

The farming soil and fertilising principles explained in [GrazingInfo](#) apply to gardens, so should be read, at least briefly, including the information on minerals.

Birds

These sitting on, and messing house window sills, roofs and ledges, can be prevented with fishing lines, as shown. One line broke several years ago and was not replaced because the remaining one worked perfectly. The sill is now spotless, cleaned by the rain.

Researchers in both Scotland and Spain have found that controlled grazing can reduce the number of birds that nest in pastures. Reasons include animals trampling and disturbing nesting sites, increasing exposure to predators and the elements. Another possibility is that intensive grazing reduces seeds and certain insects on which birds live. However, controlled grazing makes it easier for birds such as starlings to access grassgrubs, cutworms and crickets.

A way of providing seeds is to fence off all waterways as is required in New Zealand. Grass then grows along the banks and provides seeds and nesting sites for ground-nesting birds.

It is important to ensure that the banks are free of aggressive weeds such as blackberry (brambles). Pulling drain banks off (See soils > Drains) and dragging them to gateways, around water troughs and into hollows helps. Applying optimum fine LimePlus in pastures reduces most weeds.

A scarecrow made by hanging a sack or large paper bag over a garden shovel or fork, stuck in the ground, can keep birds away from seeds. A cap improves it. Move it every few days and change its clothes occasionally.



Broad Beans

These can be grown all year except in snow in a mix of soil and compost 40 cm deep with adequate LimePlus at 4 kg per m² and Gafsa fertiliser mix at 1 kg per m² as given to maize described below, and see Forage Crops > Maize.

We grow broad beans all year and use their leaves in smoothies, and freeze the beans, so eat them all year. We have kept seeds from the best for nine years. Wild bumble bees pollinate them. If flowers don't turn into beans, nip the tops off some which will then stop growing, but their beans will set.

Broad beans are the best green manure plants I know of with lots of nodules and vegetation.



Butternut Squashes

These are a large pear shaped delicious pumpkin type, with a yellowy cream-coloured skin as shown. Fifty two were grown from five plants in our flower garden, even up a Lacebark shrub, with Impatiens (Busy Lizzie's) and reinforcing steel mesh. After harvesting, the winter perennial flowers grew again.

When cut open, you'll see bright orange-coloured flesh that is, as its colour suggests, rich in carotenoids like beta-carotene, an antioxidant that turns into vitamin A in your body. Just a quarter of a cup provides your daily requirement. Butternuts contain a lot of vitamin K1 (not K2), along with vitamin C, vitamin E, B vitamins, calcium, potassium, and magnesium. They even contain plant-based omega-3 fats.

There's a good reason to make butternut squash part of your diet. Eating deep-orange-coloured fruits and vegetables reduces the risk of coronary heart disease.

A beta-carotene-rich diet may also help protect against prostate cancer and is also associated with a lower risk of colon cancer. A deficiency in vitamin A can cause your eye's photoreceptors to deteriorate, which leads to vision problems. This is why eating foods rich in beta-carotene may help restore vision.



Butternut squash also contain phytonutrients called cucurbitacins, which have anti-viral, anti-bacterial, and anti-inflammatory properties, along with anti-cancer properties, according to the George Mateljan Foundation.

A benefit of butternuts are their long shelf life, thanks to their thick skin. You can store them for a year, provided you keep them in a cool room out of direct sunlight.

While long storage times are known to decrease the nutritional quality in produce, in the case of butternut squash the carotenoids continue to increase for the first two months of storage.

Carrots

Carrots are a good source of vitamin K (13% DV) and vitamin B6 (11% DV). Like beetroot, their leaves are more nutritious than their roots, so use them in smoothies.

Carrots that have to force their way through compacted or rocky soil will split and be short and malformed. Carrots may also become stunted or deformed when they are planted too closely together.

They must not be grown in over fertile soils, but need well worked deep soil with good organic levels and plenty of water.

