dyo byakolebwa mu miti n,amabanda agasiigiddwa n,obusa bw'ente. Nate laba obuyinja/obubati obwetooloovu obuteeredwa ku miti okuziyiza emmese okuwalampa waggulu

<u>Ensawo ezitayisa mpewo:</u> Okutereka emmere y'ensigo mu nsawo, kyansonga okukozesa ensawo ezitayisa mpewo. Ensawo ezitayisa mpewo byagi ebirina akaveera akalala munda. Bwezisibwa obulungi (nga teziyisa mpewo), emmese tezisobola kuwunyiriza mmere eri munda. Kino kiyamba emmese obutayita mu nsawo kulya mmere ya nsigo. Ensawo ezitayisa mpewo era zeesigika mu kulwanyisa obuwuka obulya emmere n'ennaanu ey'obutwa eva ku mmere. Ensawo ezitayisa mpewo zisobola okukozesebwa mu byagi ne mu nnyumba bwe kiba kisoboka. Wegendereze nnyo okussa emmere y'empeke mu nsawo ezitayisa mpewo nga zikaze bulungi (kumpi ebitundu 10-11 ku buli kikumi bunnyogovu).

Ekifaananyi 20: Ekyokuabirako ekyetterekero ly'ebyuma ekikoleddwa mu baati. Lirina ekisaaanikira ku mutwe n'emiti ku ntobo yalyo. Lyakolebwa mu bintu emmese mwe zitasobola kuyita kuyingira.

Ekifaananyi 21: Ekyokulabirako ekya ppipa ya pulasitiika ng' esaanikiddwako ekisaanikira ekinywevu.

Ekifaananyi 22:Ebyokulabirako ebibi ebyamaterekero g'obukutiya obusobola okuyingirwamu amangu emmese n'obuwuka

4. Lunda ebisolo ebirya/ebiyigga emmese: Lunda kkapa ez'omumaka n'embwa awaka okulwanyisa emmese. Kkapa ziyigga era ne zirya emmese. Ekirala, empunya y'ebisolo bino – naddala empunya ya kkapa enkazi (oba omusulo gwazo) – gugoba emmese ne guzitangira okusiisira okumpi awo.

Ekifaananyi 23:Ebyokulabirako ebirungi ebyobukutiya obutuufu obuterekerwamu, obuziyiza emmese okuwunyiriza emmere eterekeddwamu

Ekirala, okubeerawo kw'ebisolo ebirya emmese – kkapa (ezirundibwa awaka n'ezomunsiko/ emiyaayu), embwa, obukolwa, namundagi, n'ebiwugulu – okwetooloola empya z'amaka n'ebyalo kigobera wala emmese. Emmese zimanya obulabe bw'ensolo ezizirwanyisa; n'olwenkyo, zikendeeza ku kutambula kwazo nga zinoonya emmere n'ababeezi. Tuweebwa amagezi obutagoba bisolo birya/birwanyisa mmese, wabula okubisikiriza mu mpya zaffe ne ku byalo. Essuula ey'okutaano ewa amagezi ag'ebuziba ku ngeri y'okusikiriza ebisolo ebirya/ebiyigga emmese.

Ekifaananyi 24: Ekyokulabirako ekyengeri etterekero eddungi bwe lirinna okubeera (obukutiya nga buteekeddwa waggulu enkoko we zitasobola kutuuka kuwumula bituli mu bukutiya, ekiyinza okusaasaanya mmere okusobola okuliibwa emmese)

Ekifaananyi 25: Okulunda kkapa mu nju, nkola nnungi eziyiza emmese

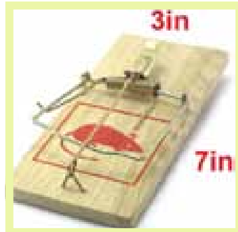
5. Ssaawo emitego/tega obumasu: Enkola esembayo mu kwanganga/kulwanyisa emmese okwetooloola enju kwe kutega obumasu, naddala mu bifo we tuteebereza emmese okutambulira oba okwekweka. Waliwo obumasu bwangeri nnyingi, obukolebwa oba obugulwa mu butale obwawano, obusobola okuteebwa mu nnimiro n'ebyagi. Emitego gy'amayinja, obumasu bw'obuuma obwetooloovu, emitego gy'envubo, n'emitego gy'obulobo (nga mulimu ekitundu ky'amazzi). Omuntu asobola n'okukozesa akamasu/omutego gwe yeekoledde awaka; eky'okulabirako ky'engeri y'okukozesa akalobo yiino wammanga.

Ekifaananyi 26: Embwa zisobola okutiisa emmese n'olusu lwazo

Ekifaananyi 27:Okuteekawo ebisu by'ebiwuggulu okubisikiriza okusenga mu bitundu ebirimwamu emmere

Ekifaananyi 28: Omutego gwo obutimba ogukozesebwa okwetooloola TBS

Ekifaananyi 29: akatego k'ekyuma



Ekifaananyi 30: akamasu akakoledwa mu mbawo

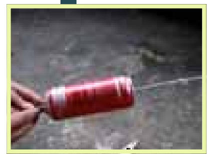
EKY'OKULABIRAKO: OMUTEGO GW'AKALOBO OGUKOLEBBWA AWAKA.

