The Organic Farmer

The magazine for sustainable agriculture in Kenya

BIOVISION

Nr. 32 January 2008

Kenya's organic market is growing

There are a few certified organic farmers. And they do not grow products that the consumers want.

The Organic Farmer

The market for organic food products is growing faster than the supply of organic produce from farmers. The increasing demand for organic products is a result of increased awareness among Kenya's middle and upper class consumers on the health benefits of organic foods. The demand is also high among the expatriate community. But local farmers are not able to supply most of the exotic fruits and vegetables that this market segment requires.

Education of farmers important

Consumption of organic food is still low in lower income groups due to lack of awareness of its health benefits. Most players in this field are of the view that there is need for a stronger creation of awareness among this group to help increase the consumption and expand the market for organic food products. Su Kahumbu, a pioneer organic farmer who now runs two marketing outlets in Upmarket Gigiri and the newly opened Nakumatt Westgate in Westlands, Nairobi, says the few certified organic farmers in the country are not able to supply organic food products that the consumers want: "I think we need to do more training and awareness creation so that farmers are sensitised on what to grow and how to grow it."

Demand for organic products in the export market outstrips local supply by far as John Kang'ethe, the International Markets Development advisor of KOAN (Kenya Organic Agricultural Network) emphasizes. International buyers have expressed interest in buying local organic coffee and tea. Kang'ethe says that during the BIOFAC exposition in Germany in February 2006, an international company was willing to buy 10 tonnes of organic coffee every month from Kenya, but there was not a single company or co-operative society producing organic coffee. *See page 8*

More consumers are going for organic foods. All organic food should be certified and labelled clearly for easy identification. (Photo TOF)

Tick control a big problem to farmers

Ticks cause great losses to farmers. These could be avoided if farmers acted in time.

The Organic Farmer

According to a report by the UK's Department for International Development (DFID), farmers in East and Central Africa lose more than 300 million dollars (Ksh195 billion) a year to East Coast Fever (ECF), one of the diseases transmitted by ticks. There are 70 species of ticks in the region. Ticks are one of the most difficult pests to eradicate due their ability to develop resistance to the drugs used to control them (acaricides).

The privatisation of veterinary services in Kenya two decades ago, affected tick control in most livestock keeping areas. All the personnel trained in tick control were sent home leaving the management of cattle dips in the hands of untrained farmers. Most of the cattle dips were abandoned while those that are still operational use too diluted chemicals to which ticks developed resistance. As a result, most farmers have stopped taking their animals to the cattle dips altogether. Most farmers never take tick control seriously until they lose their prized cows to tick-bourne diseases. It costs Ksh. 4,000 to treat an animal suffering from ECF and other tick related complications. There are alternative tick control measures such as plant extracts. *See page 3*

Dear farmers,

After the hectic electioneering period, life is returning to normal in the countryside. There is a lot of hope that our new members of parliament will be good advocates of the interests of farmers in the new parliament. Farmers expect that the MPs will be able to lobby and help improve the infrastructure in all the farming areas in the country, schools, roads and electricity. But as we have told you repeatedly since we started this newspaper, farmers should not rely too much on words alone. You should trust on your own skills, power and creativity to improve your lot.

As you can see in this issue, we have slightly changed the layout of our magazine. This does not mean that we do not have much to say in the editorial column; however, due to the size of our newspaper, we sometimes lack adequate space for more important information. Our aim is to improve the content of the newspaper. We are going to do this in our inside pages as well in order to give you a variety of articles. We should never forget the sentence "Knowledge is power". Only well informed farmers are able to improve their livelihood.

Do you need *TOF*?

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www.organicfarmermagazine.org

MY OPINION

After tending our crops for the whole year, it is time for harvesting. This is one period in the year when every farmer has some money in the pocket. We should not forget the task ahead. We will need to pay fees, buy inputs and settle some of the outstanding debts. With proper planning, one might even be able to start that new project they have been thinking about or even open a savings account in the local SACCO or bank. This might turn out to be the foundation of a prosperous future. Let us not waste our hard-earned money on unproductive ventures.

Paul Mokaya, Farmer Nyamira

The Organic Farmer

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Animals like Boma Rhodes grass

Boma Rhodes grass is easy to grow and ensures a consistently high milk production if well managed.

