



MAZINGIRA BORA

October 2009 Newsletter

ENGLISH VERSION



www.tist.org

The International Small Group and Tree Planting Program (TIST)

An Environmental, Sustainable Development and Community Forestry Program.



TIST Trainers from Kenya, Uganda, Tanzania in a recent seminar: TIST trains Trainers to help serve you better.

TIST Values: We are Honest. We are Accurate. We are Mutually Accountable.
We are Transparent. We are servant to each other.

Inside this Newsletter

- ✓ News for TIST Kilimo Hai Farmers
- ✓ Poem
- ✓ Why not try 4 "RS" for polythene bags

To submit your Small Groups articles or to advertise in this publication contact;

TIST Kenya-0722-846501.martinweru@tist.org.

Or

- Field Offices Staffs in Narumoro, Lamulia, Ntugi, Kinyaritha, Chugu, Wendo and Kirimara.
- TSE Laikipia West - 0724 - 255 369
- TSE Nyahururu - 0722 - 477 321
- TSE Wiyumiririe - 0724 -365 431
- TSE Timau - 0725 - 527 831
- TSE Imenti North - 0726 - 319 539
- TSE Igembe - 0724 - 625 795
- TSE Tharaka - 0721 - 865 864
- TSE Kirinyaga - 0721 - 719 353
- TSE South Imenti - 0723 - 817 552



Good News For TIST Kilimo hai Farmers!

We have good news for TIST farmers who will be practicing Conservation Farming (kilimo hai) this October - December rainy season.

TIST is working on how to help more farmers practice kilimo hai. Small Groups members who meet some simple requirements will benefit from a voluntary Seed Loan and Reporting Bonus earning CF Program.

CF increase yields.

Many farmers who have practiced kilimo hai in the past have reported and witnessed higher and better yields from CF plots. This has led to increased food security and in some cases, economic independence as surplus yields are sold in local markets.

Conservation farming has been proven to increase soil fertility when well and consistently practiced. Soil erosion is minimized and cost of production lowered. It therefore helps farmers to use little resources (costs) and achieve high results.

How to participate in this TIST CF program.

TIST Small Groups members in active clusters have an opportunity to participate. However, there are core requirements that are required to be met for those who are willing to participate. They include;

1. Abide by TIST Values.
2. Create a real CF plot(s), with proper spacing, hole depth, and pre-planting and post-harvest CF practices.
3. 75% of your Small Group members sign the application form.
4. Attend your Cluster meeting. Read below to find out if your cluster is among the first selected beneficiaries.

TIST will provide a Seed Loan to Small Groups who will meet the above requirements. The

amount of seeds to be loaned will depend on number of holes you have prepared or you plan to prepare (before rains) in a real CF plot.

What are TIST Values and why are they important to adhere in this CF program?

The core TIST Values includes Honesty, Accuracy, Transparency, Mutual Accountability, and Servant hood to each other. These are core pillars of TIST program.

Farmers who are interested with this CF program will be required to give an honest and accurate count of number of holes that they have prepared for CF on a Small Group application form. They will further be required to give accurate and regular reports (2 months after planting and at harvest) about plant health, yields, and their CF practices on reporting forms and to share their experiences at cluster meetings. This will help us share and serve other Small Groups in future with more detailed CF experiences and results among different TIST farmers in different areas and seasons.

TIST farmers are expected to share the information about their CF plots transparently to their own members and other Small Groups to allow exchange of ideas and best practices. It is important that Small Groups help one another in preparing the CF holes and in monitoring of the growth of the crops in CF plots. This makes them servants to one another. Significantly also, they need to hold each other mutually accountable by reminding one another to keep the promises they make and what they agree to do.

What are qualifications of a real CF plot?

- ✦ Clearing your plot out of weed and bushes and not ploughing at all. Since this program is starting late this season, we are relaxing this requirement for Small Groups who promise to not till after harvest.
- ✦ Preparing your holes in an oblong



(rectangle) shape. They should be 15cm wide, 35cm long and 15cm deep. Space holes at least 75cm apart.

- ✦ Taking some manure and good topsoil and mixing it together, or use of compost manure. Fill the hole with the mixture up to 5cm from the surface.
- ✦ When you plant the maize seeds (1 -2 days after rains start), plant 4 seeds in the soil across the hole. If you are planting sorghum, plant 5-6 seeds at each end of the planting hole after a good shower of rain.
- ✦ Cover the seeds with 2.5cm of the rich soil and manure mixture. After this the soil in the hole should be about 2.5cm below the surface of the field.
- ✦ The space at the top of the hole enables water to get to the plants when the rains come.
- ✦ Weed around the holes regularly.

Please remember the things to avoid when practising kilimo hai;

1. Do not till the land. Just clear the weeds and make the holes.
2. Do not burn of the remains on the plot. Leave the residue on the ground so that they make the soil more fertile. Crop remainders can also be used for compost manure.
3. Do not graze cattle in the plot.
4. You don't need to use chemical fertilizer on the Conservation Farming plot. Well-prepared holes with enough compost manure have good soil nutrients, and good spacing means plants are not competing too much for nutrients.)
5. Keep the holes free of weeds by weeding in the holes by hand, and use the weed residue to mulch the soil between holes. This helps maintain soil moisture.

Who will own the yields?

Farmers who participate will own all the yields they harvest.

Other benefits besides yields:

CF can improve yields and lower your costs of labor, fertilizer, and other inputs, but taking part in this program has other benefits as well:

- Two cash bonuses for keeping and providing honest and accurate information about progress of your CF plot.
- Fertile soil in your plots.
- Retained soil moisture in your shamba
- Reduced soil erosion in your shamba.
- Developing and sharing best CF practices with the TIST family.

When do I re-pay the seed loan advance?

The Small Group that receives Seed Loan will be required to repay the loan in two installments. The first half will be paid immediately after the crop harvest (this season) while the remaining balance will be paid at the next harvest. By repaying the loans you provide a fund for other farmers to benefit from the TIST CF Fund. The loans will be made to Small Groups, not to individual members. If the loan is not repaid, the amount of the loan will be deducted from the Group's tree payment. For this season, the Seed Loan and reporting process will be for maize only.

Where do I get seeds advance loan?

At your cluster meeting. However, only the best TIST clusters are going to be considered at this time. We are working with these clusters because of our value on low cost, big results. When clusters meet regularly and have all groups within walking distance, transport costs for training and quantification go down, and sharing of information goes up. Since we all share costs and benefits, this creates the best environment for Small Group successes. These best clusters include;



Field Office	Cluster Name
Kirimaara	Kairuni
	Kianjagi
	Kirindini
	Igwanjau
Wendo	Gikumene
	Kanyakini
	Mpuri
	Naari
Chugu	Kithoka
	Giaki
	Chung'ari
	Gachua
	Kiria
Kinyaritha	Kinyaritha
	Miathene
	Kigucwa
	Kagaene
Ntugi	Mbaaria
	Kibirichia
	Kisima
	Mworoga
Naromoru	Kiamathaga
	Itangini
	Aguthi
	Muriru
	Manyatta
	Kimahuri
	Murungai
Lamuria	Matanya
	Male
	Sweet Waters

Field Office	Cluster Name
Kiripia West TSE	Kwajebi
	Mithuri
	Njorua
	Tandare
Kirinyaga	Njuki-ini
	Ngariama
	Mwea Karumande
Tharaka	Nkondi
	Matakiri
	Kanjoo
	Nthambiro
	Tunyai
Igembe	Maua
	Antobocio
Nyahururu	Raichiri Podo
	Podo
	Salama
	Muruku
Wiyumiririe	Wiyumiririe
Timau	Kiambogo
	Kithithina
	Ngarindare
	Silimon
Imenti North	Limoro
	Muruta
	Mituntu
Imenti South	Kithurine

What if my cluster is not among listed above?

