

Rotation

Crop groups grown in the same piece of land should be changed routinely to help avoid soil pest and disease build-up, make best use of fertilizer and build soil fertility. Legumes (e.g. peas, beans) followed by leafy vegetables (e.g. callaloo, pak choi) then fruit or tuber vegetables (tomato, pepper, beet, radish) may be used in this way.

Pests and diseases

Be on the look-out for pests and diseases which will almost certainly attack your plant. They feed on the leaves, making holes, mines or almost completely destroying them. Others eat the fruit or suck sap from plants, causing disease. Check plants once or twice weekly, hand-pick and squash pests. Marigold or garlic plants in the garden will repel some insects and insect-proof screens placed over plants will keep insects away. Natural enemies of insects will destroy many pests. These helpful creatures include spiders, many wasps and others.

Simple pesticides may be made at home. Soaps will kill many soft-body insects e.g. aphids, white flies. Use 2-3 tablespoons (15-30 ml) of liquid soap per 4 litres water. Garlic and onion, properly blended, filtered and sprayed on the plants will also repel some insects.

Where all these fail, a pesticide may be needed. Correctly identify the problem before treatment.

Pesticide use precautions

Pesticides are poisons and must be handled with extreme care. Always read and follow label instructions before use. If in doubt, contact your RADA extension officer.

Weeds

Weeds in your garden rob the plants of food and water so remove them as early as possible. Do this by pulling or using a machete, hoe or garden fork. This is best done before they set seeds.

Harvesting

Most vegetables are ready for harvest within three months. Callaloo, lettuce, cucumber, radish may be reaped after about six weeks; tomato, pepper, red peas require three months.

Container gardening

If you have very little space e.g. in an apartment, you may plant in containers such as old pots, car tyres, flower pots or metal drums cut in half. A loamy, free-draining soil is best for containers. Otherwise three parts clay or sandy soil may be mixed with two parts organic matter. Place containers in a fully sunlit area and follow growing practices mentioned above.



*For more information on the European Union Food Facility, please visit their website at www.fao.org/europeanunion
In Jamaica, contact the EUFF Project Manager,
Akhter Hamid at akhter.hamid@fao.org or (876) 927 9162.*

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Grow what we eat • Eat what we grow

BACKYARD GARDENING TIPS



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Benefits of backyard gardening

With the high prices and generally unstable food supply situation now facing Jamaica, gardens will help citizens to supplement their diet. Short-term vegetables, condiments and herbs are particularly suited to ongoing production in backyard gardens.

They supply energy, vitamins and minerals essential to good nutrition as well as the exotic flavours characteristic of Jamaican foods. Backyard gardening also brings savings, exercise, a greater appreciation for nature and the satisfaction of knowing that you grow your own food.

Getting ready to start your garden

An area that receives sunlight at least six hours per day is best.

1. Clear the land of stones, tins, etc., leaving a free area in which to grow crops.
2. Fork the soil to a depth of 25-30 cm (10–12 in) breaking up large particles.
3. Add manure and compost where available. This is most important for sandy or clay soils.
4. Make raised beds 90 cm (3 ft) wide and 20–30 cm (8–12 in) high.
5. Protect the area from animals e.g. with a fence.

Crops to grow

Some nutritious foods which are easy to grow are callao, pak choi, beans, cucumbers, okra, corn, carrot, tomato and cabbage. Sweet potato will also grow easily but requires more space. If you are a beginner, start with only two or three crops until you become accustomed to operating a garden.



Growing seedlings

Sow the seeds in a seed-box or commercial seedling tray. For a seed-box, sand, loamy soil, manure, coir (optional), straw, small stones and a box or similar container with drainage holes at the bottom are needed.

1. Mix together 1 part sand, 2 parts clean loamy soil, 1 part well broken down farmyard manure and 1 part coir dust. Alternatively, commercially prepared potting mix may be used by itself.
2. Put small stones over holes in container and straw over stones so soil will not fall out.
3. Fill box with soil mixture or potting mix.
4. To kill pests and some disease organisms, pour boiling water on the soil to soak it properly. Most commercial potting mixtures are already sterilized.
5. After the soil has cooled and drained, level the seedbed and make rows 8 cm (3 in) apart.
6. Sow seeds singly in rows and cover to a depth of 0.5-1 cm (1/4-1/2 in).
7. Water lightly, cover with plastic to retain moisture, place box in a cool area and check daily for sprouting.
8. When the first two true leaves open fully, water with a fertilizer starter solution and at 3-day intervals after.

Commercial seedling trays are inexpensive, very convenient and used as above. You could also fill the tray with potting mix; plant a single seed in a hole sunk in the middle of each cell.

Transplant seedlings when they reach 10-15 cm (4-6 in) tall.



Fertilizing and watering

Plants need fertile soil to produce properly. Well broken down manures should be mixed into the soil at least 3 weeks before planting. Use 1 kg (2 lb) chicken manure or 4 kg (8 lb) cattle/goat manure per square metre of beds.

Compost: Compost is a dark, crumbly, soil-like material produced from organic material (e.g. animal manures, lawn clippings, kitchen wastes). Compost is made by arranging alternate 15–30 cm (6-12 in) lightly moistened layers of organic material and 3-5 cm (1–2 in) of soil in a pile or compost bin at least 1 m (1yd) and any length. The pile is turned at 3-week intervals to mix layers together. After 5-8 months, compost is produced and ready to be added to the soil.

Fertilizer: Inorganic fertilizers provide plant nutrients. The three major nutrients: nitrogen (N), phosphate (P) and potash (K), are often sold in different mixtures/grades of these macro-nutrients: 11-22-22 grade has 11% nitrogen, 22% phosphate and 22% potash. Fertilizers may be placed in moist soil before planting or around the base of plants. They should not come in direct contact with the plant and must be covered to prevent loss.

Water: Vegetables need a regular supply of water but, over-watering suffocates roots causing disease and death. A layer of dried grass 5-10 cm (2-4 in) thick, or black plastic over the bed will retain soil moisture and keep down weeds.

Rainwater collected from roofs or grey water will help save on domestic water. Grey water is all the non-toilet wastewater including the water from bathtubs, showers, sinks, washing machines and dishwashers. A good rule-of-thumb for deciding how much gray water to use on your garden is that a square foot of well-drained, loamy soil can handle about a half gallon of gray water per week.

Spacing

Vegetables need adequate space to develop properly and prevent conditions for disease build-up. Follow recommended distances listed on commercial seed packets.

Crops such as tomato and cucumbers are supported using stakes or trellises. This saves on ground space, helps fruit quality and reduces disease conditions within the crop canopy.