The Organic Farmer

In Kenya, Rhodes grasses are important pasture grasses. They produce large quantities of feed for grazing livestock, making hay or silage. All varieties of Rhodes grass are palatable and are readily eaten by livestock, goats and camels, even at coarser stages when the quality of the feed is low. A good establishment of these pasture grasses ensures consistent high milk production all year round, especially when the pasture is well-managed. Pasture can be established anywhere as long as there is adequate water and good certified seed for planting.

The most common Rhodes grass in Kenya is Boma Rhodes. Farmers can establish good Boma Rhodes pasture if they adhere to the following guidelines in its management:

Land preparation: Plough the land towards the end of the rainy season; this should be done on previously cropped land. Plough again during the dry season and harrow to control the weeds. On virgin land, it advisable to plough 3 times and harrow twice in order to obtain a good seed bed.

Sowing: Early sowing at the onset of the rainy season is important. In areas with two rainy seasons, sowing is prefereably done during the short rains in order to eliminate annual weeds. Most farmers practise direct sowing, where the Boma Rhodes grass is planted alone. Then the seed is sown on a fine, weed-free seedbed. It is always advisable to plant pasture on land which has been cropped for two or more years. Seeds should be sown close to the surface in order to get in contact with moist soil so as to promote quick germination. Grass seeds should not be buried deeply into the soil as they may not be strong enough to push through the heavy topsoil. The seeds can either be broadcast or drilled in rows of 20-30 cm apart. Mix the seeds with sawdust, rough sand or phosphate fertilizer for even distribution. If mixed with fertilizer, planting should be done immediately to prevent scorching of the seed by the fertilizer. Small-scale farmers may practise handsowing in smaller acreages where close supervision is possible. For large-scale farms, use of wheat planters is recommended for effective sowing. Immediately after sowing, the seedbed should be compacted to enhance germination by improving contact with the soil. This can be done by use of tree branches or even trampling by feet on small plots.

Fertilizer application: Use farmyard manure at the rate of 10 tonnes/ha (about 5 tonnes an acre). The manure should be broadcast and harrowed in before planting. Only well-composted manure should be used.

Weed control: Weeds can reduce the productivity of the sown pastures particularly during the year of establishment. Control weeds as much as possible by hand weeding or slashing, hand pulling and mowing.

Grazing management: During the year of establishment, Boma Rhodes grass reaches the flowering stage 3 to 4 months after planting. At this stage, the grass is not firmly anchored into the soil. It is therefore advisable to cut the grass and make hay rather than graze the pastures to prevent the animals from pulling out the young shouts. Graze or cut the grass at intervals of 4 to 6 weeks leaving the stubble height at 5 cm.

Feeding: One cow needs 1 to 2 acres of Boma Rhodes grass per year in areas with 900 mm rainfall. In Zero-grazing an average-sized dairy cow requires 80 to 100 kg (about 3 gunny bags) of freshly cut grass per day.

Sources: Various KARI publications ■

Fodder grasses

December 07: Napier grass
January 08: Boma grass
February 08: Lucerne

Alternative methods of tick control

Natural tick control techniques are not only cheap for the farmer, they also minimize damage to the environment.

William Ayako*

Ticks cause direct and indirect losses to farmers. They transmit a large number of parasites that are responsible for dangerous diseases such as East Coast Fever (ECF), Anaplasmosis, Babeosis, Heart water, etc. The most common methods of tick control consist of dipping or spraying cattle with chemicals (acaricides) or through grazing management. However, latest research shows that farmers can spend less by using natural methods to control ticks.

In a study conducted in Bahati division of Nakuru District it was found that a number of herbs effectively control ticks and tick-borne diseases in cattle. Plant extracts from a number of plants mentioned by farmers and herbalists during a survey, were collected and tested. Preliminary tests were carried out to verify the plant's efficiency in controlling ticks at rates recommended by farmers and herbalists. Preparations from pyrethrum flowers, Tephrosia species, *Tagetes minuta*, *Datura stramonium* and a concoction from a herbalist which included a mixture of 5 plants, 3 active against ticks, 1 preservative and 1 stabilizer, were tested.

