

The Organic Farmer

The magazine for sustainable agriculture in Kenya



Nr. 45 March 2009



Every farmer desires a good maize yield. Correct seeds play a major role (Photo TOF)

Plant the right seed variety

Many farmers often use wrong seed varieties for their areas and end up with poor yields

The Organic Farmer

Most farmers are now preparing to plant this year's maize crop. Although a section of them know which varieties are good for their areas, there is a lot of confusion in the market with regard to choice of the right varieties for the various agro-ecological zones. One reason for this is that there are many seed companies competing to sell their seeds to farmers.

These companies have launched big marketing campaigns to sell their seeds throughout the country. The problem is that in their advertisements, they do not tell farmers which of their varieties are suitable for which regions. Whether

this is deliberate we can hardly tell. But the result is that farmers are lured into buying varieties that are not suitable for their areas. Every year *The Organic Farmer* educates farmers on maize varieties and agro-ecological areas where these varieties can do well (see TOF Nr 33 February 2007). However, most farmers do not take this advice seriously and only end up with low yields or total crop failure.

Lack of knowledge

Most of the maize varieties, especially those from South Africa, are meant for medium potential areas, but those selling the seeds do not inform the farmers appropriately. Dr. John Ombakho, the Chief maize breeder at KARI- Kitale advises farmers in high potential areas such as Trans-Nzoia and Uasin Gishu, not to go for these varieties because they cannot do well in those areas. Following the current maize shortage and the unpredictable weather, it is important that farmers choose the right variety they want to grow carefully.

Information service

The Kenya Plant Health Inspectorate Service (KEPHIS) has launched an SMS information service for farmers who want to know which varieties they can grow in their areas: Just write: maize/ name of your division, SMS to 2964 using your safaricom, Zain or Telkom lines. If your division is not in the mailing list, you can talk to KEPHIS personnel who will assist you.

Just call them on Tel. 0722 516 221 or 0733 874 274.

Dear farmers,

The current maize scandal involving the National Cereals and Produce Board is just a pointer of how deep corruption has entrenched itself in the government. For the last six years, we have been treated to high sounding policy initiatives that the government intends to take to revive the agricultural sector and improve the food security situation in the country. How then could the same people we have entrusted with the custody of the national strategic food reserves sell maize that is meant for starving people?

A serious government would channel a sizeable portion of its budgetary allocation to food in order to ensure that the country not only has enough food both for local consumption but also for sale. Kenya, where more than 80 percent of the country's population relies on agriculture as its major economic activity, has great potential to feed itself. The government had enough time to put in place measures to address the looming food shortage. But since nothing was done, the poor are going to bed hungry forcing the government to make yet another appeal for food aid from donors. It is a shame!

Although the high fertilizer prices are partly to blame for depressed yields last year, lack of other inputs or reliable credit schemes for small-scale farmers contributed greatly to low production; in the past, seasonal credit schemes have enabled farmers to produce surplus food. Nowadays small-scale farmers cannot meet the high interest rates on loans charged by local banks.

This does not mean that small-scale farmers cannot do anything. If they have to overcome problems that now threaten production, they have to rely more and more on themselves. They can buy some of the inputs as a group and share among themselves. Some organic inputs are cheaper than conventional ones. Farmers can also exploit all available resources within their own shambas. As we have done before, we shall continue to provide farmers with all the relevant information that they need to increase production. We believe that this information, if well utilised, enables you to make the right decisions that will help increase crop yields and fight poverty. In this issue, we guide you on the choice of seed varieties which is very important during this planting season.

in this issue



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Inspired by TOF, Subukia farmers form groups

TOF has always advised farmers to form groups. Farmers in Subukia complied and benefitted.

Katharina Kijani.

Paul Njenga leans against one of his forty large avocado trees and proudly explains, "I started growing avocados in 1984. At that time, I was the only farmer with avocado trees in Subukia valley. Since then, I have continued selling seedlings from my tree nursery to surrounding farmers, and I am still teaching others how to graft avocado trees." Paul Njenga's passion for avocados has led to the foundation of a farmers' group - Miroreni Horticulture Growers with 40 members. It was registered by the Department of Social Services in 2006. All the farmers who now grow organic avocados come from Munanda location in Subukia valley in Nakuru North district.