They need low levels of nitrogen, moderate phosphate and high levels potash and adequate OrganiBOR which is a slow release boron. Rich highly fertile soils should be avoided, as these will cause the roots to become hairy and miss-shapen. Keep the soils moist.

Carrot seeds take weeks to germinate during which time they need to be watered several times a day. They take three to four months to mature. They grow best in full sun, but tolerate some shade. The optimum growth temperature is between 16 and 21 °C. The ideal soil has fine pumice or sand, is deep, loose and well-drained.

Cats & Small Dogs

These can be kept in or out with an electrified cat stop. Cats can be a nuisance in gardens when they urinate and kill patches of the lawn and mess in dug up soil.

The smallest mains energiser (charger) and a two wire fence can keep yours in or others out. Power should come through a timer to switch it on at night and off in the morning so that children don't get a shock during the day. Modern energizers are 99.9999999% safe. The shock that a safe energiser emits lasts only 0.0003 seconds, every second. Being shorter than a heart beat, makes it safe under normal conditions. If unsure see the Fencing PDFs and search for Safe. If they weren't safe there'd be dead animals all over farms. People were killed in Japan when standing in water and touched by a home made electric fence wire.

Cat Fence

These polywires are about 20 cm apart and about 5 cm above the ground. They were orange and white as shown, but are now both white for better visibility at night and day. Originally there were three wires, but two do just as well and are easier to step over.

Warning signs should be displayed every 30 metres or as required by your law. Cars can drive over the polywires. If cars have low mud flaps they should drive slowly so the polywire doesn't spring up and get caught and dragged by them.

Two steel rods (wrapped in white paper for this photo) or 15 cm long nails in the ground or concrete on a very slight angle towards the fence hold the 2 cm thick timber which holds the two insulators. If a car mud flap or someone catches their feet in the wires the angle of the rods allows the plank to come up and off.



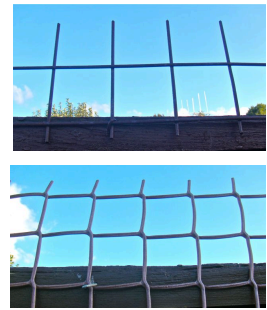
The energiser is in our garage, which has a window in the top of the door into the house passage, so as we pass and when going to bed, we can check that the garage doors are closed and the fence is going with a green flash, meaning no shorts. Double insulated cable goes overhead and down to the cat stop.

This is the other end. Screw-in insulators are set in concrete,

There is zero voltage on the galvanised one metre deep earth stake which is in a damp area of the garden, and joins are clamped or well tied to avoid sparks, so we get no clicks on the phone or radio. Some brands of energizers cause clicks.



Wooden fences that cats can jump over will need about 20 cm (8 inch) high concrete reinforcing steel or plastic mesh with 5 cm square holes, stapled to the top.



If a cat does come in, and two have over the three years our fence has been up, chase them growling with your hands waving high in the air to look bigger. They don't come back, partly because they don't like being in a confined area. All products should be available from your local farm store.

Brief Safety Rules

- Everyone with pacemakers should keep away from electric fences.
- Children and those incapable of a normal response should be warned to keep away from all electric fences. Demonstrate the shock to children and visitors by using a long piece of grass to touch a live wire.
- No one should climb through an electric fence.
- Barbed wire should never be electrified or even be used in a fence with electrified wires.
- Don't string galvanised wires across lanes or thoroughfares without marking them clearly. Motor cyclists have been injured through not seeing them. Use Spring Gates or white tape.

Citrus

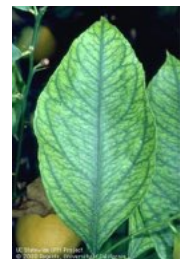
White flies and minute parasites attack hungry citrus trees. Black scum like this can build up on the leaves. They can be sprayed with poisons, but who wants to do that, and why do it, when dusting the trees twice or more a year with fine dry agricultural lime onto their moistened leaves does a better job. Throw the lime upwards all round the trees to get it under the leaves, or spray on liquid calciums like Plexacal (calcium & boron) from Hortigro Ltd, 164 Manukau Rd, Pukekohe 2120. 09-237-1777. Glynn Douglas, 021-273- 0473. They have good products and a wide knowledge of safe chemicals, for instance they recommend acidifying water that is used for some sprays to improve the effectiveness and improve its lasting strength. Apparently some products can lose effectiveness in hours if not in slightly acid water.