Most dips in the country are abandoned after the government withdrew support. (TOF)

Different plant extracts used

Pyrethrum flowers obtained from farmers were sun-dried, ground and sieved; about 250 g were mixed in ten litres of warm water and left standing in a dark room for 12 hours. The suspension was then passed through a strainer to remove coarse particles; 5 litres of the suspension was then sprayed on the entire animal's body using a knapsack sprayer. In the same way, *Tephrosia*, *Datura stramonium* and *Tagetes minuta* leaves were prepared as directed by the herbalist; 250 g of fresh leaves were pounded and boiled in 500 ml of water for 30 minutes. The greenish yellow mixture was then separated from the leaf particles by sieving through a tea strainer. Five litres of the concoction was sprayed on the entire animal body. Six ml of the concoction from Waweru, the farmer/herbalist, was added to 18 litres of water and the mixture stirred for 2 minutes. Three litres of the mixture was applied on the entire body of the animal.

The trials were conducted on Sahiwal bulls. They are naturally infested with ticks. The results revealed that the animals sprayed with pyrethrum had 83% reduction in tick infestation while those sprayed with Tephrosia had 75% reduction in ticks. Those sprayed with *Datura stramonium* had about 5% reduction while those sprayed with Tagetes minuta had 55% reduction. The concoction from Waweru achieved 88% reduction in tick infestation.

More tests necessary

Three bulls out of five from the control group and one from the *Datura stramonium* group contracted East Coast Fever (ECF) and all recovered after treatment with Butalex (Cooper Kenya). One bull from the pyrethrum flowers group and two from the *Tagetes minuta* group were treated with tetracycline for Anaplasmosis and Babeousis. The study concluded that some plants tested showed significant effect against ticks. Since they are readily available and affordable, farmers should be encouraged to use them together with other tick control techniques. However, the study recommended further trials to verify the efficacy of the tested botanical drugs and their implication on the environment if they were to be adopted by the farmers. For example, *Datura stramonium* is very toxic to all mammals.

Apart from the plant extracts named in the above study, there are other plants that have proved to be effective against ticks, among them *Gynandropis gynandra* (Kikuyu: *thageti*; Kamba: *mukakai*; Kisii: *chisaga*; Luo: *akeo*), *Ocimum Suave* (Luo: *Bwar*, Kikuyu: *mukandu*; Taita: *murunde*; Kamba: mutaa; Masai: *Sunoni*; Pokot: *chemwoken*), as well as neem (*mwarubaini*) which repels ticks.

** Dr. William Ayacko is a livestock scientist at KARI Naivasha Animal Husbandry Centre*

Some tips on tick control

- Ticks easily develop resistance to most acaricides used by farmers; therefore farmers should frequently change chemicals to control ticks. Acaricides made from synthetic pyrethroids have been found to be more effective in tick control.
- Burning pastures in order to kill ticks does not work because ticks often hide below the soil and reappear when the pastures start growing.
- Ticks can survive without food for upto two years. Farmers should dip their cattle regularly to ensure that they are not infested since the ticks are always present in the pasture.
- Farmers should not graze their animals on the roadsides where they are likely to get ticks. Fodder harvested on the roadsides also habours ticks and should be avoided.
- Zero-grazing animals have less exposure to ticks; thus it should be practised in areas where tick problems are serious.
- Dipping of animals is more effective in tick control than spraying as all the parts of the animal's body are evenly covered by the acaricide.
- Even without causing diseases, ticks can degrade an animal's health; their bites can cause wounds on the skin and reduce the quality of the hide; they can also inject poisons into the animal causing complications and interfering with the animal's normal growth. (*TOF*)

Plant extracts are readily available to farmers, but they have to be handled with care.

Six golden rules for a better soil

One of the most important tasks in sustainable agricultural production is to increase the level of soil fertility. To be successful, farmers need to keep to the following six rules to improve soil productivity on their farms.