Your cluster too can benefit. You are required to motivate your groups within your clusters to start attending cluster meetings so that we may be able to reach and serve them. If you your cluster has been meeting and is not included in the above list, please contact Martin, 0722 846501.



P O E M

Where are the indigenous trees and shrubs?

By: Eunice Wambui.

Where are the indigenous trees and shrubs?
Where are the beautiful indigenous flowers?
Where are the indigenous fruits and nuts?
Where are the wild animals?
Where are the beautiful birds and insects?
Where is the beauty of God's creation?

Wait a moment, might have an answer,
man has cut down all the indigenous trees and shrubs,
man has poached a large number of the wild animals,
man has sent away a large number of birds and insects,
man has destroyed all this beauty.

Can anyone remember the good old days?
When our forests were fully covered by indigenous trees,
when there was plenty of rainfall,
when there was plenty of water,
when there was plenty of food,
when there was those beautiful wild animals,
when the birds could whistle and make songs.

Can we revive back this beauty again?
Yes, we can bring back this beauty again,
by protecting the water catchment areas,
by protecting our forests,
by planting more indigenous trees and shrubs,
by planting indigenous cover crops to reduce soil erosion,
by using improved stove jikos to sustain our woodlots and forests,
by teaching our children environmental conservation.

Why not try 4 "RS" for polythene bags

By: Mwangi Kimani

Everywhere you look, polythene bags are an eyesore. They litter playing fields, roadsides, rivers and even our own backyards. Even in a landfill, polythene bags may take over one thousand years to degrade. Its hazard are many: cows that ingest poly bags may die; the bags choke drainage systems, leading to damaging floods; the bags create breeding grounds for mosquitoes that spread malaria. Clearly, poly bags cause serious environmental and health problems.

To curb the effects of polythene bags, the formula is simple: apply the rule of "4-Rs":

RE_USE-poly bags we have by taking them along to the store instead of accepting new ones.

RECYCLE-instead of disposing non-degradable poly bags, use them as poly tubes for seedlings and establishing a mobile nursery. You can also finger crochet them into a rope or other useful items. This is a low cost, high results re-use!

REDUCE-their hazards as much as possible by disposing the polythene bags by collecting them and burying them in one pit.

REFUSE-where possible refuse to carry the polythene bags especially when doing the shopping, it's better to carry a basket or reusable bag.

Let's all work to reduce the impact of polythene bags!

Seed collection

Since most of our seedlings in nurseries will be transplanted this rainy season, it is important that we start preparing new nurseries for seedlings that we will transplant in the next rainy season – April – July 2010.

This article will help you understand some of the issues you need to learn in preparation of your individual or group nursery.

1. Which tree species should we grow in our area?

The best ones are those growing naturally in the area. Select ones that meet your needs. TIST particularly encourages fruit and indigenous trees, and others that will remain in the ground for 20 years or more.

2. Are all trees good?

Not necessarily! Some may be difficult to control, be poisonous to your animals or use too much water. Choose ones you know will benefit your area.

3. Do trees produce seeds every year?

Most trees do, but observe your local trees to be sure. Some may only produce good quality seeds every 2-3 years.

4. Which is a good mother tree to collect seeds from?

- Collect seeds from healthy trees that are good seed producers.
- Avoid isolated trees. In this case the seed is likely to have been self-pollinated which leads to poorer quality seeds.
- Avoid unproductive trees and ones with a bad shape.
- It is better to choose a tree in the middle of a healthy group of trees of the same species. Seeds will be higher quality from trees with flowers that are spread out rather than packed closely together.
- The exact type of tree depends on what you want to use the tree for. For example, good trees for timber are straight, few branches and fast growing. Good trees for fodder should



be fast-growing, many branches with multiple stems, and fast growing leaves with the ability to recover after being pruned. Good fruit trees should obviously have good quantities of healthy fruit!

- Try to choose seeds from a tree growing at the same altitude and soil type as where you want to plant.
- Choose a mature tree, not a young one.

5. When do we collect the seeds?

- Learn the time of the year when the seeds are ripe.
- Ask other local people or observe the tree yourself.
- Sometimes seeds are ripe when the fruit or pods change color, become dry, or break easily from the branch.
- Most seeds are ready for collection when they fall from the tree naturally.

6. How do we collect the seeds?

- It is helpful to clear the area around the bottom of the tree first. Many seeds can be collected from the ground. Inspect the seeds for insect damage.
- The tree can be climbed to collect the seeds, but take care!
- Some fruit dry, open and disperse their seeds without falling to the ground. These are hard to collect if the seeds are small. Collect the fruit or pods after they are ripe but before they have split or fallen to the ground. Then dry the fruit or pod in a clean, sheltered place to obtain the seeds.
- Some seeds can be knocked from the tree with a long stick.
- Try putting a sheet under the tree and gently shaking the tree.
- For tall trees a simple tool can be made by attached one end of a pair of shears to a long, strong stick. The other handle can be attached to a rope.
- Note that some seed species cannot be collected from the ground and have to be collected as *wildlings*. These are newly germinated seedlings found growing under mature trees. These can be transplanted to pots in your nursery. This is often the best method for trees that are hard to grow in a nursery or whose seeds are hard to collect.
- All seeds must be removed from their fruit or pods. This can be done by hand, or putting the fruit/pod in the sun and waiting for it to dry and split.

7. How can we tell if the seed is good?

- Firstly look at the seed. Discard ones that are smaller, lighter or a different color than the others. Some may be damaged by insects.
- For some hard-coated species floating in water is a good test. Normally the good seed sinks and the bad seed floats.
- You can do a simple germination test. Take a small counted number of seeds (20-100). Do any pre-treatment needed. Put the seeds on a damp cloth in a bowl. Cover with another fold of the cloth, moisten it thoroughly and put in a warm (not hot) place. Check the seeds daily for signs of germination and keep the cloth moist. When germination begins keep a record of the day and number. The test usually lasts about two weeks depending on the species. Germination of over 50% means you have good seed. Small-seeded species having only 5% germination are still worth keeping.

8. Do we plant or store the seeds?

- Some seeds do not store and should be planted straight away (especially soft, fleshy seeds, fruit tree seeds or seeds with high oil content).
- For seeds with harder coats the basic rule is to keep the seed clean, dry and cool.
- Seeds should be removed from the fruit/cone and dried thoroughly. To dry the seeds put them in the sun for 2-3 days.
- Storing in a paper bag or metal container out of the sun is good (avoid plastic bags as this makes the seed sweat and rot). Make sure the container is clean and air-tight.
- Label the container with the name of the seeds and the collection date.
- Remember that the germination ability of the seeds will decrease with time. If seeds have been stored for too long they may expire.

9. Do all seeds germinate?

The percentage of seeds which germinate varies greatly between species. Some seeds require some form of pre-treatment.

10. What kind of pre-treatment might be needed?

- If the seeds have a very small or thin coat often no treatment will be needed.
- Seeds that have thick coats will need some form of pre-treatment. Some need to have their seed coat cracked with a hammer or a stone. Seeds should be planted immediately after cracking.
- Some seeds just require a small cut in the seed coat to help water infiltrate (nicking). Do not cut the part that was attached to the pod or capsule as this part contains the baby plant.
- Others need to be soaked in mild acidic solutions for 5-20 mins before sowing.
- Another method for hard-coated seeds is to boil them in water for 5-10 minute. Then put the seeds in cool water. This weakens the coat and helps water to enter.
- Some seeds can be soaked in normal water for 12-24 hours.
- All seeds, once pre-treated, need to be planted straight away.