These are magnesium deficient.



and iron deficient >.



Another way to identify the requirements buy the Yates Garden Problem Solver book stationer and to grow a citrus tree. They are deficiencies and their leaves show the book so you'll know what to apply. Also do your own trials with different fertilisers and use plenty of compost and animal manure such as sheep pellets which can be bought. These are iron and magnesium deficient.

that your garden has is to from a garden centre or very sensitive to symptoms of deficiencies as described in the

Cultivation

See Soils > Cultivation. Stainless steel forks and shovels are much easier to dig with because the friction and effort are a fraction of rusty steel. You'll have to use both to believe the difference. A hand held chisel with three prongs is excellent and fast for surface cultivation.

Fence with brushwood for privacy

These are easy to erect and cost \$50 for three metres of heavy grade and less for a lighter grade. There is no painting. Ours ten years old are still fine. This new one now has flaxes and small shrubs in front of it.



Fertilisers & Lime

See Elements and Calcium (Lime) in particular. The tomato photos in it show that they need lots of lime to grow without wilting in hot dry weather and without blight. If the soil has not had lime for two years, or

if earthworms are rare, sluggish or if they have soil stuck to them (calcium deficiency signs), before digging the soil over, apply 6 kg of fine agricultural lime per 10 m² (3.3 by 3.3 metres) and mix it in thoroughly to 25 cm.

In New Zealand's high rainfall areas, acidity is a problem that applying adequate LimePlus helps overcome, but don't overdo it. Once too much of anything is applied, it can't be removed.

Don't apply phosphate fertiliser at the same time as lime because P needs acidity to become available. Mix it in a few days or weeks, later.

No one and no test can tell you **exactly** how much fertiliser and lime you need, so always do comparative trials by applying different amounts in rows of plants until you know how much is needed.

Also do compost and no compost, deep digging and 'no till' which the promoters claim saves costs by just scratching the surface and sowing, which I can assure you may work once, and certainly won't long term. Chisel ploughing to bring up some subsoil gives major improvements with many crops. So do the same when digging your garden. It will deepen your topsoil and bring up minerals that have been farmed out of the top 15 to 20 cm.

Pests

Blitzem Ant Flea and Tick Killer is a fine sand in a spreader which is what we have used to get rid of ants. Open the slide so the smallest amount comes out and spread over them. As always you will have to do this several times. If in the wall of your house drill a hole at about 45 degree angle downwards and use a small funnel in the hole to guide the Blitzem sand in. Muscle testing showed that I was not allergic to it, but I treat it as a poison. A previous plain fine sand was not effective. Farmlands Ltd have Blitzem.

For information Google for Ant poisons. Safe ways are to dig up the ant nests and break them up.

Cockroaches and snails are a nuisance, especially when the former come under doors into the house. Trays placed upside down on top of shrubs, or anywhere in the garden, attract them from where they can be dropped onto the lawn and squashed, or snails killed and given to birds. This tray, over a Pittosporum shrub, caught 50 snails and two cockroaches over six months.



Insects Control

No chemical or insecticides sprays have been used in our vegetable garden or plants.

Slugs and snails are the hardest things to control. They don't like crawling over a mulch of lawn clippings which we place around all plants in exposed soils, but poisoning them seems the only way. We place one Baysol pellet in a small lid about every 50 cm around susceptible plants. If rain is due we place a larger lid over it on an angle so slugs can still get in. Those not eaten are moved somewhere else.

In flower gardens and lawns I just drop one every 50 cm.

They kill slugs and snails. Control suggestions are welcome please.