1 Don't disturb soil too much

Soil is the most important productive factor for crops. It is a living system. Therefore, soil cultivation should aim at minimum disturbance of the soil life. The most important reasons for cultivating the soil are to:

- Loosen the soil to facilitate the penetration of plant roots
- Improve the aeration (nitrogen and oxygen from the air)
- Encourage the activity of the soil organisms
- Prepare the site for seeds
- Increase infiltration of water, reduce evaporation
- Incorporate crop residues and manures into the soil

2 Let the soil breath

Like humans, the soil organisms needed for healthy soils as well as plant roots require oxygen to breathe. Mixing mulch, compost or manure into the soil is important, they improve the aeration. Micro-organisms, insects, worms and other animals also aerate the soil.

3 Mulching conserves water, enriches soil

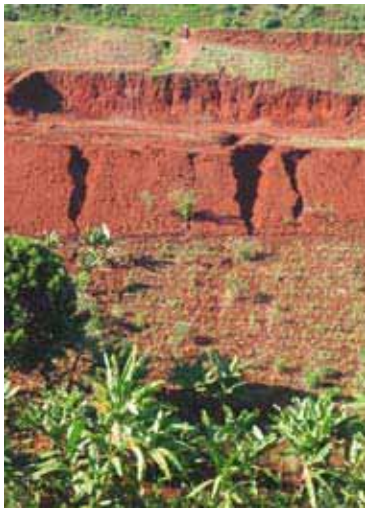
For many farmers, a clean garden without mulch is the best. They are wrong. Mulching is a method to protect and to feed the soil. It is the process of covering topsoil with plant material such as leaves, grass, twigs, crop residues, straw etc. Of course, it needs some labour to spread the mulch. But mulch protects the soil from wind and water erosion, it improves the infiltration of rain water, no crust is formed; it keeps the soil moist by reducing evaporation. While decomposing, organic mulch material continuously releases its nutrients, thus fertilising the soil; and apart from these, the mulch will be transformed to humus. If the process of decomposing needs to be accelerated, organic manures such as animal dung may be spread on top of the mulch, thus increasing the nitrogen content.

Mulching has a lot of advantages, but it can also cause problems. Green vegetative matter should not be used as it may encourage pests and diseases. Harmful organisms such as stemborers may survive in crop residue. Plant material infected with viral or fungal diseases should not be used if there is a risk of a disease being transmitted to the next crop. Crop rotation is the best way to avoid these risks.

4 Take care of the water

Water is a blessing, but too much water is a disaster. Soil erosion is the most serious and irreversible threat to soil fertility. It carries away the topsoil, the most fertile parts of the soil.

- Contour planting reduces the speed of the water.
- Hedges planted along contour lines contribute to terracing and leveling the site over the years, as eroded soil gets accumulated at the hedges.
- On steep slopes, walls or trenches are the only sufficient way to prevent soil erosion. Combined with plants such as fodder grass (e.g. Napier), they prevent erosion and also provide fodder for livestock.



Apart from mulching (see rule 3), cover crops are the most effective method of stopping soil erosion. The water drops reach the soil with less speed and therefore have a lesser smashing affect on soil crumbles, reducing the possibility of a run-off. At the same time, cover crops act like an sun shade. Every plant which covers the soil and improves soil fertility can be a cover crop, for instance beans or leguminous plants which enrich the soil with nitrogen. An ideal cover crop is cowpea. It is drought tolerant, can fix nitrogen, yields eatable grains and can be used as an animal feed which is rich in protein. In addition, it is resistant to pest attacks.

5 Feed the soil to feed the plant

Can you work without eating? No! Can soil produce crops without getting nutrients? No! This is the most important task for every farmer: to feed the soil with compost, manure and green manure (leguminous plants!). Remember: overused soils are dead soils!

6 Crop rotation

Crop rotation is planting of different crops in the same field in consecutive seasons. If, for example, the land has been planted with maize and beans one year, the farmers can rotate these by planting another crop the following year. The most suitable crops for rotations are legumes or fodder crops such as sesbania which help improve soil fertility. ■

Simeon Ojekwu's tricky fertilizer-question

If Africa cannot improve agricultural productivity by the year 2025 it will be able to feed only a half of its population.

Felix Mbitu Murimi

In contrast to most developing countries in Asia, Latin America and the Middle East, Africa is experiencing a decline in overall per capita food production. Its farmers generate the lowest food output per hectare of any major region in the world.