An active group

The group's chairperson Paul Njenga recounts that, from the beginning, his avocados have been organically grown as chemical fertilizers would, in his own words, "completely spoil the taste of my avocados". He has not had any serious problems with pests or diseases that would have forced him to spray pesticides.



TOF Radio producer John Cheburet interviews Subukia farmers.

(Photo TOF)

Every farmer with at least four Avocado trees can join the group after paying a registration fee of Kshs. 300. The farmers' group is well organised. Each member pays a monthly contribution of at least Kshs. 200. They hold a general meeting on the first Wednesday of every month.

The disciplinary board of the group can penalise members if they do not attend meetings, fail to hand in money in time or sell against the group's regulations to individual buyers. After the second warning or a fine, an errant member has to leave the group. The chairperson, secretary and treasurer are elected once a year by all members through a secret ballot voting system. There is also a regular assessment to ensure all members observe organic standards. Njenga says that there is a high level of integrity and commitment amongst his farmers who have to maintain high standards of organic farming.

Organic pays

The farmers' group received a real boost in early 2008, when they established contact with the US-based company, Olivado, which after a rigorous assessment started buying avocados from them. Olivado buys organic avocados from farmers' groups to process them into certified organic and fair trade avocado oil at their production facility in Nairobi. The deal assures all participating farmers of a regular buyer, permanent access to a market and above all, a much higher price. Instead of selling avocados to the local market at between Kshs 400 -500 a bag, they now sell at Kshs 1,500 a bag. The farmers save on transport costs and time; they gather the harvest at their chairman's place from where the buyer comes to collect them.

Paul Njenga points out that *The Organic Farmer* magazine played a central role in starting off the farmers' group. Primarily, the magazine prompted the farmers

to start meetings in order to share and discuss ideas from the articles and secondly to dispel doubts about the benefits of organic farming. In each of their monthly meetings, they read articles of interest from the magazine and discuss possible ways of implementing new methods of farming.

Young poultry farmers

Adjacent to the avocado group, a second farmers' group specialising in poultry keeping has been established. The Good Shepherd Youth Group is mainly composed of young farmers between 18 and 25 years old. John Njuguna Muchina, the chairperson, sees his main objective as proving to the youth, that poultry keeping can be a profitable business and farming a highly reputable profession. At the moment, the group has 15 active

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TOF celebrates fourth birthday

In April 2004, we launched your magazine, *The Organic Farmer*. In view of the commemoration of this event in April, we shall publish a short series on farmers' groups in Subukia valley as an example of all the farmers' groups we are dealing with. How has *TOF* influenced their farming methods and their social life? And what is the experience of Charles Munyari, a *TOF* distributor since the inception of the magazine?

In this second article on this page, we feature farmers in Subukia who have formed groups after gaining experience from the magazine.

Growing wheat organically is not easy

Crop rotation and an integrated pest and disease control mechanism can reduce the use of chemicals.

The Organic Farmer

A number of farmers have requested us to provide them with information on how they can grow wheat organically. In a hot climate such as the one we have in Kenya and other tropical countries, it is very challenging to grow wheat without use of chemicals. One of the major reasons for this is that wheat is prone to many diseases and pests that are difficult to control using organic methods. Under warm tropical conditions, disease-causing fungi and pests multiply very fast and thus organic control methods may not work very well. This subjects the crop to a variety of fungal diseases and pests.

In Europe and Australia organic production of wheat is now on the rise among farmers due to the high prices offered for the product; but the acreage is still low compared to that of conventional wheat. As with any other cereal crop, soil fertility is the most important factor in wheat production. The soil has to have adequate supply of organic matter. A farmer can attain this through the addition of compost, green manuring and practising crop rotation. Organic matter in the soil can encourage growth of micro-organisms which help to recycle nutrients essential for wheat development. Wheat requires nitrogen, phosphorus and potassium in sizeable quantities. Good quantities of organic matter in the soil can alleviate deficiencies of these nutrients.