White flies (which spread blight) and moths, don't like the smell of the old smelly marigolds, but don't now. Snails come out at night so we put out tins that they go into and in the morning we empty them in the middle of a concrete area for the thrushes.

Ants make nests in gardens and move around a lot. They feed off midges in plants.

Some people think that seeing ants inside the home is normal. Well, you better think again!

"Over 10,000 people seek medical attention for ants' stings each year, according to Oregon Department of Agriculture". Theirs are bigger than in New Zealand.

Fire ants mostly in Texas are aggressive and will repeatedly sting anything that disturbs them. Characteristics of a sting include intense burning and itching which usually subsides within an hour. However, the itching and sickness may return periodically over the next few days. Within the next 4 hours, a blister forms at the site of a sting. A white pustule forms in a day or so. Treatment is aimed at preventing secondary bacterial infection, which occurs easily if the pustule is scratched or broken. I was bitten in Texas grass and felt faint for days. See Fire Ants in Ants in Pests in Soils & Plants.

Treat all toxins with care, wash your hands and or shower after use, and store them high in closed cupboards, well away from children access.

Kumura

Plants can be bought in slip form. Soak them in water for at least two hours before planting which must be shallow and horizontal in shallowly cultivated fertile sandy soil over firm soil 35 cm apart, with only the leaves exposed. Water three times a day for at least three days, unless raining. Ridge them to discourage leaf growth. Lift the leaves frequently. They take four months to harvesting. After harvesting leave them on the soil for a few days to dry.

Native trees

This eight metre high Kauri we planted in our vegetable garden is 11 years old, showing how fast native trees can grow if in deep topsoil (this is 60 cm deep), limed, fertilised and watered as done to our vegetable garden.



Organics

New Zealand is a young country geologically, has poor volcanic soils, pumice and peat, and almost no alluvial soils that are naturally more fertile. Our high rainfall aggravates the problem by leaching.

Good animal farmers fertilise pastures with all deficient elements based on a ryegrass leaf analysis from Hill Laboratories, 1 Clyde St, Hamilton, for Phosphorus (P), Calcium (Ca), Magnesium (Mg), Potassium (K), Sodium (Na), Boron (B), Manganese (Mn), Iron (Fe), Copper (Cu), Cobalt (Co), Sodium (Na) and many feed them iodine to keep their animals healthy. Don't fertilise with iodine because it is highly water soluble, so leeches very quickly which makes it a waste on money.

Commercial vegetable growers are not rewarded for applying trace elements so don't, so human health suffers and some people have to take magnesium to avoid osteoporosis, cramps and migraines, zinc to strengthen nails, selenium with vitamin E to strengthen muscles to cure sore necks, and three Pure boron tablets a day. The only toxin free one I know of.

Organically grown vegetables have a higher dry matter content (less water) and a lot more good minerals so you get more for your money. A UK survey showed that the mineral content of conventional vegetables had "dropped dramatically since 1940". Below is Rutgers University, New Jersey, and USA Soil Society figures showing how much better organic ones are. The **conventionally grown ones are in brackets**. Figures are for Phosphorus (P), Calcium (Ca), Magnesium (Mg), Potassium (K), Sodium (Na), Boron (B), Manganese (Mn), Iron (Fe), Copper (Cu), Cobalt (Co). All are essential elements.