Weetaaga:

- Akalobo akagyamu liita 20 ez'amazzi oba okusingawo
- Eccupa y'amazzi, akakebe ka ssooda, oba omudumu ng'ogukozesebwa ku kaabuyonjo ez'amazzi
- Oluwawu oluzungu
- Omuggo okukola ng'akaserengeto
- Amazzi
- Ekisikiriza – okugeza ekipooli ky'ebinyeebwa oba entuungo

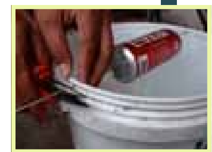
Ekifaananyi 31: Emitendera egyomutego gw'awaka ogukolebwa ne bbaketi

Engeri y'okukikolamu



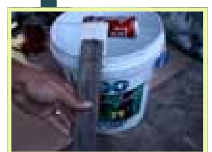
Omutendera 1

Omutendera 1: Fumita akawaya mu kakyupa k'amazzi eruyi n'eruyi (oba ekintu kyonna ekyetooloovu nga kisobola okwetooloola ate nga kiseerera/kiweweevu)



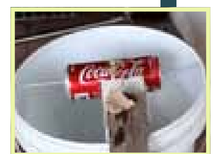
Omutendera 2

Omutendera 2: Fumita ebituli mu baketi eruyi n'eruyi kumpi ne waggulu wa baketi nga osobola okuyisaamu akawaya, ne kyupa wakati w'omumwa gwa baketi.



Omutendera 3

Omutendera 3: Teeka akabaawo ku mumwa gwa baketi



Omutendera 4

Omutendera 4: Teeka obw'okulya ku kabaawo ne ku kakyupa akeetooloola

Omutendera 5

Omutendera 5: Jjuza amazzi mu baketi

Omutendera 6

Omutendera 6: Emmese zigyakujja nga zagaala okulya ebiteredwa ku kabaawo era mungeri eyo' kuwaalampa akabawo zigyakwesanga zituuse ne kakyupa wezisererera nezigwa munda mu baketi eli mu amazzi.

04. OKUKYUSA EMBEERA ETWETOOLODDE OBUTASIKIRIZA NNYO KUBEERAWO NA KUZAALA KWA MMESE

Emmese kizibu kinene nnyo eri ebirime, okusingira ddala emmere y'ensigo n'eyemirandira. Mu bitundu eby'enjawulo, omuwendo gw'emmese mu birime ebigattiddwa mu nnimiro/ekika ky'ebirime ebikulira ku ttaka guli waggulu nnyo.

Tufunzizza ensonga ssatu ezireetedde omuwendo guno okweyongera:

1. Emmese zirina eby'okulya bingi era zeeroboza. Ebirime bingi ebirimibwa mu biseera by'okulima buli mwaka, era ennimiro empya ez'ebirime zitondebwawo mu bifo ebikadde emmese mwe zaabeeranga. Ekivaamu, walabikawo emmere nnyingi emmese kwezirya. Ekirala, ebirime ebikulira mu bbanga erisukka omwaka ogumu ebireeteddwa mu nteekateeka y'okulima ebibira nabyo byongera nnakavundira (okugeza ensigo n'ebikoola) ebyagalwa ennyo emmese.
2. Emmese zirina ebifo bingi omwokwekweka n'okubeera. Ennimiro z'ebirime ebikulira ku ttaka ziwa emmese obukuumi/aw'okubeera ekireetera ebisolo bino okweyongera okubeera mu nnimiro ezo. Ekirala, ebimera ebikulira mu bbanga erisukka omwaka ogumu bisuza emmese mu kyo biyamba omuwendo gw'emmese okweyongera n'okulumba ebirime n'amaanyi mu kiseera eky'omumaaso.
3. Emmese zirina abalabe b'obutonde batono. Mu bifo ebimu, abalabe b'emmese ab'obutonde (misota, biwugulu, ebinyonyi ng'empuungu ebirya emmese, nnamundagi) biweddewo nga bittibwa oba okusaanyawo kw'ebisulo byabyo. Eky'okulabirako ekirungi bwe butabaawo bwa miti n'ensiko omuwummulira ebinyonyi ng'empuungu okubaako kye bitta. Awatali balabe ba butonde, emmese zisobola okutambula kyere nga teziriiriddwa.

Okutwaliza awamu, ennima ekozesa enkola z'obutonde etondawo ebisulo ebisobozesa ebiwuka eby'enjawulo oba ebisolo ebirya ebirime, okugeza ng'emisonso, nsombabyuma, okukula obulungi.

Enkola ezirwanyisa obungi bw'emmese zissa essira ku nsonga ssatu: okukendeeza ebisulo, okukendeeza okubeerawo kw'emmere, n'okwongera amaanyi mu bisolo ebirya emmese. Enkola ezisinga obukulu zikola zigattiddwa ne zinnaazo okusobola okufuna mu nsonga zino essatu.

Tugenda kunnyonnyola emitendera emikulu esatu egigoba emmese, okuzigoba mu nnimiro, n'okukendeeza ku muwendo gwazo.