Useful guidelines

An integrated system of both disease and pest control can be the best way to produce wheat under these conditions. The system may not be fully organic but the farmer can reduce the incidence of diseases and pests considerably while at the same time reducing the use of chemicals. The following guidelines are important.

Land preparation: Proper land preparation can considerably cut your cost of chemical application especially in weed control. To reduce the problem of weeds, wheat should be grown in rotation with legume crops such as beans or mustard (See TOF Nr.41 October 2008). Mustard is especially useful because it can help suppress most grass and broadleaf weeds. Mustard should be planted at the rate of 10-15 kg per hectare at a depth of 10-15 mm in moist soil. The mustard crop is chopped and worked into the soil. As it decomposes, the plant releases two compounds: glu-



cosinolates and myrosinase. Both of them are toxic to soil fungi, nematodes and even weed seeds.

Seed preparation: Before planting, dressing of seeds is important to protect the germinating seed from fungal and pest attacks before and after germination. A range of organic fungicides and even pesticides in the market can be used for this purpose. One of these is Eco-T which helps speed up germination, increase root growth, water uptake and also control root-borne fungal infections. The seed can also be coated with organic fertilizers and soil conditioners such as fulvic and humic acids or vitazyme (See TOF Nr. 45 February 2009).

Planting: Wheat should be planted on land that has just been under a

mustard crop. The land can be harrowed 14 days after the mustard has been chopped into the soil. Wheat can be planted without second harrowing depending on the condition of the soil (there are minimum tillage seed drills in the market that can plant directly without the need for ploughing and harrowing). Seed rates will depend on the wheat variety and are set using the seed planter.

Early tillering: Early tillering is the period between 3 to 4 weeks when the wheat crop has produced three leaves. At this stage the crop will need extra feeding, disease and pest control. There is a range of organic foliar feeds such as Phosgard, Synergizer, TwinN and Vitazyme. Pesticides such as Nimbecidine or Thuricide or Neemroc, a biological insecticide that contains Neem can be applied to protect the crop from diseases and pests.

Mid-tillering to ear emergence: This is another critical stage in the growth of a wheat plant. Apart from additional feeding, the crop is susceptible to many diseases mainly fungal in nature from the sixth to ninth week. These include leaf rust, stem rust, stripe rust, loose smut etc. The most dangerous of these diseases is a strain of stem and leaf rust known as UG 99, which originated from Uganda (see box).

This fungal disease has now spread to almost all wheat growing areas in the country. Organic methods cannot help. Farmers therefore need to apply chemical fungicides at the first sign of the disease, and the most effective fungicides that can control UG 99 include Artea, Amistar Extra or Folicur. Application should be done up to the time of the ripening ear (ear washing) to ensure the spores from infected plants in nearby farms do not affect your crop.

A devastating virus

The virus UG 99 is a strain of black stem rust (*Puccinia graminis tritici*). It is virulent to the great majority of wheat varieties. Unlike other rusts, which only partially affect crop yields, UG99 can bring 100% crop loss. The blight was first noted in Uganda in 1999 (hence the name UG 99) and has spread throughout the highlands of East Africa. In January of 2007, spores blew across to Yemen, and North into Sudan.



Try drought resistant maize varieties

Due to unpredictable rainfall patterns and amounts, farmers need to grow varieties that require less rain.

The Organic Farmer

If the current drought in most parts of the country is anything to go by, the rains this year shall be so unpredictable that farmers have to think of ways of coping with the prevailing weather conditions. One of the strategies that farmers can employ is to choose carefully what they intend to grow. Maize is the major crop grown by farmers across the country; the amount of maize harvests every year determines the household's as well as the country's food security. It is therefore important that farmers choose the right varieties for their areas and also look for varieties that can withstand depressed rains to ensure the chances of crop failure are reduced to a minimum.

Varieties that do not require much rainfall will tend to do well not only in marginal areas but also in high potential areas if the rains are not in sufficient amounts. One of the mistakes that farmers make is to go for varieties that are high yielding even when they come from areas with less rainfall. This will always result in low yields or total crop failure because such varieties will only do well when there are adequate rains.