11. How do we plant the seeds?

- Some seeds that germinate readily can be sown directly into the field or into pots. Species that require special conditions to germinate are sown into a seedbed first.
- The time taken for germination depends on the seed type, the temperature, the amount of water available and the age of the seed.
- Generally sowing is done just before the rainy season starts.
- As a general guide, for direct sowing seeds should be planted at a depth two to three times their diameter and should be covered firmly with soil. The soil should then be kept moist.
- Details on seedbeds are to follow.

12. Do seedlings grow only from seeds?

Some tree species produce root suckers (young plants



MAZINGIRA BORA

October 2009 Newsletter

KIMERU VERSION



www.tist.org

The International Small Group and Tree Planting Program (TIST)

An Environmental, Sustainable Development and Community Forestry Program.



Arutani a TIST kuuma Kenya, Tanzania, Uganda maari seminar: TIST niithomithagia arutani aya kaingi kaingi nigetha mahoote gugutungatira wega.

TIST Values: 1. Turi etikua. 2. Turi antu ba uuma bugwa.
3. Turi antu ba weru. 4. Turi atethaniria. 5. Turi amenyaniiri.

Ndene ya gazeti iji

- ✓ Urimi bubwega nibwingiagia maciara!
- ✓ Iriku miti na mathaka ja kienyeji?
- ✓ Niki utigugeria 'R' iria inya kiri mibuko ya karatasi?
- ✓ Kuuthurania mbeu cia kuumithia.

To submit your Small Groups articles or to advertise in this publication contact;

TIST Kenya-0722-846501

martinweru@tist.org.

- Field Offices Staffs in Narumoro, Lamulia, Ntugi, Kinyartha, Chugu, Wendo and Kirimara.
- TSE Laikipia West - 0724 - 255 369
- TSE Nyahururu - 0722 - 477 321
- TSE Wiyumiririe - 0724 -365 431
- TSE Timau - 0725 - 527 831
- TSE Imenti North - 0726 - 319 539
- TSE Igembe - 0724 - 625 795
- TSE Tharaka - 0721 - 865 864
- TSE Kirinyaga - 0721 - 719 353
- TSE South Imenti - 0723 - 817 552



Urimi bubwega nibwingiagia maciara!

Arimi babaingi baria bathithitie urimi bubwega nibaretete ripoti ati nibonete maciara jamaingi na jamega nkuruki kuumania na tumiunda tutu twa Cf. Bubu nibutumite baigua ati irio bitibanyiira na rimwe nibonaga mbeba kuumania na kwendia thokone riria biaingia nkuruki ya biria bakwenda.

Urimi bubwega nibwonetwe kwingiyia unoru bwa munda riria bwathithue bwega na buthingatene, gukamatwa kwa muthetu nikunyiaga na mbeba iria citumagirua kurita ngugi cia munda nicinyiaga. Kwou nibutethagia murimi gutumira mbeba iniini na kwona maketha jamanene

Uria umba gutonya kiri mubango juju jwa CF jwa TIST

Amemba ba ikundi bibinini bia TIST baria bari kiri clusters iria citirimanaga bwega bakoona kanya ga gutonya. Indi ri, kuri na mantu jaria baria bakwenda kuthoma babatiri kuingiyia. Najo nijo jaja;

1. Baingie mawatho jaria TIST ithagirwa iikirite
2. Bathithie urimi bubwega bwa kama, bataranie marinya bwega, uraja bwa kirinyabubwega na mantu jaria jabati kuthithua mbele ya kuanda na nyuma ya guketha
3. Bathatu kiri bana ba amemba ba gikundi kiu bacaine fomu iu ya kuromba mukobo jou
4. Wite mucemano jwa cluster. Thoma aja nthiguru nikenda umenya kethira cluster yaku ni imwe ya iria cikambiria kuewa.

TIST ikaejana mukobo juju jwa mbeu kiri ikundi biria bikaingia mantu jau jari au iguru. Mbeu iria bakaewa ikalingana na marinya jaria winjite kana jaria ubangite kwinja (mbele ya

kuura) muundene jungwa jwa urimi bubwega.

Mawatho jaria TIST ikirite ni jeku na niki tukwendekana tujaingia kiri mubango juju jwa CF?

Mawatho jau ni; turi etikua, turi ba uuma bungwa, turi ba weru, turi amenyariri na turi atethaniriria. Jaja nijo mucingi jumuriku jwa program iji ya TIST. Arimi baria bakwenda gutonya kiti mubango juju bakandeka kuuga irinya nia bing'ana biria beenjite na umma bakiujuriria kiri fomu iji ya kuromba mukobo juju. Bakandeka kinya kuejana ripoti ya mma na ya o igita (mieri iri baanda nairi baketha) yegie afya ya imera, maciara na mantu jaria bakuthithiria munda juju na bojuririe kiri fomu na kinya bagaane kiri micemano ya cluster. Bubu bugatutethia kugaana na gutethia ikundi bingi na ripoti injega nkuruki gatigati ka arimi mwanya nab a guntu mwanya na bathithitie urimi bubwega magita mwanya.

Arimi ba TIST nibabatiri kugaana kwegia miunda yao na amemba bangi ba gikundi kiao na kinya ikundi bingi kenda baejana mathuganio na njira iria njega buru kuthithia mantu jaja. Nibubui ikundi bitethanie kwinja marinya na gutega imera bigikura miundene yao. Nibabati kinya kumenyanirira na njira ya kurikanania mantu jaria baugite na jaria betikiririe bakathithia.

Ni mantu jariku jabati kuthithua nikenda munda jwitwa mundajwa urimi bubwega?

- Guchenga kwa maria muundene na guti kurima kinya anini. Niuntu mubango juju juriambiria juchereri mbura iji, tukanyia ubatu bwa kuingia bubu aki gikundi gikinini kiauga gitithithia uju kairi.
- Kwinja marinya ja rectangle. Warie bwa 15cm, uraja bwa 35cm na kwinama nthi 15cm. kuuma kirinya mwanka kingi 75cm.



- Kujukia mboleo na muthetu jwa iguru na kuungania kana gutumira mboleo ya kuthithia na mati. Ujuria kirinya na juju mwanka gitigare 5cm
- Kunikira mbeu na 2.5cm ya muthetu jumunoru na muunganio juria jwa mboleo. Ntuma ya uju muthetu nijubati kwithirwa juri nthiguru ya kuungi na 2.5cm.
- Kanya kau gatigere iguru nigatethagia ruuji rukinyira imera kwaura
- Rimira akui na kirinya o igita

Itubu menyeera mantu jaria utibati kuthithia riria ugutumira urimi bubwega;

1. Ukarima munda. Chenga maria na winje marinya
2. Ukaithia biria bigutigara muundene. Bitige ku nikenda muthetu junora. Imera no bitumirwe kuthithia mboleo
3. Ukarithia ndiithia muundene juju
4. Guti ubatu bwa kugura fertilizer kiri muunda juju.marinya jathithitue bwega jena mboleo ing'ani nijathongomagia muthetu, gutarania bwega nikumenyagira ati guti gushindanira irio.
5. Ukareka maria jakura marinyene ndene, kuura na njara na ujatumire gukunikira muthetu gatigati a marinya kenda unyiyia kuura kwa ruuji kuuma muthetune

Maciara ni jaau?

Arimi baria bakaanda nibo eene maketha jonthe.