Poor quality of the seeds and low-yielding crop varieties, mentioned by many farmers is one, though not the only reason. In the last 40 years, the adoption of improved crop varieties has been uniformly high in all developing regions except in Africa. Their contribution to crop yield increases has been 66 % to 88 % in Asia, Latin America and the Middle East, but only 28 % in Africa. Overall, in Africa, soil nutrients and water management are the major limiting factors; thereby, the potential of improved crop varieties cannot be realized on nutrient-depleted soils. Apart from affecting food supply, soil degradation also diminishes agricultural income and economic growth.

No trials on the dosage

Compared to the temperate parts of North America, Europe and of Asia, most African soils are not very fertile because they are amongst the oldest soils in the world and exposed to all forces of erosion and leaching. Also, high temperatures cause fast decomposition of organic matter.

The subsidies for fertilizers between 1960 and 1985 in Kenya for instance improved to some extent crop productivity but not soil quality. As in most of Africa, the slash-and-burn-method was in many parts of the country the common way to prepare the land. This method increases yield in the short run, because nutrients become easily available to the plant. However, in the long run slash-and-burn depletes the soil. Concomitantly, the increase in population pressure on land resulted in shorter or even zero fallow periods.

Moreover, in most African countries hardly any soil analyses were done to check which nutrients (nitrogen, potassium, phosphorus etc.) were the most limiting factor. This is a prerequisite for optimizing fertillizer dosages in order to obtain maximum yields. Yields increase for a given fertilizer dose.

Use of compost has long-term effect of building soil feritility and structure. (Photo P. Luthi)

Two ways for feeding plants …

When African governments stopped the subsidies for fertilizer because of lack of money, the farmers were cultivating on even more degraded soils. Nowadays small-scale farmers can hardly afford fertilizers, since one bag goes for KSh 2,500/= - this during a time, when the pressure on land is enormous.

This is now, as we have mentioned many times in our magazine, a big challenge for African organic farmers. Conventional agriculture feeds the plants directly by using soluble mineral fertilizers; when used alone, they do not contribute to a higher quality of the soil. Organic farming, however, goes in another direction: it feeds the plants indirectly by feeding the soil organisms with organic matter. Nutrient supply is ensured by sound management of the organic matter in the soil. Organic manures usually contain all required nutrients for healthy plants in sufficient amounts and in a balanced composition. Today we are faced with the fact that many farmers lack the knowledge about natural ways of improving soil quality and soil fertility management as well as the understanding of the dynamics of organic matter in the soils.

Last month, we got a letter from the Nigerian farmer Simeon Ojekwu asking us if there is no way in-between these two methods "for small scale African farmers who have to deal with poor soils, let's say some kind of combination?"

Indeed, this is a tricky question, which he sent to *The Organic Farmer*. The Organic Standards of the International Federation of Organic Agriculture Movements (IFOAM) states clearly: "No chemical fertilizers containing nitrogen can be used, Chilean nitrate and all synthetic nitrogenous fertilizers, including urea, are prohibited." These standards should also be binding for African organic farmers.

… or a combination?

However, farmer Ojekwu from Nigeria is by far not alone with his idea of a way in-between. In the last years, quite a lot of studies on soil fertility in Africa propose a mixture between conventional and organic agriculture. The US-scientists David Weight and Valerie Kelly bring the problem to a point: "Fertilizers and organic matter are complements rather than substitutes – both are required to improve African soils." The movement "African green revolution for the 21st century" of the former UN-secretary general Kofi Anan takes a similar line. It promotes the planting of leguminous trees that fix atmospheric nitrogen in the soil and low-cost water harvesting techniques; this approach should be complemented with increased use of conventional methods, including well-dosed chemical fertilizers.

The idea with the trees is nice, but is far behind reality. Nitrogen-fixing trees are amongst the slowest and least efficient agents of soil improvement; also, they are by far the most labour demanding. It is strange that Kofi Anan's Movement is not promoting cover crops (leguminous plants for instance), which are capable of producing positive yield responses within one year, requiring little additional labour and changing of

continued on page 7

How nutritious is potato flour?

I have managed to produce potato flour. Can you test it's nutritional value?

Congratulations on your achievement of value addition! You now have a potato product with a shelf-life, thus it can be stored and consumed when potatoes are out of season, perhaps in soups or mash?