| | Organic | | Conventional | | Organic | | Conventional | | Organic | | Conventional | |
|--------|----------|-------|--------------|-------|---------|-------|--------------|-------|---------|-------|--------------|--|
| | SnapBean | | Cabbage | | Lettuce | | Tomato | | Spinach | | | |
| P % | 0.4 | (0.2) | 0.4 | (0.2) | 0.4 | (0.2) | 0.4 | (0.2) | 0.5 | (0.3) | | |
| Ca % | 4 | (2) | 6 | (2) | 7 | (2) | 2 | (0.5) | 10 | (5) | | |
| Mg % | 6 | (2) | 4 | (2) | 5 | (1) | 6 | (0.4) | 20 | (5) | | |
| K% | 10 | (3) | 15 | (5) | 18 | (5) | 15 | (6) | 26 | (8) | | |
| Na % | 0.9 | (0) | 2 | (1) | 1 | (0) | 0.7 | (0) | 7 | (0) | | |
| B ppm | 73 | (10) | 42 | (7) | 37 | (6) | 36 | (5) | 88 | (12) | | |
| Mn ppm | 60 | (2) | 13 | (2) | 169 | (1) | 68 | (10) | 117 | (1) | | |
| Fe ppm | 227 | (10) | 94 | (20) | 516 | (9) | 1,938 | (1) | 1,584 | (19) | | |
| Cu ppm | 69 | (3) | 48 | (0) | 60 | (3) | 53 | (0) | 32 | (1) | | |
| Co ppm | 0.3 | (0) | 0.2 | (0) | 0.2 | (0) | 0.03 | (0) | 0.3 | (0.2) | | |

The figures show that organic vegetables even at twice the price are better value because they contain more than twice the essential elements. The very low non-organic figures for lettuces are likely to be from being grown under hydroponics or force-fed. The figures also show that eating a variety of vegetables supplies a variety of minerals.

Good animal farmers analyse their ryegrass to determine which minerals should be added to their fertilisers. An analyses for 17 elements costs GrazingInfo members NZ\$110 which can be justified in a home garden to then have correctly fertilised health giving vegetables. Another way to identify the requirements your garden has is to buy the Yates Garden Problem Solver book from a garden centre or

stationers and to grow a citrus tree. They are very sensitive to deficiencies and their leaves show the symptoms of deficiencies as described in the book so you'll know what to apply. Also do your own trials with different fertilisers and use plenty of compost and animal manure such as sheep pellets can be bought.

Don't overdo N, P, K. An excess of any one lowers other important elements.

Good animal farmers also analyse cows' urine to correct their mineral levels with fertilisers and by feeding Solminix from DeLaval which has nine sulphate safe minerals, but needs twice as much fine salt with it which brings the price down and has hundreds of minerals. Humans seldom do anything about their own mineral requirements. Read the Human Health Minerals chapters.

Meat eaters get minerals from animals grazed on correctly fertilised pastures and Solminix with salt added to their drinking water. Cobalt is lacking in low organic-matter sandy and pumice soils and in many vegetable growing soils after the organic matter levels drop from years of harvesting crops. Zinc is low in most NZ soils. Some animals thrive without supplements and so do some humans. Human mineral deficiencies can show up in different ways such as poor digestion which then causes poor circulation, cold feet, cold hands, declining memory, cramp, arthritis, osteoporosis, fatigue, split nails, creaking joints, bleeding gums, headaches and pains in necks, legs, feet and joints.

Pests

White Fly

These lay eggs on lots of plants and are discouraged by Marigold plants and a safe salt based spray.

SEAVITA from terry@sea-agra.co.nz

This is a salt and mineral powder that you mix with water. It doesn't dissolve, so has to be kept in suspension by shaking the liquid. It can remain in the spray container for days and then shaken again before spraying.

The excessive salt kills small insects and discourages larger ones, if applied before dark.

Over the years there have been powerful potato blight sprays that have been withdrawn. SEAVITA helps control it, but needs spraying every few days. Grow Heather potatoes and Sweet 100 tomatoes because they are both excellent and if well fed with a little compost for potatoes and lots for tomatoes, organic fertiliser and LimePlus, then don't need spraying for blight. Light green lumps on tomato stems are a sign of needing more LimePlus (Lime with magnesium and deficient minerals).

Neem Oil

It was found after a number of scientific tests that Neem Oil was 50% more effective for control than the chemical controls available at the time. Repeat sprayings are needed, and for bad infestations spray every 3 to 5 days for 4 or 5 times. For continued control a spray every 7-10 days should be about right.

Use the Neem Oil with Rainguard and spray all the foliage till the point of run off. You will not notice any great change in numbers for about a week, after which they will start to disappear.