Baita ingi iti maketha;

Urimi bubwega nibwingiagia maketha na kunyiyia mbeca iria utumagira kiri ngugi, fertilizer na bingi. Indi ri gutonya kiri mubango juju gugakua:-

- Bonus ijiri cia mbeca wanankanira ripoti yam ma yegia munda jwaku uria jukwendelea
- Muthetu jumunoru mundane jwaku
- Ruuji kurega kuurakuuma muundene jwaku
- Gukamatwa kwa muthetu kunyie muundene jwaku
- Kuthithia na kugaana njira iria njega buru cia urimi bubwega gatigati ka amemba ba TIST

Iri nkaria mukobo juju jwa mbeu?

Gikundi gikinini kiria kiejagwa mukobo juju gikendeka kuria mukobo juju jairi. Nusu ikariwa orio baketha iketha ria mbele mbura iji na iu ingi iketha riu ringi. Kuriwa kwa mukobo juju gugatuma mbeca cioneke cia gukobithia mumemba ungi wa TIST. Mikobo iji ikaewa ikundi na ti amemba. Mukobo jwarega kuria, mbeca iji ikaritwa kiri mbeca cia miti cia gikundi giki. Ngai iji mukobo juju jwa mbeu na ripoti ikethirwa cirri cia mpempe aki.

Inaa nkomba kuewa mukobo juju jwa mbeu?

Kiri mucemanio jwenu jwa cluster. Indi ni cluster iria njega buru ikaewa ngai iji. Nitukurita ngugi na cluster iji ni untu bwa uria twikirite utumiri bwa nthi, maketha jamanene. Riria cluster itirimanaga a mweri na ikethira ikundi biayo nibiumbaga gwita na magurumucemanione, ngarama cia ngarikiri gwitana na gutara miti nicinyiaga na kugaana umenyo nikwingiagia. Nontu twinthe nitugaanaga mbeca iria igutumirwa na kinya baita, bubu nibuejaga ikundi bibinini kanya ga kwona maketha jamathongi .clusters iria njega buru niji:-



Field Office	Cluster Name
Kirimaara	Kairuni
	Kianjagi
	Kirindini
	Igwanjau
Wendo	Gikumene
	Kanyakini
	Mpuri
	Naari
Chugu	Kithoka
	Giaki
	Chung'ari
	Gachua
	Kiria
Kinyaritha	Kinyaritha
	Miathene
	Kigucwa
	Kagaene
Ntugi	Mbaaria
	Kibirichia
	Kisima
	Mworoga
Naromoru	Kiamathaga
	Itangini
	Aguthi
	Muriru
	Manyatta
	Kimahuri
	Murungai
Lamuria	Matanya
	Male
	Sweet Waters

Field Office	Cluster Name
Likipia West TSE	Kwajebi
	Mithuri
	Njorua
	Tandare
Kirinyaga	Njuki-ini
	Ngariama
	Mwea Karumande
Tharaka	Nkondi
	Matakiri
	Kanjoo
	Nthambiro Tunyai
Igembe	Maua
	Antobocio
Nyahururu	Raichiri Podo
	Podo
	Salama
	Muruku
Wiyumiririe	Wiyumiririe
Timau	Kiambogo
	Kithithina
	Ngarindare
	Silimon
Imenti North	Limoro
	Muruta
	Mituntu
Iment South	Kithurine

Cluster yaku kinya yo ikona baita. Nubati gwikira antu ba ikundi bia cluster yenu wiru bwa gwita micemanione ya cluster nikenda tumba kubakinyira na kubatethia. Kethira cluster yaku nitirimanaga na iti kiri list iu ringira Martin; 0722846501



Iriku miti na mathaka ja kienyeji?
Eunice Wambui

Iku miti na mathaka ja kienyeji?
Jariku maua jamathongi ja kienyeji?
Ciriku nyooo cia kithaka?
Ciriku nyoni na tunyomoo tutunini tututhon-
gi?
Buriku uthongi bwa biria Murungu ombire?

Etera, ndomba kwithirwa mbiji,
Muntu nagitite miti na mathaka jonthe ja
kienyeji,
Muntu noraite nyomoo inyingi cia kithaka,
Muntu nengite nyoni na tunyomoo tutunini
tutwingi,
Muntu nathukitie uthongi bubu bunthe

Kuriwe ukurikana ntuku iria cia mbele in-
thongi?
Riria miitu yetu yojuritwe ni miti ya kie-
nyeji,
Riria kwari na mbura inyingi,
Riria kwari na ruuji rurwingi,
Riria kwari na irio bibingi,
Riria kwari na nyomoo iu cia kithaka
Riria nyoni ciombaga kwina na kuthithia
ndwimbo

Twomba gucokia uthongi bubu kairi?
li, twomba gucokia uthongi bubu kairi,
Gukurukira kumenyeera biumo bia nduui,
Gukurukira kumenyeera miitu yetu,
Gukurukira kuanda miti na mathaka jangi ja
kienyeji,
Gukurukira kuanda imera bia kienyeji bia
gukunikira muthetu
Gukurukira gutumira mariko jaria jatumagira
nkuu inini tumenyeere miitu
Gukurukira kuritana aana betu kumenyeera
mazingira,
li, twomba gucoka kiri ntukucia mbele iria
nthongi

**Niki utikugeria ‘R’ iria inya kiri mi-
buko ya karatasi?**

By: Mwangi Kimani

Naria kunthe ugatega, mibuko ya karatasi
ni murimo kiri metho. Niyakaga ruuko bieni
bia mibira, nteere cia njira, nduui na kinya
bieni bia nja cietu. Kinya ikunikiri mibuko
ya maratasi no ijukie miaka nkuruki ya ngiri
imwe kwora.

Mantu jaria ithithagia jamathuku ni jaja;-
Ng’ombe ikameria nocikue, niingaga naria
nduui ikurukagira na gutuma ruuji rwigara
na ruthukia into, niejaga aria rwagi ruciaraira
na kwou antu baria bari akui bakagwatithua
murimo juu jwa rwagi. Mibuko iji ya maratasi
nitumaga kugia thina kiri mazingira na kiri
afya cia antu.

Kenda tunyiyia thiina iji citumagwa ni mibuko
iji, njira iria mbuthu; itira watho bwa ‘R’ iji
inya;

RE-USE- tumira kairi mibukoiria uri nayo ugita
kugura kairi. Ukaewa imieru.

RE-CYCLE- antu a guta mibuko yonthe iria
itoraga, mitumire kuandira imera na kwou
uthithie nursery ya gwitaitithua. No kinya umi-
tumire kuthithia mukanda kana into bingi biri
bigatumika. Bubu ni utumiri bwa nthi bwina
maciara jamanene.

REDUCE- nyiyia thiina iria mibuko iji itumaga
gukurukira kujothurania na kujathika kir-
inyene kimwe.

REFUSE- rega riria umbikia, gukamata mi-
buko ya maratasi na mono riria ukugura into,
ni kaba gukamata kitheti kana mubuko juria
jugatumika kairi.

Twinthe tuciumieni kunyiyia thina iria itu-
magwa ni utumiri bwa mibuko ya karatasi.

Kuuthurania mbeu cia kuumithia

Nontu imera bietu biria biri nursery bikathamirua muundene ngaine
iji ri, ni untu bwa muhimu mono batwi twambirie kuthuranira nursery
injeru cia imera bia gwikia miundenu ngai iu ingi ya April-July 2010.
Kithomo giki gigatutethia umenye mantu jamwe jaria ukwendeka
kumenyanikenda umba kuthuranira nursery yaku wengwa kana
ya gikundi

1. Ni mbeu cia miti iriku injega cia kuanda?

Mbeu iria njega cia kuanda ni iria ciumaga ciongwa. Taara
mbeu iria ikujuria ubatu bwaku. TIST mono niendaga mbeu
cia matu nda na miti ya kienyeji na cia miti iria ikaraga nthi
miaka mirongo iri kana nkuruki

2. Miti yonthe nimiega?

To mwanka! Imwe iri inya kumimenyeera, ingi ni sumu kiri
ndiithia na ingi nitumagira ruuji rurwingi mono. Thuura miti
iria ukumenya igatethia kwenu.