The advantage with drought resistant varieties is that they can be grown in both high potential and marginal areas and still do well. This is one reason why farmers in high potential areas should always go for these varieties. However they should know that most of these varieties do mature early. They can therefore be used for consumption as green maize and meet immediate food needs of their families while waiting for the late maturing ones to be ready. For example planting the early maturing varieties in early March means that the family will have something ready for consumption in July when there is a severe food shortage in most parts of the country.

Drought resistant varieties

The following are some of the drought resistant varieties that farmers can buy to reduce chances of crop failure:

Katumani composite

This was the first dry land maize variety to be developed in the country in 1967. It does well in areas with an altitude of between 1000- 1800 metres above sea level. The variety does well even in high potential areas. It matures between 3 and four months. It can be reused as seed for up to three years

without affecting the yield. It can yield 12 bags per acre.

H511 and H12

These two varieties can do well in dry land high altitude in West Pokot, Keiyo Marakwet and Nakuru which have moderate rainfall. They mature between 4 to 5 months and can produce between 16 and 18 bags an acre.

DH01

This is an early maturing drought tolerant variety released in 1995 to help improve maize production in dry areas where Katumani is grown. It is recommended for arid and semi-arid areas. It performs well even in areas with cotton soils where varieties such as H511 cannot do well due to lack of rain. To produce a good yield DH01 should be planted just before the rains start. Farmers should use a seed rate of 20- 25 kg per hectare and a spacing of 90- 30 cm. It takes 100-120 days to mature. It can withstand diseases such as leaf blight, common rust and ear-rot.

DH02

Dry land hybrid 2 was released in 1995. It is a drought resistant variety that performs best in areas where Katumani composite is grown (between 1000 – 1500 metres above sea level). Places where it has been grown successfully include Mwea, Kitui, parts of Makueni and Baringo. The variety is resistant to maize streak virus.

DH03

This is early maturing hybrid maize that was released in 1999. It is recommended for drier, low to medium altitude areas between 800-1200 m.a.s.l where it performs better than H511. It has better husk cover, resists blight, Maize Streak Virus and drought.

DH04

The variety is early maturing. It is recommended for production in dry low to medium altitude 800- 1200 m.a.s.l. It performs better than H511 (by 15 %) in the drier zones and along the Lake Victoria region. The variety does better



Maize seeds are normally treated with coloured chemicals for easy identification and to protect them against pests and diseases (inset).

than DH02 and DH03 though it takes longer to mature.

DH09

The hybrid does well in lower coffee growing areas mainly in central province Eastern and western provinces Bungoma, Busia and Teso districts between dry land and medium altitude areas (1000- 1150 m.a.s.l). It does well if planted before the rains start. It matures between 3 and 4 months. Compared to H511, it produces 30 percent more yields.

DH10

This is a high yielding variety which performs well in areas with an altitude of 800-1400 masl. The variety does well in Kangundo, Thigio, Thika and Bumula. It does produce 62.5 percent more than H511 and is more resistant to lodging, blight Grey Leaf Spot disease and ear rot.

PH4

This is a new variety suitable for lowland coastal areas. It is adapted to hot humid lowland areas between altitudes of 0- 1200 masl. These areas include Mombasa, Kilifi, Tana River Lamu and Kwale. It matures between 3 to 4 months after planting and is capable of producing 16 bags of grain

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Choose the right salt for your livestock

Salts are vital for livestock. In the last few weeks, we have received a number of questions on salts for livestock. Most of them have been answered directly, on phone or with SMS. Some of the questions however are more important for all farmers to know. William Ayako, a Livestock specialist at KARI Naivasha answers them here.

Cows need a variety of minerals

Is it okay to use minerals only for my high yielding milk cows? Tel.0735 123 188

It is important to understand that a productive dairy cow requires mineral supplements rich in both macro elements and trace elements in the right balance. The macro elements include: calcium, magnesium, phosphorous, sodium and sulphur. Trace elements include among others: copper, selenium, cobalt, zinc, iodine and iron.