Powdery Mildew

50% whole milk and water is claimed to control powdery mildew, a grey growth on older plants.

Vaccinate is a spray that makes plants such as Courgettes so healthy that they don't suffer mildew. SEAVITA does the same.

Pests entered New Zealand

Five pests entered New Zealand in 2010, according to Rural News. Many other disasters have entered.

Please read Kiwifruit in: <http://www.biosecurity.govt.nz/pests/kiwifruit-vine-disease>

Another future pest

We all regret the pests that have entered or been brought into NZ with good intentions, but have multiplied in our kind climate, and become a problem.

Some home owners now have Ringneck doves in open dove coates in their gardens, so come and go as they please.

In parts of Africa and Australia there are millions. They learn to follow maize planters and eat the maize

seeds, causing lower maize yields. They know the seeds are about 20 cm apart.

Here it could be twenty or thirty years before they increase to uncontrollable numbers.

They should be forbidden now, and all disposed of now, when it is possible to do so. Some people in the Waikato keep them as pets, so will not want to lose them. Fantail pigeons could replace them and would never become a problem because they are not naturally wild, can't fly far to fend for themselves, and don't go far from their domestic source of food.

A pair become three pairs in one year, which then become 12 pairs.

I warned MAF and the government, but as typical bureaucrats, they ignored it, so in a fifty years time maize growers and some other growers, will have their seedlings eaten. In between times they eat Poa and other plant seeds and green leaves.

Opossum

They were imported from Australia in 1837.

- Possums are native to Australia and are protected there.
- Many trees in Australia have possum defences such as spines, thorns or poisonous leaves - NZ doesn't!
- Possums in Australia have a lot more parasites and more predators, such as snakes.

The gestation period is 18 days, after which they live in their mother's pouch for months. They are a curse in New Zealand because they damage trees.

The left tree was being eaten almost to death by possums. Two years later, after the possums were killed the tree became healthy again as shown on the right.



The Kiwi Conservation Club say that there are about 30 million possums in New Zealand - that's about 7 per person that munch through around 9,000 tonnes of leaves, berries and fruit every night.

In New Zealand, possums have no natural enemies. That is why they increase so rapidly. The possum is not protected in New Zealand, it is a pest doing a lot of damage to the native plants, animals and birds.

Possums were brought to New Zealand to start a fur industry. At the height of the fur trade, trappers killed 20 million possums a year. But that did not make much of a dent in possum numbers. Possum numbers can build up quickly because every female has a baby each year.

People didn't realise the harm possums would cause to the forest and the wildlife, which would be much greater than any value their fur provided!

Possums like to eat the juicy new growth on trees. It is very hard for the tree to grow when all of its new growth is being eaten. In New Zealand forests possums will go back to the same tree night after night, eating the tree to death. They love eating our native trees such as our pohutukawa, rata, totara, kowhai and kohekohe.

Because possums are eating native trees they are eating the food of New Zealand native birds which is tough on birds.

Possums are wreckers. Not only do they eat the homes of native birds, (i.e., the trees), they eat the eggs and chicks of our native birds. What's more they have been known to push kiwi birds out of their burrows so they can have a dry place to sleep!

These pests can also be a problem for farmers. Possums can spread bovine tuberculosis (TB) to cows, beef and deer. If the farmer's animals get tuberculosis they will get a bad cough, and become weak. They may even die. Possums are noisy creatures and can make 22 vocal sounds. They do screeches, grunts, hisses, chatters, zook-zook, squeaks and clicks.

In the 1940s, New Zealand declared war on possums. Millions of dollars have been spent trying to get rid of possums to protect the New Zealand environment from possum destruction.

- DoC staff have also been busy getting rid of possums in New Zealand's national parks and conservation land through baiting and trapping.
- Farmers, conservationists regional councils, land owners and businesses have also been working hard by setting traps and laying bait to kill possums. Some run possum shoots and sell the fur.
- The staff at the Department of Conservation and Landcare have been doing research about possums

to learn the best ways to kill them or stop them from breeding.