3. Miti niciaraga mbeu o mwaka?

Miti imingi niu ithithagia, indi tega miti yenu yongwa kenda
withirwa uri meene. Miti imwe iciaraga mbeu injega nyuma
ya miaka iri kana ithatu

4. Muti juria mwega jwa mbeu ni juriku?

- Cwa mbeu kuuma kiri mutine juri na inya juria jumaga
mbeu bwega



- Tigana na muti juria juri junka. Muti ta juju jwithagira juri jwa rutere rumwe runka rwa kiurume kana rou rungi na juti kuraga bwega
 - Tigana na mbeu ya miti iria iticiaraga bwega na mbeu iria itikwonekana ithongi
 - Ni bwega gucua mbeu ciaku gatigati ka miti iria yumite amwe ya muthemba jumwe na iri na inya. Mbeu cia miti iria ria na maua jakunuki bwega iciithagirwa iri cia iguru nkuruki cia maua jaria jakunjari jagwatene
 - Mbeu iria njega iriringana na ugwe gwengwa cia muti juria ukwenda. Kwa mung'uanano, miti imiega ya mbao ithagirwa iri imitamburuku iri na mpang' inkai na ikuraga na mpwi. Miti imiega ya iria ria ndiithia ikuraga na mpwi, mpang'i inyingi, muti jumwe jukethira juri na itina bibingi, mabura jakuraga na mpwi na jukumba kworia ironda wajucaa. Muti jumwega jwa matunda naju nijuria juguciara matunda jamaingi jari na inya
 - Geria gucua mbeu kuma kiri miti iria ibujaga kuria ukwenda kujuanda na muthetune juu
 - Thuura kuma kiri miti imikuru, ti imianake
- 5. Tubwirite gucwa mbeu ri?**
- Thoma umenye ni igita mwaka ririku mbeu ciithagira iri ingundu.
 - Uria antu ba nao kana utegage gwengwa
 - Rimwe mbeu igundaga iria itunda riagaruka rangi kana rioma kana riria rigukuka raisi kuuma rwang'ine
 - Mbeu iria nyingi ciithagirwa iri tayari riria ciagwa ciongwa
- 6. Tubwirite kwoja mbeu atia?**
- Buri na bata kwamba kutheria gitina kia muti mbere. Mbeu iria nyingi womba gucioja rungu nthi. Tega mbeu itikeje kwithira irigi ni tunyomoo
 - Womba gwitia muti ugacwa mbeu indi imeenyeeere
 - Matunda jamwe jakuraga jagatuka na mbeu ikauma ikarega kugwa nthi. Mbeu ta iji iri inya mono kuoja ikethira iri inini. Mbeu taiji itujagwa itunda riagundambeke ya ritiroma rituka mbeu inyaga kana igwa nthi. Ucoke uriumie antu atheru na athithitue bwega kenda wona mbeu
 - Mbeu imwe nitujagwa mutine na miti imiraja
 - Geria gwika kiandaruga gitina kia muti na kujwinainia mpaara
 - Miti iria miraja womba kuthekera muti jumwe jumuraja na juri na inya rutere rumwe rwa makasi na ruteere rungi ukathekera murigi jumuraja
 - Menya mbeu imwe utiumba kwoja nthi indi neka ikuraga ciongwa. Iji ni miti imianake iria ithagirwa iumite rungu rwa miti imikuru. No uthamirie mbeu iji tumibukone twa nursery yaku. Iji niyo njira iria njega ya miti iria utiumba kumithia kiri nursery kana iria mbeu iri inya kwoja
 - Mbeu cionthe no mwanka iritwe kuuma matundene jacio. No urite na njara kana kwanika ugeteera ikooma na gwatuka
- 7. Niatia tumba kumenya kethira mbeu ni injega?**
- Mbele amba utege mbeu. Taara iria iri na rangi iri na mwanya kiri ingi. Imwe ciomba kwithirwa iritwe ni tunyomoo.
 - No wererie mbeu iria ciithagirwa iri na gikonde gikiumu rujine. Mono mono iria njega ikorokera na iria mbii cierere
 - No uthithie na njira imbuthu, taara mbeu inkai (20-100) kethira kuriu ciendaga kuthithirua mbele withithirie. Ciikire gitambaene kiri na ruuji kana mpakurine. Kunikira na gitambaa kingi na wikundie ruuji bwega na wike antu
- ari na murutira. (indi ti mwanki). Tegaga ntuku cionthe ikiambiria kuuma. Gitambaa kithagirwe kiri na ruuji igita rionthe. Wona ciambiria kuuma aki, iika rekondi yacio ni ntuku iriku na ni ing'ana. Mono ikuraga na biumia biiri kulingana na muthemba jwa muri. Ikauma nkuruki ya 50% nikwonania uri na mbeu injega. Mbeu iria niini ikauma 5% kinya cio ni injega
- 8. Twaande kana twike mbeu?**
- Mbeu imwe utibwirite gwika nonga kuanda orio. (mono iria mbinyu, iria ciithagirwa iri fresh, mbeu cia mitunda kana mbeu iria iri maguta jamaingi)
 - Mbeu iria iri gikonde gikiumu ciendaga gwikwa antu atheru na ati na ruuji ari na karuugo gakeega
 - Mbeu no mwanka iritwe itundene na ciumwe bwega. Ciike riuene ntuku ijiri kana ithatu
 - Guciika mubukone kana mukebene jwa ibati bunka juti riuene nibwega (indi ti mubukone jwa nylon tontu nijutumaga mbeu ikathithina na ikoora). Mukebe no mwanka jukunikirwe uria ruugo rutitonya
 - Andika riiwa ria muthemba jwa mbeu na ni tariki ing'ana waciojere
 - Rikana ikanyiya uria ciumba kuuma na wingi. Ugaciika igitariraja igita ria kuuma riomba kuthira
- 9. Mbeu cionthe niciumaga?**
Mbeu iria nyingi ciumaga iringanaga na muthemba jwa muti. Mbeu imwe niciendaga kuthithirua na njira ya mwanya mbele
- 10. Niatia ciendaga kuthithirua mbele?**
- Mbeu ikethirwa iri na gikonde gikiuthu. Gutiu ciendaga kuthithirua.
 - Mbeu iria iri gikonde gikiumu niciendaga kuthithirua mbele. Imwe iciendaga gukonyorwa gikonde kiu na nondo kana iiga. Ibwirite kuandwa orio ciakonyorwaingi ciendaga gwaturwa aniini tu kenda ruuji rwonaa kaanya. Ugakonyora aria mpindi yagwatiri iri kiri kimera kana aria kuri na metho.
 - Ingi ciendaga kurindwa ruji ne rwa acid iti na inya ndaika 5-20
 - Njira ingi ya mbeu iria cirri na gikonde gikiumu ni gwicamukia na ruuji ndagika 5-10. ucoke uciikire rujine rungi ruti na mwanki. Buu ibutumaga gikonde kiaga inya na ruuji rukomba gutonya
 - Mbeu ingi iciendaga kurindwa ruujine rwa kawaida mathaa 12-24
 - Mbeu cionthe ciathithirua uju, ibwirite kuandwa orio
- 11. Tuandaga mbeu atia?**
- Mbeu imwe ciumaga orio nociaandwe muundene orio. Mbeu iria ciendaga kuthithirua kenda ciuma iciendaga ciumithirua nurserine
 - Igiita riria ijukagia ikiuma rikaringana na muthemba jwa muti, murutira, ruuji uria rukwoneka na ukuru bwa mbeu
 - Withire, mbeu ciandagwa mbele ngai itirambiria
 - Njira ya withire ya kubutongerira, mbeu iria ciandagwa orimwe ibwirite kuandwa irinyene riorokeri mainda jairi kana jathatu unene bwa mbeu na gukunikirwa na muthetu bwega. Muthetu jubwirite kwithagirwa juri na ruuji.
- 12. Miti yumaga mbeune aki?**
Mithemba imwe ya miti iri mbeu mirine (miti imianake ikauma mirine ya muti jungwa). Iji no umigite na umiande. Ingi nigitagwa mpang'ine iri na metho jairi kana jathatu. Thuura rwang'i



MAZINGIRA BORA

October 2009 Newsletter

KIKUYU VERSION

www.tist.org



The International Small Group and Tree Planting Program (TIST)

An Environmental, Sustainable Development and Community Forestry Program.