You can test the nutritional value by taking a clean sample in a clean container, to Analabs Limited, situated in the Cooper complex off Kaptagat Road, Kangemi (Nairobi) Tel. 020 418 analabs@africaonline.co.ke Tel:0727 531230

Please let us know of your results!

I need a book about weeds

Is there a book in the market showing pictures of plants and weeds, pictures of harmful and beneficial insects? David Smith 0727 721 694

Unfortunately I have not come across a good weed book locally. At least we can recommend to you two books: Encyclopedia of Organic Gardening, The Henry Doubleday Research Association, London 2005; Useful trees and shrubs for Kenya, by Patrick Maundu and Bo Tegenäs, World Agroforestry Center, Nairobi 2005. However, you can find a lot of information on the internet. With regards to pests, diseases and deficiencies, TOF has done a four-page special issue on these topics which you can order from the TOF office. BioVision has also just launched the new website www.infonet-biovision.org. This site has been developed to help organic farmers access information related to the topics you are enquiring about.

Su Kahumbu answers your questions

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How to attract bees to a new hive

Many farmers have problem of attracting bees to their new hives, as the following question shows: "We are 30 members of Up rise Youth Group. We decided to start a beekeeping project and have put our 12 hives at a suitable site, but the bees have not yet come. Zablon Orina 0735 373 650

Low hive occupation is one of the problems that face many farmers who want to start beekeeping. Whenever you encounter the problem, it is important to check the following:

- Have you waxed your top bars?
- Is the hive clean and pest–free?
- Are there any ants or rats nesting in it? If so, clean it and re-grease wires. Bees do not like a dirty hive.
- Is it the swarming season? Ask a friendly beekeeper in your area. Swarming occurs when bees reproduce themselves and fly out of the old hive looking for a new home. During the swarming season, it is easier for hives to be occupied quickly. Farmers should also choose a good site for hanging the hives.
- Farmers can also catch a swarm of bees. They can ask an experienced beekeeper to help them to do it. The bee swarm has better chance of staying in the new hive during the nectar flow period. They should ignore small swarms of bees but go for the big ones.

How to catch bees

To catch the bees it is important to observe the following:

1. First, prepare your hive by smearing it with some melted beeswax, so it smells nice for the bees.
2. Use your smoker and bee suit. Some swarms may be hungry and difficult to manage. Always be careful with strange bees.
3. Look for a swarm with bees clustering on a branch where you can catch them. Wear your bee suit and smoke them gently so as not to disturb them (Don't smoke if you can avoid it). Shake bees into a catcher box or similar container e.g. a cardboard box. If the queen falls into the box, the rest of the bees will follow. Wait for 20

minutes or so. If the bees return to the original site, try the same process again.
4. Once you have the bees, leave the box in a shady place until evening. Make sure it does not become hot in the container, sometimes covering with a damp cloth helps.
5. When evening comes, you can take home the bees and shake them into your empty hive.
6. If you have another hive, give bees a comb with some uncapped honey and a brood comb with eggs from another hive to encourage them to stay. (*Thomas Carroll)* ■

The right soil for mango trees

How well can mangoes grow on a rocky ground compared to deep soils. Ogal Opiyo Tel. 0722 800 403

Mango trees grow and produce well on various soil types. The tree often develops a fairly strong taproot shortly after planting. This taproot can continue growing until it reaches the soil water-table, and under favourable conditions can penetrate the soil to a depth of 6 m. However, most of the roots responsible for nutrient uptake are found in the top 500 mm of soil, with the largest concentrations in the top 250 mm.