1. Yongera amaanyi mu nnima okusobola okukendeeza emikisa gy'emmese okweyongera. Enkola zino wammanga zisobola okukozesebwa:

- Kendeeza omujjuzo gw'ebirime: Mu kifo ky'okuba n'ekirime ekibikka ettaka wansi wonna, kisingako okuteeka ebirime mu misittale (lines) okusobola okukoola obulungi. Kino kireetawo amabanga wakati mu birime, emmese kye zitaagala, kubanga kizissa mu katyabaga k'abalabe baazo ab'obutonde. Ekivaaamu kiri nti emmese tezijja kutambulira wala. Okukungula n'obwegendereza (nga toyiwaayiwa) n'okukabala ennimiro nakwo kukendeeza okubaawo kw'emmere y'emmese. Ggyawo omuddo ogusaliddwa n'ebisigalira okumpi n'ennimiro oba bisaasaanye mpola, era oggyewo emmere y'empeke yonna eyiise mu kiseera ky'okukungula.
- Okukkaanya ku kukulimira mu kiseera kimu mu kitundu: Abalimi bonna abalina ennimiro eziriraaniganye (ennimiro eziddiringana) bateekwa okukkaanya ku biseera by'okuteekateeka ettaka, okusiga, okukoola, okukungula, n'okulwanyisaamu emmese. Okusiga n'okulabirira ebiddirira biteekwa okukolebwa mu wiiki/ssande bbiri ekimu okudda ku kirala. Emmese zijja kuba n'omukisa mutono okuba ennamu, kubanga tezisobola kugenda kwetaaya bulungi okulya n'okwebaka mu kifo ekiriraanyewo. Kino kiwanvuya ku kiseera ekizibu emmese mwe zibeerera ennafu, ekikendeeza omuwendo gwazo.

Ekifaananyi 32:Ebyokulabirako ebyokusimba ebimera mu layini, ekiremesa emmese okwekweka n'okuziwaliriza okulekeraawo okwetaaya

- Lowooza ku nteekateeka ey'ekigero ey'okulundira mu byererezi: Emirundi mingi, okulunda ebisolo kiviirako okusaanyawo ebimera ebikka wansi/ ettaka okuyita mu kulinnyirira ettaka ekivaamu okusaanyawo kw'ebisulo by'emmese. Ekivaamu kwe kwerula emmese eri balabe baazo n'ekiddirira muwendo gwa mmese kukendeera.

2. Sanyaawo amaka g'emmese era okakase nga tezirina kifo wa kwekweka:

Okusaanyawo amaka g'emmese n'ebisulo byazo kiggyako emmese obukuumi okuva eri balabe baazo, ebifo we zizaalira, n'ebifo awokwewogoma akaseera akatono. Kino kikendeeza emikisa gy'okubeerawo kw'emmese n'obungi bwazo, era kiwa obukakafu nti emmese zisobola okubeera mu nnimiro z'ebirime oluvannyuma lw'ekiseera nga ssizoni etambuddeko.

- Emmese ezimu zikola ebisu byazo okuva mu bisubi, ebisigalira by'ebirime, n'ebisasiro mu nnimiro, naddala emmese ezeetala ennyo emisana nga zeetaaga awokwekweka kungulu okuva eri balabe baazo. Okulundira ebisolo ku ttaka ng'okusiga kw'ekiseera ekiggya tekunnatuuka, ebisu by'emmese bijja kwonoonebwa. Eky'okulabirako, omuntu asobola okukozesa 'okulunda kw'ebisigalira,' ng'atwala ente mu nnimiro okulya ebirime ekisigalidde

oluvannyuma lw'okukungula. Ente bwezimaliriza okulya ebisigalidde, ebisigalidde ebirala bikungaanyizibwa ne byokebwa. Engeri eno 'ey'okulongoosa ennimiro' yeetagisa nnyo okukolebwa ng'ekiseera ekipya eky'okusiga tekinnatandika. Kiwa ebimera omwagaanya okukula obulungi, kubanga emmese ziremeddwa okulumba ebimera ebyakasimbibwa mu nnimiro.

- Emmese endala zisima obunnya n'emikutu aw'okusula wansi mu ttaka, naddala ebika by'emmese ezeetala ennyo ekiro. Tuweebwa amagezi okusooka okutobya obunnya buno n'emikutu n'amazzi amangi okusobola okutta emmese eziri munda ng'ekiseera ky'okusiga tekinnaba. Enkola endala kwe kunyookeza emikutu/amakubo gaazo.

- Okukabala wansi ennyo kusobola okusaanyawo obunnya n'emikutu gy'emmese. Emmese zisobola okusima obunnya kumpi bwa ffuuti nga emu kitundu obuwanvu. Obuwanvu bw'okukabala buno busobola okutuuka ku buwanvu obusaanyawo ekitundu ekinene ku muwendo gw'emmese; wabula, okukabala okutuuka ku buwanvu kumpi bwa kitundu kya ffuuti, okugeza, nabwo busobola okutataganya obunnya bw'emmese.

- Mu ngeri endala, noonya obunnya bw'emmese era obusaanyewo ng'ofumita/okusimaasima obunnya n'enkoondo oba ekifumu. Kino kisobola okukolebwa ku mitendera gy'okukabala n'okulima.

- Kebera entakera obubonero obulaga nti emmese weeziri (obunnya, obukubokubo n'enkuubo mweziddukira) okubaako enkola zetussaawo okuzirwanyisa.

Ekifaananyi 33: Okutobya n'okusaanyawo obukwesese bw'emmese. Ekisooka, kuyiwa mazzi, ekiddako kuziba n'okukuba emmese egezaako okudduka

3. Yongera ku mutindo gw'ettaka n'ebyagi ebyeyambisibwa okukuumira amazzi mu nnimiro:

Ebyagi bino bya kukendeeza okukulukuta kw'ettaka n'okukuuma amazzi agamala mu ttaka, naye era nga bikola ng'amakubo mwe tutambulira. Ebyembi, era bikola ng'ebisulo by'emmese.