Sweet Corn

See Forage Crops > Maize for full information on growing maize. There is a photo of how much better maize grows when LimePlus and complete Reactive Phosphate fertiliser are chisel ploughed in to a depth of about 40 cm. To make the sweet corn taste delicious and to be healthier for you, make sure that there is ample OrganiBOR in the fertiliser, or buy some and mix it in at one level teaspoon per m². Maize needs plenty of water. When they are pollinating, spray water over the whole plant daily to get full cobs. When cobs are filled to the tip like the top photo, it shows that moisture, boron, calcium and fertility were adequate. The photo below it shows mainly low boron and low iron. Maize seedlings in gardens are attacked by night low flying insects from other parts of the garden. In maize paddocks the few ground level flying insects cause no noticeable damage. We used to grow them on a one metre high bench, but found it easier to cover them with wire netting frames from garden stores and cover those with damp towels to stop them being blown off. One towel was removed to photograph.



Tomatoes

We like Sweet 100s which grow two metres wide and two metres high and doesn't need spraying for blight - provided it is grown in a composted soil mix 40 cm deep and 60 cm square with a adequate LimePlus mixed in. If the leaves show any signs of wilting (See Elements > Calcium) it means lime was insufficient so give it the water soluble Gypsum (Calcium Sulphate) at half a kg per m² around it and water it in. Growing the old smelly marigolds kept white flies away, but don't now. They spread blight. Cut off blighted leaves as soon as seen and dispose of them.

The cherry 1,000 small tomatoes are softer and sweeter and easy to wash and freeze in small plastic bags, yield that many.

In early January, Southern Hemisphere, cut slips off them and grow them in top quality water and plant them in a fertile soil in a north east sheltered location, and they will yield until June.

When there are too many to eat, wash and dry them and freeze them in small plastic bags.

At the end of the growing season cut off the stems with green tomatoes and hang them up in a warm dry place to ripen on the vines, or mix them with half ripe ones and make chutney.

Brown dry spots on leaves indicate excessive nitrogen.

Tools

This is a Dutch hoe which makes weeding easy because it is done standing up and the weeds are left as a mulch. A minor chisel plough is on the right for mixing lime and fertiliser into soils and for deeper weeding. It has a cutter for hoeing out larger weeds. Weeding a garden with a Dutch hoe can be quicker and leaves a mulch, or turn the soil over with a fork.



Sprayers

The Aqua Spray Pressure Sprayer one litre is the best I could find in that size. In the large sizes, the Solo is the best of those I tried. Both nozzle adjustments were better than many others. The round nozzle is better and more versatile than the fan shape.

A two litre pressure sprayer (in four languages) nozzle was dreadful.

Safe organic weed killer

A small scale safe organic weed killer is -

One litre of white vinegar

100 g of table salt

2 drops of liquid detergent.

Heat the vinegar and salt in a pan until the salt is dissolved.

Stir in 2 drops of detergent.

Allow it to cool.

If you use a stainless steel pan that is dirty looking, it will acquire a new look.

The spray is excellent to spot spray and on paths and drives.

In gardens, use a jet spray aimed at the middle of the weed to avoid killing the surrounding plants.

As with all sprays, wash the equipment well because while stainless steel can cope, rubber seals can't, so can rot.

A flame thrower is toxic-free. Fumes from it are nothing compared with other toxins, for example excess mercury from burning oil for electricity, disposed circuit boards, etc. In Norway they don't know how to clean it all up, because it is in everything - soil, water, etc. Always dispose of anything containing mercury through official channels, and don't use the new low-power light bulbs that contain mercury and give a rash if broken. Halogen lights are better. If you have to spray a lot, use air induction nozzles. They reduce drift. See Spraying - Codacide organic spray that makes the sprays spread better over leaves and halves the amount of spray needed.

See Weeds for more on sprayig and Grazeon.