Soil depth

Depending on the conditions under which the mango is grown, i.e. dryland or under irrigation, the response to the soil type will vary. Under irrigation, mangoes grow well in soils with an unimpeded depth of more than 1 m. If irrigation scheduling is well planned, there should be no problem on soil with a depth of 750 mm, provided that any soil or rocky layers that restrict root growth to a depth of 750 mm allow excess water to drain easily. If not, a temporary shallow soil water-table could develop above this layer, with resulting damage to the trees.The ideal soil has a fairly loose, brittle, crumbly structure. Compact or strongly-developed soil structures prevent effective water infiltration and root penetration. (*TOF)*

Letters to the editor

Interested in watering plant

I refer to David Osiako's letter, Umoja Forest Conservation Group, which appeared on the October 2007 issue, about a watering plant. I am interested in getting it. Can he tell me how I can get it? Alternatively, if is difficult to send it to me all the way to Kilifi, he can give me its botanical name so that I may try to get it from Gede forest which is near me. Francis Hinzano, P.O. Box 285, Kilifi

We need past issues

We are a Community- Based Organization composed of small-scale farmers. We are residents of Kinamba location in Ng'arua division of Laikipia West district. We read issue Nr. 23, which had the information on mushroom growing, soil conservation, liquid manure, organic methods of weed control among and every member appreciated the information contained there in. We would be delighted if you could send us all the past copies and continue to send us the future copies of your magazine on organic farmer. Francis Looremata, Boma Beekeepers, P.O Box 82, Kinamba

It is good for training

I am pleased to inform you that I have had the opportunity of reading some past copies of your magazine and I do appreciate the various articles and technologies which are being applied in organic farming. I am a technical officer and I have farmers groups in Kilifi and Malindi districts growing various horticultural crops, especially African indigenous vegetables. We are training these farmers groups using the Farmer Field School approach on how to grow these vegetables by organic methods. If you send us a copy of your monthly magazine, it will further broaden our knowledge on the various methods and technologies available for organic farming and this will be of great benefit to the large farming community we are working with. Martin Mwakangalu, P.O Box 16, Mtwapa

I need plant extract issue

I wish to request you to send me your monthly magazine as from this month. I received a copy of your magazine from Etang Kenya Ltd. As a farmer who believes in organic farming, I hope to receive it for more information. Please also send me the plant extracts special issue.
Andrew Oriedo, P.O Box 1493, Kitale

Magazine is helping us

We are a group of farmers called MEROF (Mt Elgon Rwandet Organic Farmers) and are 96 in number. This magazine is very educative and we have been reading it from a friend working with the ministry of agriculture. We kindly request that you send us a few copies of the magazine to improve our knowledge and skills. Andrew Mukung, Chairman MEROF, P.O Box 240, Cheptais

Dear Farmers,

If you have any questions or ideas for articles, or if you would like us to publish experiences about your shamba or within your farmers' group, please contact us. We shall get back to you!
SMS ONLY

Tuma maoni yako! Asante.

Simeon Ojekwu's tricky fertilizer-question

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management, doing erosion control better than trees and not 'locking up' massive amounts of potassium and phosphorus in their wood.

Scientists call these combined methods the "Integrated Natural Resource Management". In mixing small amounts of fertilizers with compost and manure and applying it later to the plants keeps the nitrogen longer in the soil, avoids the washing out by rain and produces higher yields. The dosage and the needs of the respective plant play an important role. Recent efforts have improved the technical and economic efficiency of recommended mineral fertilizer doses, and farmers are nowadays more willing to read and to follow the recommendations. Research in Burkina Faso and Niger has shown that it is possible to increase millet and sorghum yields profitably by using fertilizer in combination with organic/natural techniques that conserve and concentrate soil moisture and organic matter.

According to the promoters of the "Integrated Natural Resource Management", this complementary method

produces more biomass, which can be used again for the replenishment of the soil with organic matter. This would make sense especially in areas where organic matter is inherently low. There is a notorious lack of fodder, so crop residues are fed to animals and are not used as organic matter to feed the soil.

Special approach for Africa?

In his letter Simeon Ojekwu asks if the IFOAM-ban of fertilizers containing nitrogen "is an European approach which does not consider the poor soils of the poor African farmers." No doubt, besides being ecologically questionable, synthetic or chemical fertilizers have many disadvantages. If not properly applied, a big share of the nitrogen fertilizer gets lost through runoff, leaching, and volatilisation, thereby polluting the ground water.

On the other hand the correct use is a question of knowledge and management; this would be the task of the "Integrated Natural Resource Management", namely to teach farmers how to use fertilizer in an efficient manner and minimize wastage, and to apply it when the plant needs it most, i.e., split it rather than applying it in a single dosage.