Arutani a TIST kuuma Kenya, Tanzania, Uganda maari seminar: TIST niithomithagia arutani aya kaingi kaingi nigetha mahoote gugutungatira wega.

TIST Values: 1) Turi eehokeku. 2) Ithui turi andu a uria kuri.
3) Turi andu autheri. 4) Turi atungataniri. 5) Turi a and aigiririku.

Maria mari thiini wa gazeti ino

- ✓ Uhoro mwega kuri arimi aa Kilimo Hai iri i
- ✓ Maratathi ma minyore: Njira njega yakumahuthira
- ✓ Ungania wa mbegu
- ✓ Irebeta ria miti ya kiunduire

To submit your Small Groups articles or to advertise in this publication contact;

TIST Kenya-0722-846501

martinweru@tist.org.

- Field Offices Staffs in Narumoro, Lamulia, Ntugi, Kinyartha, Chugu, Wendo and Kirimara.
- TSE Laikipia West - 0724 - 255 369
- TSE Nyahururu - 0722 - 477 321
- TSE Wiyumiririe - 0724 -365 431
- TSE Timau - 0725 - 527 831
- TSE Imenti North - 0726 - 319 539
- TSE Igembe - 0724 - 625 795
- TSE Tharaka - 0721 - 865 864
- TSE Kirinyaga - 0721 - 719 353
- TSE South Imenti - 0723 - 817 552



Uhoru mweka kuri Arimi aa Kilimo hai

Turi na uhoru mweka kuri arimi a TIST aria marikoragwo makihuthira urimi wa Kilimo Hai kimeraini giki kia mbura ya mweri uyu wa October-December .

TIST ni irarora uria ingiteithiriria arimi angi aingi kuhuthira urimi wa Kilimo Hai. A memba a ikundi nini aria mahotete gukinyaniria ikiro ni maguteithika na loan rwa mbegu na Bonus ya mutaratara wa CF

CF kuongerera magetha.

Arimi aiingi aria mahuthirite Kilimo hai ha kabere mari na uira ati Kilimo hai nigikoragwo na magetha mingi. Uu niuhitithitie gukorwo na irio cia kuigana na kwihota ki mbeca nigukorwo magetha ni marendio thoko-ini ciitu.

Kilimo hai ni kionekete kuongerera unoru wa iiri ungingatwo na kuhuthirwo wega. Gukuuu gwa tiiri ni mai ni kunyihagio oundu umwe na mbeca cia urimi. Kwa uguo kguteithia arimi kuhuthira mbeca nini na kugia na magetha maingi.

Uria unghota kuigira mutaratara-ini uyu wa TIST CF

Amemba a Ikudi nini cia TIST no mahote kuin-gira mutaratara-ini uyu. Ona kuri ouguo nikuri na ikiro iria wagiriirwo kuhitukia na nicio ici;

1. Rumirira mitugo ya TIST
2. Thondeka tumigunda twa CF turi na utiganu mweka, uriku na na mehaririria ma mbere na thutha wa kuhanda.
3. Gicunji gia 75% kia ikundi ni mekagira sign marua ma application.
4. Rumirira micamano ya ikundi. Thoma haha muhuro umenye ka na gikundi giaki nigigukorwo gi kiambere kugunika.

Tist ni ikuheana loan rwa mbegu kuri ikundi iria igukinyiria ikiro. Muigana wa loan ukuringana na marima maria uhariirie kana ubangite kuhariria(mbere ya mbura) mugundaini waTIST.

Mitugo ya TIST ni iriku na nikii yagiriirwo ni kurumirirwo.

Mitugo ya o muhaka ya TIST ni; wi-hokeku, uigananu, uigiririku, Ici nicio itugi cia mutaratara wa TIST.

Arimi aria magukenio ni urimi uyu magiriirwo ni kuheana namba iria ya ma na yakwihokwo ya marima maria mahaririirio niundu wa mutaratara wa CF marua-ini ma application ma gikundi. Na maheane report thutha wa mieri2 kuringana na mukurire wa miti, magetha,nana mibango ya reports na kuheana uira micamanoini ya ikundi nini. Uguo niugututeithia kuhota guteithia ikundi ingi kuma miena na imera ingi.

Arimi a TIST magiriirwo kuheana uira mutheru kuri aria angi iguru rigii migunda yao nigetha makuranie meciria na mirimire miega. Nihari bata ikundi iteithanie kuhariria marima ma CF na kurora mikurire ya mimera thiini wa migunda ya CF. uguo kumahotithia gutungatanira na kurorana na kurikiranania uria marikaniire magwika.

Ikuro cia mugunda wa CF ni iriku

- ✦ Gutheria mahuti no ti kurima. Tondumutaratara uyu urambiriria ucereirwo kimera giki, tutikuria muno gikiro giki kuri arimi aria magwitikira kaga kurima thutha wa magetha.
- ✦ Kuhariria marima ma kona inya. Mari na warii wa 15cm kwa 35cm na uriku wa 15cm. na utiganu wa 75cm.
- ✦ Kuoya thumu na tiri wa iguru na gutu-



kana kana thumu wa mahuti. Ihuria irima nginya 5cm kuma thi.

- ✦ Hindi iria wahanda mbembe(matuku 1-3 thutha wa mbura kwambiriria), handa mbembe 4 tiriini konaini. Angikorwo ni muhia, handa mbegu 5-6 o konaini cia irima thutha wa mbura guitika.
- ✦ Humbira mbegu na tiri munoru na mutukano wa thumu, thutha wa uguo tiri irima0ini wagiriirwo gukorwo uri2.5cm kuma iguru wa irima.
- ✦ Muanya ucio utigagio niguu kuhitithia mimeru gukinyirwo ni mai.
- ✦ Rimagira irimaini ohingo ohongo.

Ririkana maundu maria utagiriirwo gwika hari Kilimo hai.

1. Ndukarime mugunda. Ehutia mahuti na wenje marima.
2. Ndugacinire mahuti mugunda-ini, tiga mahuti mugunda-ini niguu mongerere tiri hinya, na no uhuthiri magetha maria magutigara guthondeka thumu.
3. Ndukarekie mahiu mugunda-ini
4. Ndurabatara gwikira fertilizer mugunda-ini, mugunda muharirie wega na thumu na matigithukanitio wega niuiganite.
5. Ndukareke irima rimere ria, tumira moko kumunya ria ucoke ware mahuti macio irima-ini niundu wa kuiga ugunyu.

Magetha ni mau?

Arimi aria mararima mugunda nio ene magetha.

Maciaro mangi tiga magetha.