- Kyansonga nnyo okukola enkuubo ezaawula ennimiro/ensalosalo entonotono ate zikuumibwe nga temuli muddo zireme kukola nga bifo bya mmese kwekwekamu. Ekirala, ensalosalo zirekebwe nga nfuunda nga bwekisoboka (obutasukka ffuuti emu obugazi) okulemesa emmese okusima obunnya.

- Ensiko erimu amaggwa n'obuti/omuddo ogufumita ku nkomerero y'ennimiro oba mu makkati g'enkuubo z'ebirime nabyo bitaataganya entambula y'emmese. Kikaluubiriza emmese nga bisalaasala n'okuleeta amabwa ku bitundu byazo eby'omubiri ebigonvu. Kikulu nnyo okusimba omuddo guno mu lukoloboze olufunda, okulemesa emmese okutambula ng'ate tonyigiriza birime birala mu nnimiro.

Ekifaananyi 34:Ensalosalo mu muceere ezisanidde obutakuuma mmese mu nnimiro. Ekiveera kya pulastiki ki ziyiza emmese obutatuka mu nnimiro

Ekifaananyi 34b: eky'okulabirako ky'nnimiro y'omuceere ng'erina ensalosalo ezisaniddde mu size ezitasikiriza mmese kwewogomamu

Ekifaananyi 34c: Olusalosalo olusanidde mu nnimiro zo omuceere gwo omumazzi ne omutego gwa Trap Barrier System okukwata emmese mu muceere

05. BAAKO EBY'ENJAWULO BY'OKOLA OKULWANYISA OBA OKUTANGIRA EMMESE

Okugatta ku ekyo, waliwo enkola ez'enjawulo ezisobola okukozesebwa okukendeeza ku muwendo gw'emmese. Tunnyonnyola enkola endala ssatu ez'okwanganga/okulwanyisa n'okutta emmese.

1. **Kozesa ebimera ebigoba emmese nga Tephrosia okuva mu nnimiro z'ebirime ebiranda/eby'emmere ey'emirandira. Kino kigendereddwamu kulumya mmese eziyitibwa enfuuko.** Busitema University ng'ekolagana wamu ne MetaMeta n'abalimi, banoonyereza/batumbula enkozesa ya *Tephrosia vogelii* nga ekimera ekigoba enfuuko. *Tephrosia vogelii* kirina emirandira egirimu ekirungo ekya *Retinoid* eky'obutwa ate nga kikaawa/kibaalaala. Okukaawa/okubaalaala kigambibwa kugoba enfuuko buli lwe zikwatagana n'emirandira gino era emmese zino zitera okwewala ennimiro ezirimu ekimera kino. Okugezesa okwenjawulo n'ebinavaamu bijja kukozesebwa okulongoosa obukugu buno. Enkozesa ya *Tephrosia* erina emiganyulo mingi: tekikosa butonde, ssikyabulabe okukozesa, era omugaso gwakyo muwangaazi.

Ekifaananyi 35: Ekifaananyi ekirungi eky' ensalosalo za amayinja mu nnimiro ya Ssyiri. Entumu y'amayinja yeekutte wamu, ekiyinza okuzibuwalira emmese okuyitamu. Ka layini k'omuddo omuto kya bulabe nyo eri emmese okusala ogugenda mu nnimiro ya ssayiri n'ebirime ebirala

2. Tumbula abalabe ab'obutonde. Abalabe b'emmese ab'obutonde bakola nnyo mu nkola ey'obutonde eyeesigika okwanganga/kulwanyisa emmese. Abalabe b'emmese ab'obutonde mulimu kkapa ezirundibwa mu maka, embwa, ebiwugulu n'ebinyonyi ebirala ebirya emmese. Enkola eno erimu; obutatta, obutagoba, okukuuma ebisulo n'okutumbula n'amaanyi okubeerawo kw'ebisolo n'ebinyonyi ebibeera mu nsiko.

- Ng'omulimi, osaana okutumbula n'amaanyi n'okugezaako okusikiriza abalabe b'emmese bano mu nnimiro. Eky'okulabirako, okussaawo ebisu ebikolerere mu mbaawo (ku nkoondo nga za bifuba bisatu oba okusingawo) mu nnimiro biyambe okusikiriza ebinyonyi ebirya emmese nga ebiwugulu, ensega, ne kamunye. Kino kikole naddala mu nnimiro omutali miti na nsiko. Teeka enkoondo mu nnimiro ezo ebinyonyi okusobola okutuulako n'okuyigga emmese okukendeeza omuwendo gwazo.

Ekifaananyi 36: Bu layini bwomuddo wakati w'ennimiro z'ebimera

Ekifaananyi 37:Omu ku bakadde ng'ayolesa engeri y'okukolamu akatego k'emmese mu disitulikiti y'e Kamuli

3. Ssaawo "emitego eminene" egy'enjawulo egiyitibwa Trap Barrier Systems.

Omutego guno guyite TBS, gukola mu ngeri y'okukwata emmese mu kibangirizi ekineneko, nga wateekeddwa okubaawo ennimiro esigiddwaamu ng'ennimiro eziriraanyewo tezinnasigibwamu. Mu mbeera eno, emmese zisikirizibwa okwettanira ennimiro eno esigiddwa ekikeerezi okuva mu kifo ekigazi, era muno mwezitegebwa nezikwatibwa zonna wamu. Ekibangirizi kitono kisalibwako (ebifuba 10 ku 10), era obutego munaana busimbibwa ku lukomera; emmese bweziyingira ennimiro eteereddwaako olukomera okuyita mu bituli awaggulawo, ziggweera mu butego era nezikwatibwa. Omutego guno ogw'okulwanyisa emmese mupya, tegulina bulabe ku butonde. Enkola eno ejja kuba ya mugaso nnyo singa ekozesebwa wamu n'enkola endala ezinnyonnyoddwa mu kitabo kino ez'okwanganga/okulwanyisa emmese.