Any deficiency in the two categories of elements is the cause of major metabolic disorders which affect productive dairy cattle. The disorders are associated with the short or long term imbalances between mineral 'inputs' the animal gets in the feed and water. These may vary in quantity and quality and may contain other minerals that

interfere with absorption. Animals lose minerals from their bodies through urine, faeces, calving and milking. They also use minerals to maintain their bodies.

There is also mineral 'throughput' (stored minerals) in the animal body reserves that are used to compensate between the inputs and output imbalances. In this regard, it is important to feed the right minerals that take care of the above explanation. The practice of mineral feeding should embrace offering the animal the required mineral as added and mixed in the concentrate at the rate of 150 grams per cow per day on top of the offered lick. Therefore it is not advisable to offer only block licks to high yielding milk cows since this may cause a major disorder.

Do not blame your cow!

What is the problem with my cow's delayed oestrous. Twelve months have past since she gave birth. I give her salts and molasses. Camlous E. Jagona, Lugari. 0722 582 329

There are several causes of delayed oestrous (coming on heat). These include:

Poor management: This includes lack of proper fertility records and lack of proper heat detection.

Diseases: Reproductive diseases such as brucellosis, vibriosis and trichomonas are other causes of delayed oestrous.

Hormonal disturbances: This leads to inactive follicles or cystic follicles which do not rupture.

So before you blame your cow, please observe the following:

- Good nutrition that contains sufficient energy, proteins, miner-

als and vitamins. An additional mineral lick is advisable on top of the normal ratio especially for high milk yielders.

- That heat detection is proper
- That heat records are properly kept
- Prevention of inflamed uterus by providing a clean environment during and after calving
- Good feeding by providing good rations, mineral and vitamin supplements.



Which is the right mineral salt for cows?

I am a small-scale farmer with 3 milk cows and would like to know the right salt to give them. 0728 014 551

There are several types of mineral supplements recommended for supporting dairy cows, such as Unga High Phosphorous, Super Madlick, Bay Mix Maziwa, Super Vitafos and many others. It is advisable to seek advice from the local livestock extension office for the recommended mineral in your region to make the right choice. We should not forget that soils from different regions have different mineral composition and hence the forages which the animals graze on.



What causes vomiting in calves?

My calf vomits when chewing cud. The Veterinarian advised me to give it more salt but this did not work. What could be the solution? Maurice Abuoro, Rongo. Tel 0712 789 219

The digestive system of an adult ruminant (animal that chews cud) is developed to enable it break down cellulose and cell wall components. Ruminants do not have the ability to break down cellulose by themselves; their digestive system is adapted to supply an ideal environment to a range of micro organisms (microbes) that break down cellulose and produce required energy units called volatile fatty acids and synthesize proteins.

The rumen of an adult animal acts as a large anaerobic (without oxygen) fermentation chamber that can store chewed fodder for up to 10 days to enable small micro organisms in the stomach to cause fermentation and breakdown of feed in the stomach. So after initial chewing, food is swallowed and enters the rumen. Large particles of food are returned to the mouth after every minute and re-chewed (chewing of cud or rumination) to reduce particle size and re-swallowed. This process is enhanced through a reflex action which could be lacking if their rumen has not been fully developed.

The vomiting will stop

Since rumination is an action that the calf learns with time, the process often results in vomiting in young calves. Calves would develop the art after a short while and vomiting would cease to happen. If vomiting is caused by the foregoing, the problem would last just for a short time.

However, the other cause of vomiting could be due to an injury in the mouth. In this case, the process of regurgitation could be normal but due to the injury, the calf would not be able to re-chew the food. This would last for as long as the injured tissue has not healed.



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members; all of them rearing indigenous chicken breeds. Apart from holding regular meetings and making financial contributions to the group, it also engages in shared activities. If, for instance, a new member gets registered and has not yet gotten a good chicken house, the group comes together and helps to put up the structure.