CF no yongerere magetha na kunyihia ma-

huthiro ma wira na fertilizer na maundu mangi maingi. No kunyitanira mutarataraini uyu kuri na maciaro mangi a hamwe.

- ✓ Bonathi igiri cia mbeca niundu wa kuheana mohoro maigiririku na ma ma iguru rigii mugunda wa CF
- ✓ Mugunda waku kugia na unoru.
- ✓ Mugunda waku kugia na ugunyu.
- ✓ Kunyihia gukuo gwa tiri ni mai mugunda-ini.
- ✓ Guthomithania gatagati ka nyumba nene ya TIST.

Ngariha loan rwakwa ri?

Ikundi iria ciamukira loan ciagiriirwo gucokia tna icunji igiri, gichunji kiambere kiagiriirwo kurihwo thutha wa kimera giki nakio gicunji gia keru kirihwo thutha wa magetha mwa mwaka uyu ungi. Wariha niwateithia andu angu kugunika na kigina kia TIST CF. ngombo iriheanagwo kuri ikundi no ti mindu kiumbe. Ngombo ingiaga kurihwo, mbeca iritinagio kuma kuri marihi ma muti ma gikunndi kimera giki, ngombo ya mbegu niya urimi wa mbembe tu.

Nguoya loan ya mbegu ku?

Mucamanoini wa kundi nini. Ana gutui-ka no ikundi iria ciikaga wega ikuheo rita riri. Turaruta wira na ikundi ici niundu wa mutugo witu wa meca nini na magetha maingi. Riria ikundi nini iracemania na ikundi igakorwo handu mangithii na maguru mbeca cia thabari cia githomo ni inyihaga na kuheana mohoro gukongerereka. Nigukorwo ithuothetugayanaga galama na maciaro, kwa uguo guthondeka mahinda mega ma ikundi nini kugacira. Ikundi iria ciikite wega ni;



Field Office	Cluster Name
Kirimaara	Kairuni
	Kianjagi
	Kirindini
	Igwanjau
Wendo	Gikumene
	Kanyakini
	Mpuri
	Naari
Chugu	Kithoka
	Giaki
	Chung'ari
	Gachua
	Kiria
Kinyaritha	Kinyaritha
	Miathene
	Kigucwa
	Kagaene
Ntugi	Mbaaria
	Kibirichia
	Kisima
	Mworoga
Naromoru	Kiamathaga
	Itangini
	Aguthi
	Muriru
	Manyatta
	Kimahuri
	Murungai
Lamuria	Matanya
	Male
	Sweet Waters

Field Office	Cluster Name
Likipia West TSE	Kwajebi
	Mithuri
	Njorua
	Tandare
Kirinyaga	Njuki-ini
	Ngariama
	Mwea Karumande
Tharaka	Nkondi
	Matakiri
	Kanjoo
	Nthambiro Tunyai
Igembe	Maua
	Antobocio
Nyahururu	Raichiri Podo
	Podo
	Salama
	Muruku
Wiyumiririe	Wiyumiririe
Timau	Kiambogo
	Kithithina
	Ngarindare
	Silimon
Imenti North	Limoro
	Muruta
	Mituntu
Iment South	Kithurine

Angikorwo Cluster yaku ti imwe ya ici iri haha iuguru, no uteithike?

Gikundi giaku no giteithike. Wagiriirwo guthomithia ikundi nini thiini wagikundi giaku guthiaga micemanioini ya Cluster niguu tuhote kumakinyira na kumatungatira. Angikorwo Cluster yanyu niikoragwo na micemanio na ti nyandike hau iguru, araniria na Martin 0722846501.



Iri ku miti ya ki-nduire

Mwandiki: Eunice Wambui

Iriku miti ya ki-nduire?
Mari ha mahua maria mathaka ma ki-nduire?
Mari ku matunda ma ki-nduire na nathi?
Cirri ku nyamu cia githaka
Cirri ku nyoni iria thaka na tutambi?
Uri ku uthaka wa ki-imerera?

Tareke hanini, kwahoteka ndi na macokio,
Andu nimatemete miti ya ki-nduire na ithaka,
Mundu niahitite nyamu nyingi cia githaka,
Mundu niaingatite nyoni na tutambi,
Mundu niathukitie uthaka uyu wothe.

Kuri mundu ungiririkana matuku maria mega ma tene?
Hindi iria mititu iitu yaihurite miti ya kionduire,
Hini iria kwari na mbura ya kuigana,
Hindi iria kwari na maai ma kuigana,
Hindi iria kwari na irio cia kuigana,
Hindi iria kwari na nyamu thaka cia githaka,
Hindi iria nyoni cia huhaga miruri na kuina turuimbo.

No tuhote gucokia uthaka ucio ringi lini, no yucokie uthaka ucio ringi,
Tungigitira kuria maai maumaga,
Tungigitira mititu iitu,
Tungihanda miti miingi ya ki-nduire na ithaka
Tungihanda mimera ya ki-nduire kugiririria tiri gukuo ni maai,
Tungihuthira riiko ritarahuthira hinya muingi kwa uguo kunyihia utumiri wa ngu,
Tungithomithia ciana ciitu kugitira maria maturigiciirie,
lini, no tuhote gucokia matuku macio mega

Maratathi ma minyore: Njira njega yakumahuthira

Mwandiki: Mwangi Kimani

O kundu o guothe wa roar, no maratathi ma naironi, mathukagia iharo-ini citu, mikiraini ya bara, njui na miciini iitu na migunda. Maratathi nomaikare miaka miingi mangigathira.

Mahiu mangiria maratathi no makue, maratathi ni mahingaga miberethi ya mai kwa uguo kugia na miyuro ya mai; nimatumaga rwagi ruciarane ruria rurehaga murimu wa Malaria. Na njira nguhi nimathukagia maria maturigiciirie na ugima wa miri witu.

Kuhurana na thina wa maratathi ma naironi, huthira njira ici cia "4RS"

RE_USE(tumira ringi) maratathi maria uri namo ,ndugetiokire kuheo mangi thoko-ini

RECYCLE-(huthira na njira ingi) handuha gute huthira kuhandira miti na nathari ya guthamio.

REDUCE-(nyihanyihia)ugwati wamo ota uria kwahoteteka na kumathika irima-ini rimwe

REFUSE-(rega) gukua maratathi hindi iria uragura indo ciaku, huthira gikabu.

Ithuothe tunyitane tunyihanyihimaugwati ma maratathi.

Kungania mbeu cia kuumithia

Nontu imera bietu biria biri nursery bikathamirua muundene ngaine iji ri,ni untu bwa muhimu mono batwi twambirie kuthuranira nursery injeru cia imera bia gwikia miundenu ngai iu ingi ya April-July 2010.

Kithomo giki gigatuthia umenye mantu jamwe jaria ukwendeka kumenyanikenda umba kuthuranira nursery yaku wengwa kana ya gikundi.

- Ni mbeu cia miti iriku injega cia kuanda?**
Mbeu iria njega cia kuanda ni iria ciomaga ciongwa. Taara mbeu iria ikujuria ubatu bwaku.TIST mono niendaga mbeu cia matu nda na miti ya kienyeji na cia miti iria ikaraga nthi miaka mirongo iri kana nkuruki.
- Miti yonthe nimiega?**
To mwanka! Imwe iri inya kumimenyeera, ingi ni sumu kiri ndiithia na ingi nitumagira ruuji rurwingi mono. Thuura miti iria ukumenya igatuthia kwenu.

3. Miti niciaraga mbeu o mwaka?

Miti imingi niu ithithagia, indi tega miti yenu yongwa kenda withirwa uri meene. Miti imwe iciaraga mbeu injega nyuma ya miaka iri kana ithatu.