Ekifaananyi 38: Okusimayo emmese (enfuuko) mu bituli byazo mu disitulikiti y'e Kamuli

- Enkola zino eziziyiza oluusi zigatta emitego oba obumasu obutegeddwa mu mabanga oba 'awayingirirwa' – ekiviirako ekigambo enkola y'omutego oguziyiza oba TBS.
- Enkola y'omutego eno yateebwawo ettendekero lya Malaysia erikola ku by'obulimi, okunoonyereza n'enkulaakulana.
- Enkola eno kitundu ku nkola ekozesebwa awamu okwanganga ebisolo ebiringa emmese.
- Enkola y'omutego guno ezingiramu bannakitundu (CTBS) y'esinga okukola, era y'esinga obutakosa nsawo mu kugisaasaanyizaako ssinga ekozesebwa abalimi bonna mu kitundu.
- Enkola ya CTBS ezimbibbwa okuva mu bikozesebwa ebyangu okufuna/byetulina ebyabulijjo era nnyangu okuzimba. Wabula, enkola ya TBS okukola obulungi, ebyetaago bino eby'ekikugu birina okukolebwa:

Ebikozesebwa:

- Ekiveera ky'olukomera oluziyiza (ebikozesebwa ebigumu byetaagibwa okutangira okwonooneka, okugumira empewo ennyingi n'okuddamu okukozesebwa mu biseera ebirala)
- Amabanda oba enkoondo z'emiti okuwanirira olukomera n'emitego
- Akaguwa oba wwaya okuwanirira olukomera oluleegeddwa
- Ekyuma ekinyiga n'obuuma obunyigibwa okunyweza akaveera ku kaguwa oba wwaya
- Emitego egikwata emmese eziwerako nga nnamu (omutego nga guno gusobola okutega n'okukwata emmese eziwerako)

Emitendera gy'okuzimba:

1. Funayo ekitundu ky'ettaka ebifuba 10 ku 10 (oba bwe kiba kisoboka, ebifuba 50 ku

Ekifaananyi 39: Ebiwuggulu n'ebinyonyi eby'omukowa erimu birungi nyo mu kuyigga emmese, kirungi ebinyonyi bino okuba ne bifo ebimala we bisobola okuyiggira emmese (emiti, ensiko, ebikondo ebiwanvu.

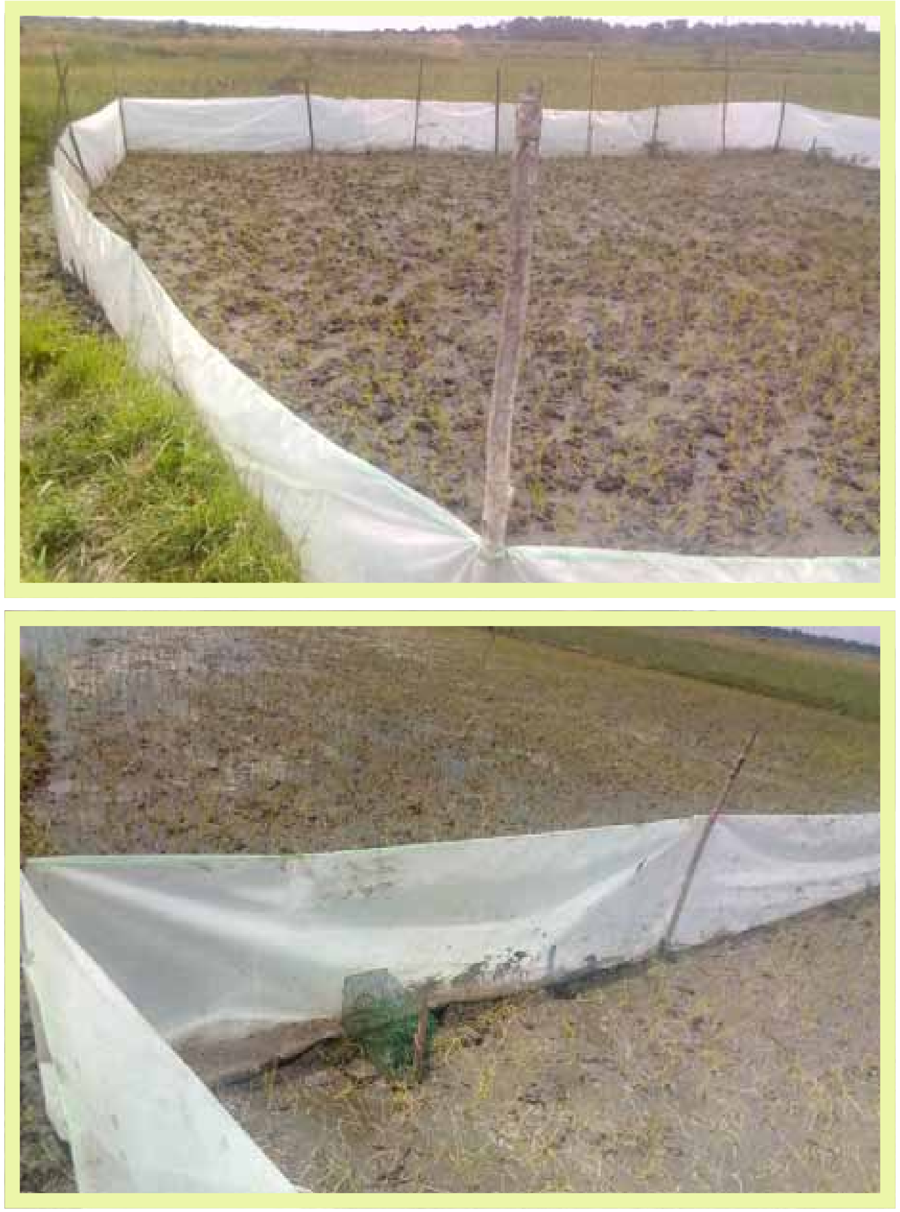
50). Kino kisoboka okukolebwa nga tuteeseteese ebibinja by'abalimi abalina ennimiro eziri okukumukumu. Bannanyini nnimiro basobola okusalawo omulimi omu oba okusingawo okuwaayo ekitundu ku nnimiro zaabwe okuzimbako enkola eno eziyiza, TBS.