John Njuguna Muchina files all the TOF magazines in a folder at his house. Whenever they hold meetings, the farmers will read and discuss a particular issue. On many occasions for instance, TOF has given them knowledge on how to combat livestock diseases and how to improve on feeds. The group is preparing to get certification for organic poultry keeping in 2009. Instead of selling the chickens individually at the local market, the group has found a buyer from outside, who comes to buy from their homes. He pays Kshs. 250 per chicken which is higher than the Ksh180 that they get for the same at the local market.

Social advantages

Besides an increased and regular income, the chairperson sees the members of the group benefiting from an improved social interaction and cooperation between farmers and the community. The group serves as insurance for members in urgent need. Moreover, receiving lump sum cash gives farmers the opportunity to diversify and share expensive farming tools.

It is clear that farming in Subukia valley has been transformed through the extensive collaboration between local farmers. Both farmers' groups have survived obstacles to benefit their members enormously. Above all, the integration of young people has resulted in high innovative potential. After reading one issue of TOF magazine that featured rabbits, some of the farmers are already preparing to start rabbit keeping.

>>> from page 4: Seed varieties

per acre. The variety is tolerant to most leaf and ear diseases.

PH1

The variety is suitable for hot humid coastal lowlands (0-1200). It requires a growing season of 75-120 days and a minimum of 400mm of rainfall. It has been found to do well in Kilifi, Kwale, and Mombasa districts. It is also suitable for the irrigated lowlands of Tana River district. It requires a spacing of 75 by 30 cm and can be intercropped.

Farmers can also plant early maturing and drought resistant varieties from other companies, these include WS103, WS909 and WS202 from (Western Seed Company), Duma41 and Duma43 (Seedco Company).

TOF for our Library

My husband and I together with our gardener are residents in Malindi. We have a productive kitchen garden, in raised beds, and many fruit trees. We shred all our biodegradable waste and make our own compost. Our gardener, Mr. Kaingu Gona, has recently set up a worm farm. We are all members of the Kenya Horticultural Society Malindi/Kilifi branch. I am also the Hon. Secretary of the Malindi Museum Society and we contribute reference material to the Webb memorial library, a free reference library set up in the Malindi museum by MMS and NMK that is used by many young readers. We would like to receive two copies of *The Organic Farmer*; we can place one copy in the library. Any back issues would also be very useful to library users. We can assure you that each copy will be read by several people, keen to learn more about organic and environmentally friendly farming.

Mrs S. A. Robertson, P.O. Box 162, Malindi

Please consider us

We have once written to you requesting to be placed on your mailing list as recipients of your magazine but all in vain. We are writing again hoping this time round you will consider sending us your monthly magazine. We are a group of farmers in Webuye. Our activities are bee-keeping, amaranth production and tissue culture banana farming.

We are twenty members and we would be grateful if you could be sending us at least four copies of the magazine monthly to be shared by our members. Joseph E. Lyomu, Afya Njema Group, P.O. Box 908, Webuye

Dear Joseph, we are sorry that you do not get the magazine. We have noticed several reasons for this: Actually we include

Order your CD



New CD is ready

Farmers, would you like to share the experience of more than 200 agronomists and 480 books on agriculture? This is what you will get if you buy the new Infonet-Biovision CD that has just been released. The updated version now has all information on animal and plant health, disease and pest control as well as human and environmental health. It is easy to open and read from any computer with a CD-ROM drive (NOT with a VCD or ordinary video CD player). Interested farmers can send airtime worth Ksh. 200, either through our Safaricom line - 0721 541 590 or Zain 0738 390 715 and SMS us your full postal address. We will send the CD by registered post. All the farmers who bought the earlier version will receive the new CD free of charge.

farmers' groups on our mailing list and send them TOF, but sadly enough it never reaches them. We do update our mailing list regularly. At times, the magazine disappears during postage and sometimes the owner of the rental box, which is shared by many people keeps all the TOFs to himself. Payment for the rental box is not renewed on time. This is the reason why farmers should send us an SMS in case they do not receive their copies of the magazine.

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 Other ☐



The right size for brooders

What is the length, height or width of a brooder for 200 chicks? And how long should chicks stay in a brooder? Tel. 0724 104326

Broiler chicks stay in a brooder for approximately 3 weeks. Layers for longer as they develop slower, up to 5 weeks. A good size brooder for 200 broilers starts at 1 m x 2 m in size, gradually increasing to double this size at 3 weeks.