Way forward for organic farmers

As mentioned above, this is a tricky issue. It is up to the farmers to decide which way to go. For us from *The Organic Farmer* magazine, the answer to Simeon Ojekwu is simple and clear: "There is no way in-between!" Organic farmers have to rely on the natural methods to improve the soil's quality with compost, manure, and green manure (leguminous plants). It requires more time, more labour, and more planning. But in the long-term it is the safer way for sustainable agriculture. ■

tips and bits

from farmers for farmers

Few people know organic food

The Organic Farmer

Although the market for organic products is expanding at the rate of 20 percent every year, a large section of the Kenyan population does not know what organic food is all about. A well-coordinated and sustained campaign is needed to educate the local consumers of the benefits of eating organic foods.

Women know more than men

A survey conducted by organic agriculture movements in East Africa last year on consumer attitudes and preferences towards organic foods, shows that awareness of organic foods is very low especially among the low-income groups in the region. Although 40 percent of the consumers knew about organic food, none had tasted it. Those who had tasted it did not know that it was organic while a majority of the consumers did not even know what organic food was. Most of the respondents in the survey could not give any reason why they did not eat organic foods. "For any awareness campaign to succeed, messages about the advantages of eating organic food should link the food to the health benefits that consumers stand to gain from eating it", says Samuel Ndungu, the KOAN National Marketing Development Advisor.

A vegetable stall along Nairobi-Naivashs road

The survey found that, apart from being enlightened, the high income groups consumed organic foods because they had more purchasing power and therefore could afford to choose the type of food they wanted. Awareness was slightly higher among women than men and tended to match the educational level of the respondents, with those who had secondary education being more informed on the benefits of organic food than those who had a lower level of education.

A lot of cheating

Organic farmers and the consumers need to be made aware of the integrity system which ensures that both farmers and retailers sell products that are really organic. One way to do this is to ensure all organic products carry labels that distinguish them from conventional farm products. Currently there is a lot of cheating where farmers offer conventional produce as organic. This may erode the confidence of the consumers. Efficient quality control systems need to be put in place to ensure that organic standards are maintained.

The findings from the survey show that organic agriculture movements need to intensify their awareness campaigns on the benefits of organic food through aggressive advertising in the local media, trade fairs, exhibitions and any other means that will get the message to the wider population. If the campaign succeeded, it would not only widen the market for organic food. It would also encourage more farmers to go into organic production and also make it affordable for them to pay for certification to be able to sell their produce in the local and international markets at a higher price. ■

Training is necessary

Following increasing demand for local organic food products by exporters, a number of local companies are training farmers' groups to produce various products. One of these is Earth Oils which has contracted farmers in Nanyuki to plant the tea tree for extraction of essential oils for the export market. The company provides farmers with training and seedlings. It also assists them to pay for the organic certification. The company ultimately buys the product for oil extraction. An ICIPE project is also working with more than 1000 farmers in Mwingi district to process organic honey for the export market. Another very successful company is Meru Herbs which has trained a lot of farmers in the region and sells a bulk of its products to Europe. (*TOF*)

Market Place

Rabbits for sale: I have more than 300 rabbits for sale. Anyone interested can call Tel.0724 857 878

Kenbrow Chickens wanted. I need 100 day-old Kenbrow chicks. Please call Z.K. Mburu Tel 0722 257 796

Soybean processing: I do soybean processing and use. Kindly contact me on Tel. 0727 180 840

Training: Ikinyukia Self-Help Group in collaboration with KARI-Muguga trains farmers on baling of purple vetch hay. Farmers interested with training can get in touch with the group. Contact the chairman Tel. 0724 492 456

Dried Mushrooms: We have 150 kg of dried Oyster mushrooms for sale. Interested buyers can get in touch with us. One Acre Fund Tel. 0736 798 214, Email: horticulture@oneacrefund.org.

The Plant Extracts Special which appeared in Sept/Oct 2006 is now available in English. Interested farmers can order.

Questions? Go to Infonet!

Infonet is an information platform for organic farmers. Whatever you would like to know about the ecological methods for the control of pests and parasite infestations of plants, humans and animals – Infonet will have an answer. You just go to the Internet, either at home or at a cybercafe and type in:

www.infonet-biovision.org