2. Ettaka eriweereddwaayo lyetoolooze/lisseeko olukomera olw'ekiveera (ttundubaali) ekisimiddwa mu ttaka. Kozesa obuti/enkoondo n'akagwa/wwaya okuleega n'okukakasa nti olukomera lwetooloodde ettaka ng'ofaayo okulaba nti lusimbiddwa nga katundu ka ffuuti mu ttaka era nga luli nga ffuuti emu okuva wansi ku ttaka.
3. Sima oba ogaziye emikutu egiriwo osime ekinnya okwetooloola (omukutu/omwala) obugazi nga kitundu kya kifuba.
4. Ssaawo obumasu/emitego egikwasa mu ngeri eziwerako nga ebiri ku buli luuyi. Giteekeddwa okukwasibwa obulungi ku lukomera nga temuli bituli oba mabanga agayinza okuwa emmese omwagaanya okuyita ku mitego.
5. Ssaawo enkuubo okwetooloola ekinnya ezikutuusa ku mitego.
6. Teeka obumasu munda mu lukomera okukwata emmese zonna eziyingidde olukomera. Emmese zijja kuyingira omutego oguli mu lukomera.
7. Munda mu mutego guno, emitego egiri mu nvubo egikwasa mu ngeri eziwerako gisimbiddwa munda mu lukomera olw'ekiveera ne mu binnya ebyetoolooddewo ebikoleddwa okuleetera emmese okuyingira. Emmese bweziyingira CTBS, tezirina waakugenda walala okuggyako mu mitego ezitegeddwa.
8. Simba ekirime "ekisikiriza" ng'ebula wiiki/ssande nnya ng'ekirime ekigenda okwetooloola ekifo ekyo tekinnasimbibwa. Okugeza, munda mu mutego, omuwemba ogukolebwamu omwenge gusimbibwa ebula wiiki/ssande nnya nga ebirime tebinnnasimbibwa mu nnimiro ezetooloddewo. Kino kisobola okukolebwa nga tufukirira ettaka eriweereddwayo okuzimbako omutego guno.

Ekifaananyi 40: Ekyokulabirako eky'ekikondo kyomuti ebinyonyi ebiyigga emmese kwebiwumulira, okuggeza nga ebiwuggulu,n'ebirala

Ekifaananyi 41: Ebyokulabirako eby'ebisolo ebirya emmese ebyandikumidwa awaka ne mu nnimiro

Ekifaananyi 42: Okyokulabirako kyo omutego gwa Trap Barrier System oguzimbidwa (Byakolebwa ;Mulungu, L.S., Mchukya, B.M. and Mnyone, L.L. (2020). https://www.intechopen.com/books/pests-control-and-acarology/trap-barrier-system-tbs-as-a-new-tool-for-rodent-pest-management-in-irrigated-rice-in-africa)



Ekifaananyi 43: Okwolesa enzimba y' omutego gwa Trap Barrier System mu Busolwa, mu disitulikiti y'eBugiri mu Uganda