When to sell broilers

How long do broilers take to mature? Tel. 0726 549 931

Conventional broilers can take as little as 33 days. Organic regulations say organic chickens may not be slaughtered before 81 days.

Can I keep broilers and cockerels together?

Can one mix broilers and cockerels in one brood? Please give me enough details and methods. Ememwa 0733 527 771

I think the question means broilers and layers. During brooding yes they can mix. However eventually the broilers will be removed as they will be twice the size of the layers after 3 weeks, and ready to go onto a different diet. If they stay in the same place they will have space and feed complications. What you should know is that broilers are actually males (cockerels), not hens.

The right size of chicken house

How many chickens are supposed to be raised in that house on the model poultry house shown in TOF Nr. 31? Tel. 0736 110 262

The model house had a floor space of 5 x 10 meters and can house 300 birds comfortably. If the birds are allowed outside into a run during the day time and the house is just for sleeping, then the density of birds can increase to 500. Ten chickens can be raised in a 2m x 2m house if they are kept indoors. If they are outside during the day and only sleeping, laying and feeding in the house it can be smaller, 2m x 1m.

Su Kahumbu

Ovarian cysts can be treated

What is the remedy for ovarian cysts in dairy goats? Local veterinary personnel in my area have no solution. David in Kitale. Tel. 0722 944750

Cystic ovarian disease in goats is an important cause of reproductive failure. The disease shows itself by short cycles with continuous oestrus (going on heat) without conception. When the goat is in season it will bleat (make noise) a lot and show nymphomaniac behaviour (wanting to mate all the time). Cystic ovarian disease has been proved to be linked to animals that graze clover

and legumes in large quantities. The treatment is 1500 - 2500 iu *human chorionic gonadotrophin* (a drug which is not readily available in this country). An alternative treatment is prostoglandin F2alpha which is available in most agrovet shops.

The same disease in cattle manifests itself in two ways:

1) By the heifer not cycling, so an egg is



not released which means that conception is impossible. The heifer will show nymphomaniac symptoms. The treatment is gonadotrophin.

2) The egg is released but becomes glutinised and the heifer will begin to manifest male characteristics and will be unable to conceive. The treatment is administering prostoglandin F2alpha.

Valerie Corr

Why is it wrong to use maozo?

Many farmers in my home area mostly use *maozo* (rotten maize) in feeding animals. Why do you disagree with this and yet we have not seen any side effects so far? 0726 348 767

It is true that most farmers use rotten maize to feed their animals without knowing that it is harmful to the animals and even themselves. The effect of feeding *maozo* is mainly attributed to mycotoxin poison in them. The range of effects of mycotoxins includes reduced efficiency in the digestive system, reduced intake, reduced production and slowing of life (hypobiosis). Some of these effects can be transmitted through the products and by consumption of the products; human beings can also be infected. Depending on the load of poisoning, the effects can be acute or slow and therefore seen after a long time of incubation on the body systems and resistance level of the host animals.

The international trade policy of good agricultural practice does not allow trade on livestock products from animals fed on such products. In this respect the use of *maozo* can have negative economic consequences to the producer. Unaware of such policies and of the negative consequences on human life, most farmers in the developing countries do feed products like

maozo to their animals. This practice should be discouraged in all categories of domestic animals (pigs, poultry, cattle etc.). **William Ayako**



Is this plant harmful?

Is it dangerous to feed Wandering Jew to my rabbit? Carol Bhachu, Ngong 0722 798 820

Wandering Jew (*Tradescantia fluminensis*) is a very common garden plant, as well as a wild plant. It comes in many colours and can cause irritation to the skin of humans and domestic pets. I cannot find any information as to whether this plant would be poisonous to rabbits if ingested, and have noted that our goats will eat the wild variety if they find it. If your rabbits are eating it with no ill effect, all is well and good. If you are thinking of introducing it as a feed, include it with caution and increase the quantity slowly. **Valerie Corr**