4. Muti juria mwega jwa mbeu ni juriku?

- Cwa mbeu kuuma kiri mutine juri na inya juria jumaga mbeu bwega.
- Tigana na muti juria juri junka. Muti ta juju jwithagira juri jwa rutere rumwe runka rwa kiurume kana rou rungi na juti kuraga bwega.
- Tigana na mbeu ya miti iria iticiaraga bwega na mbeu iria itikwonekana ithongi.
- Ni bwega gucua mbeu ciaku gatigati ka miti iria yumite amwe ya muthemba jumwe na iri na inya. Mbeu cia miti iria ria na maua jakunuki bwega iciithagirwa iri cia iguru nkuruki cia maua jaria jakunjari jagwatene.



- Mbeu iria njega iriringana na ugwe gwengwa cia muti juria ukwenda. Kwa mung'uanano, miti imiega ya mbaos ithagirwa iri imitamuruku iri na mpang'inkai na ikuraga na mpwi. Miti imiega ya iria riria ndiithia ikuraga na mpwi, mpang'inyingi, muti jumwe jukethira juri na itina bibingi, mabura jakuraga na mpwi na jukumba kworia ironda wajucaa. Muti jumwega jwa matunda naju nijuria juguciara matunda jamaingi jari na inya.
- Geria gucua mbeu kuma kiri miti iria ibujaga kuria ukwenda kuuanda na muthetune juu.
- Thuura kuma kiri miti imikuru, ti imianake.

5. Tubwirite gucwa mbeu ri?

- Thoma umenye ni igita mwaka ririku mbeu ciithagira iri ingundu.
- Uria antu ba nao kana utegage gwengwa.
- Rimwe mbeu igundaga riria itunda riagaruka rangi kana rioma kana riria rigukuka raisi kuuma rwang'ine.
- Mbeu iria nyingi ciithagirwa iri tayari riria ciagwa ciongwa.

6. Tubwirite kwoja mbeu atia?

- Buri na bata kwamba kutheria gitina kia muti mbere. Mbeu iria nyingi womba gucioja rungu nthi. Tega mbeu itikeje kwithira irigi ni tunyomoo.
- Womba gwitia muti ugacwa mbeu indi imeenyeere.
- Matunda jamwe jakuraga jagatuka na mbeu ikauma ikarega kugwa nthi. Mbeu ta iji iri inya mono kwoja ikethira iri inini. Mbeu taiji itujagwa itunda riagundambebe ya ritiroma rituka mbeu inyaga kana igwa nthi. Ucoke uriumie antu atheru na athithitue bwega kenda wona mbeu.
- Mbeu imwe nitujagwa mutine na miti imiraja
- Geria gwika kiandaruga gitina kia muti na kujwinainia mpaara.
- Miti iria miraja womba kuthekera muti jumwe jumuraja na juri na inya rutere rumwe rwa makasi na ruteere rungi ukathekera murigi jumuraja.
- Menya mbeu imwe utiumba kwoja nthi indi neka ikuraga ciongwa. Iji ni miti imianake iria ithagirwa iumite rungu rwa miti imikuru. No uthamirie mbeu iji tumibukone twa nursery yaku. Iji niyo njira iria njega ya miti iria utiumba kuumithia kiri nursery kana iria mbeu iri inya kwoja.
- Mbeu cionthe no mwanka iritwe kuuma matundene jacio. No urite na njara kana kwanika ugeteera ikooma na gwatuka.

7. Niatia tumba kumenya kethira mbeu ni injega?

- Mbele amba utege mbeu. Taara iria iri na rangi iri na mwanya kiri ingi. Imwe ciomba kwithirwa iritwe ni tunyomoo.
- No wererie mbeu iria ciithagirwa iri na gikonde gikiumu rujine. Mono mono iria njega ikorokera na iria mbii cierere.
- No uthithie na njira imbuthu, taara mbeu inkai (20-100) kethira kuriu ciendaga kuthithirua mbele withithirie. Ciikire gitambaene kiri na ruuji kana mpakurine. Kunikira na gitambaa kingi na wikundie ruuji bwega na wike antu ari na murutira. (indi ti mwanki). Tegaga ntuku cionthe ikiambiria kuuma. Gitambaa kithagirwe

kiri na ruuji igita rionthe. Wona ciambiria kuuma aki, iika rekondi yacio ni ntuku iriku na ni ing'ana. Mono ikuraga na biomia biiri kulingana na muthemba jwa muri. Ikauma nkuruki ya 50% nikwonania uri na mbeu injega. Mbeu iria niini ikauma 5% kinya cio ni injega.

8. Twaande kana twike mbeu?

- Mbeu imwe utibwirite gwika nonga kuanda orio. (mono iria mbinyu, iria ciithagirwa iri fresh, mbeu cia mitunda kana mbeu iria iri maguta jamaingi).
- Mbeu iria iri gikonde gikiumu ciendaga gwikwa antu atheru na ati na ruuji ari na karuugo gakeega
- Mbeu no mwanka iritwe itundene na ciumwe bwega. Ciike riuene ntuku iiri kana ithatu.
- Guciika mubukone kana mukebene jwa ibati bunka juti riuene nibwega (indi ti mubukone jwa nylon tontu nijutumaga mbeu ikathithina na ikoora). Mukebe no mwanka jukunikirwe uria ruugo rutitonya.
- Andika riiwa riria muthemba jwa mbeu na ni tariki ing'ana waciojere.
- Rikana ikanyiya uria ciumba kuuma na wingi. Uga-ciika igitariraja igita riria kuuma riomba kuthira.

9. Mbeu cionthe niciumaga?

Mbeu iria nyingi ciumaga iringanaga na muthemba jwa muti. Mbeu imwe niciendaga kuthithirua na njira ya mwanya mbele.

10. Niatia ciendaga kuthithirua mbele?

- Mbeu ikethirwa iri na gikonde gikiuthu. Gutiu ciendaga kuthithirua.
- Mbeu iria iri gikonde gikiumu niciendaga kuthithirua mbele. Imwe iciendaga gukonyorwa gikonde kiu na nondo kana iiga. Ibwirite kuandwa orio ciakonyorwa- waingi ciendaga gwaturwa aniini tu kenda ruuji rwona kaanya. Ugakonyora aria mpindi yagwatiri iri kiri kimera kana aria kuri na metho.
- Ingi ciendaga kurindwa ruji ne rwa acid iti na inya ndaika 5-20.
- Njira ingi ya mbeu iria cirri na gikonde gikiumu ni gwicamukia na ruuji ndagika 5-10. ucoke uciikire rujine rungi ruti na mwanki. Buu ibutumaga gikonde kiaga inya na ruuji rukomba gutonya
- Mbeu ingi iciendaga kurindwa ruujine rwa kawaida mathaa 12-24.
- Mbeu cionthe ciathithirua uju, ibwirite kuandwa orio.

11. Tuandaga mbeu atia?

- Mbeu imwe ciumaga orio nociaandwe muundene orio. Mbeu iria ciendaga kuthithirua kenda cuma iciendaga ciumithirua nurserine
- Igiita riria ijukagia ikuma rikaringana na muthemba jwa muti, murutira, ruuji uria rukwoneka na ukuru bwa mbeu.
- Withire, mbeu ciandagwa mbele ngai itirambiria
- Njira ya withire ya kubutongerira, mbeu iria ciandagwa orimwe ibwirite kuandwa irinyene riorokeri mainda jairi kana jathatu unene bwa mbeu na gukunikirwa na muthetu bwega. Muthetu jubwirite kwithagirwa juri na ruuji..

12. Miti yumaga mbeune aki?