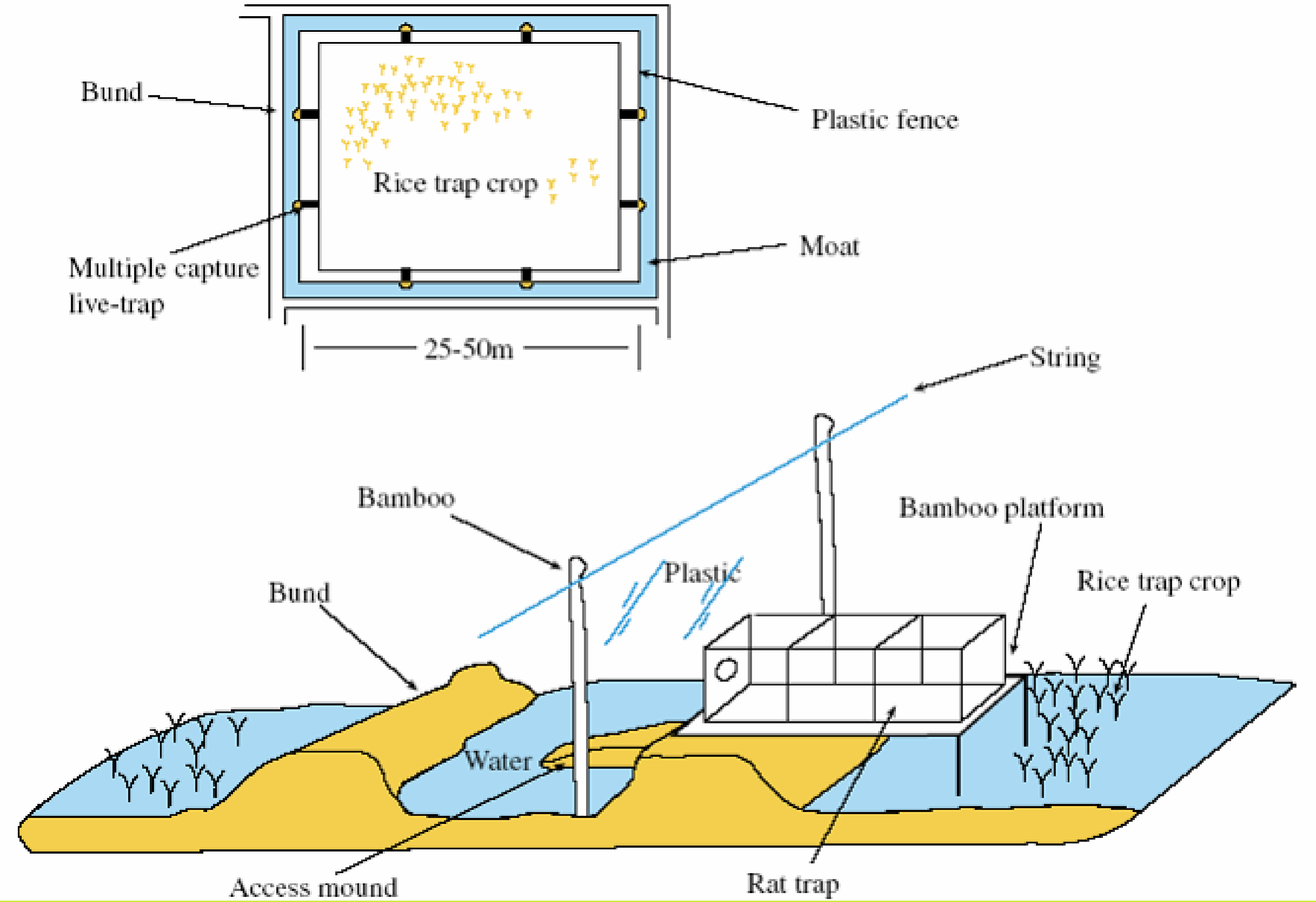
9. Omutego guno gujja kusikiriza emmese ezisimattuse ekiseera ekimpi zikwatibwe mu mutego, kikendeeze omuwendo gw'emmese ng'ekiseera ky'okusiga tekinnatandika.

Kyansonga!

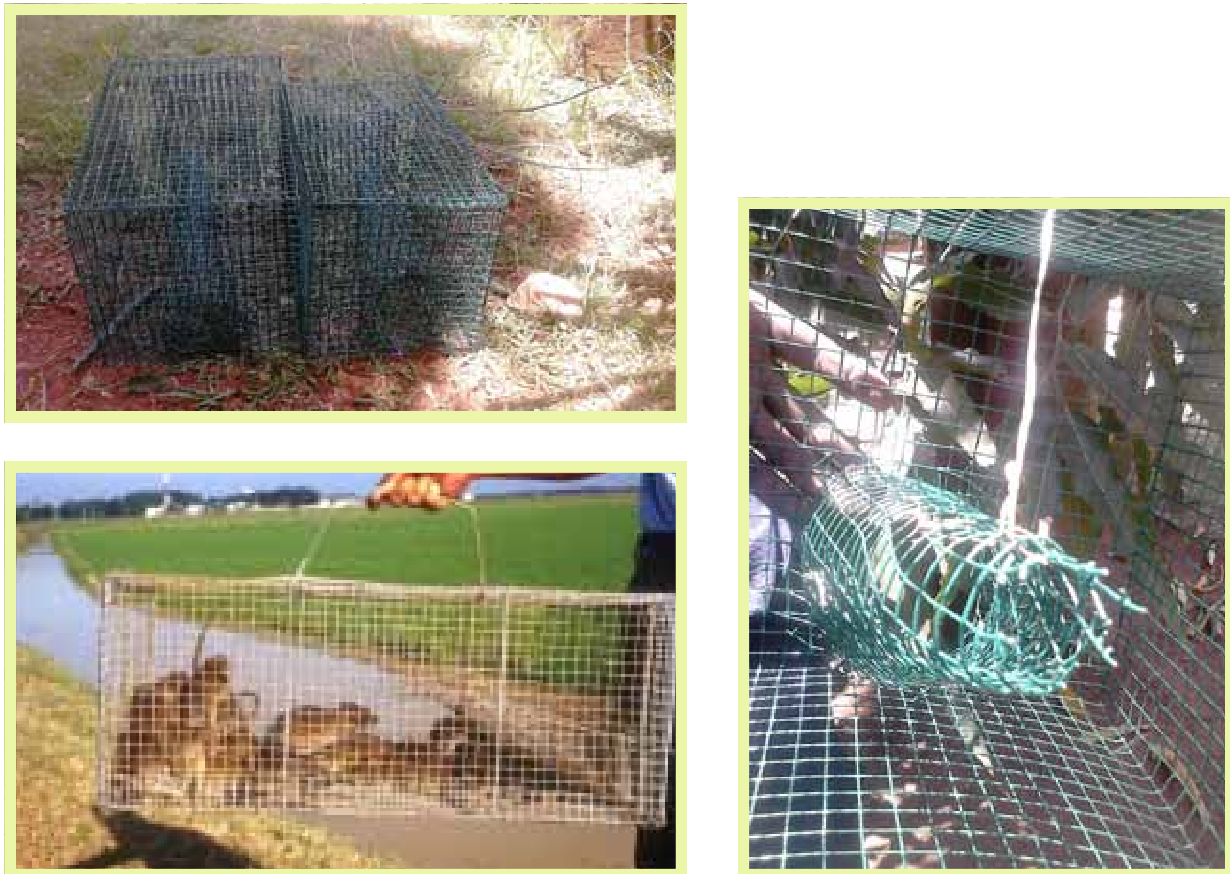
- Okunoonyereza mu Buyindi kulaga nti TBS ey'ebifuba 50 ku 50 esobola okukuuma ekibangirizi kya yiika 10-15 singa esimbiddwa bulungi.
- Ssaawo omutego guno oguziyiza, (TBS) ng'obudde bukyali! Fuba okulaba nga ebula wiiki/ssande nnya okutuuka mu kiseera ekituufu (eky'okusigiramu).

Okukuuma obulungi/okulabirira:

- Yiwayo ebiri mu bumasu buli nkya (emmese enfu ezirekebwa mu bumasu/mitego ziremesa emmese endala okuyingira).
- Kebera ekiveera buli lunaku olabe oba kirina ebituli era oddaabirize oba osseewo emitego/obumasu obulala.
- Ekinnya kikuume nga tekiriimu muddo (emmese zisobola okugweyambisa okulinnya olukomera).
- Bikka obumasu/emitego n'essubi
- Bw'oba tosobodde kukebera ku nkola ya CTBS okumala ennaku, teeka essubi ku miryango gy'obumasu/gy'emitego.



Ekifaananyi 44: Ekifaananyi ekiraga engeri Trap Barrier System gyetekebwatekebwamu mu nnimiro zo omuceere



Ekifaananyi 45: Teeka obutego obukwata emmese enyingi obukolebwa mu butimba. Buno butekebwa munda mwa TBS ezimbiddwa

06. OLUKALALA KWETUPIMIRA ENGERI EKITUNDU GYE KIRWANYISA EMMESE

Engeri y'okulwanyisa emmese	Gye kikolebbwa	Ani akikoze
Engeri ezimu ez'okulwanyisa emmese n'okuyonja enju n'ebyagi		
Kuuma enju n'ebifo ebyetoolodde enju nga biyonjo		
Tangira emmese okuyingira enju n'ebyagi		
Kakasa ng'emmere eterekeddwa bulungi mu nju n'emmere y'empeke ng'eterekeddwa bulungi mu byagi		
Tangira emmese okutuuka ku mmere y'amaka n'emmere y'empeke eterekeddwa mu byagi		
Funa kkapa ezirundibwa mu maka oba sembeza ebisolo ebirya emmese nga emiyaayu, obutulume, ebiwugulu, okugoba/okulwanyisa emmese		
Teeka obumasu/emitego mu bifo bye weerobozza		
Okukuuma obutonde mu nnimiro		
Okukyusa mu biseera by'okulimiramu ebya bannannyini nnimiro abaliraaniganye (mu bibinja) okusobozesa buli mulimu okukolebwa ku mutendera gw'ekitundu (mmanduso) okukalaba ng'emmese zirina emikisa mitono nnyo okutambula okuva ku nnimiro emu okudda ku ndala okufuna emmere n'awokusula.		
• Mukkaanye ku kiseera eky'okusiga		
• Mukkaanye ku kiseera eky'okukoola		
• Mukkaanye ku kiseera eky'okukungula		
• Mukkaanye ku kiseera ky'okwanganga/okulwanyisa emmese		

Engeri y'okulwanyisa emmese	Gye kikolebbwa	Ani akikoze
Saanyawo ebisulo by'emmese ng'obitobya n'amazzi, okwokya omuliro, oba okukabala ennyo ettaka okutuuka ku bisulo byazo. Enkola zino zikozese mu kuteekateeka okwabulijjo ekw'ennimiro		
Kuuma ebinnya nga bitono mu bunene (kitundu kya kifuba) Kakasa nga biyonjo (nga temuli muddo), obuteeyambisibwa mmese nga bifo bya kwekwekamu		
Teeka enjole z'essubi munda mu nnimiro n'okwetooloola ennimiro		
Ssaawo enkola ez'enjawulo okwanganga n'okutta emmese		
Kozesa ebimera ebigoba emmese		
Wagira enkola y'okussaawo ebisolo ebirya emmese okwetooloola ennimiro n'ebyagi (nga weewala okusaanyawo ebisulo byazo)		
Teeka mu nkola enkola ya CTBS		

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