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Organic Agriculture Program and Regional Agricultural & Fisheries Information Section (RAFIS)

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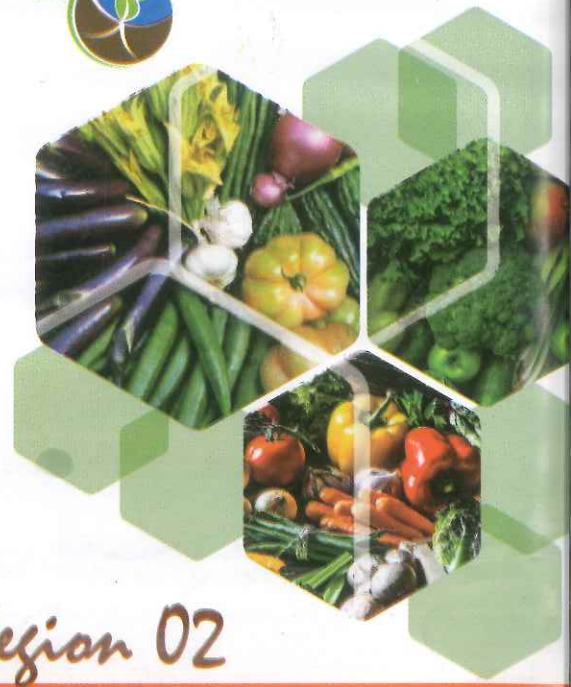
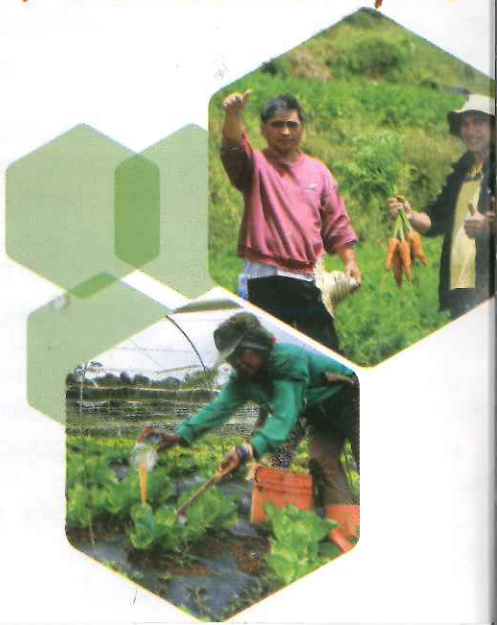


Region 02
Organic Vegetable
Production Guide



Production of Organic Vegetables

The huge volume of organic waste which can be converted into valuable input, the use of indigenous microorganisms and effective microorganism, and the exploration of plants with pesticidal properties together make possible the production of organic vegetables.

Vegetables play a very important role in human nutrition. However, successful and profitable production is threatened by high pest and diseases incidence that often redounds to indiscriminate use of pesticides. Moreover, pesticides and chemical fertilizers are dangerous to human health and are frequently associated with the occurrence of dreadful diseases in man. Their use causes soil acidity and water pollution.

Organic agriculture and organic vegetable production are anchored on four principles; health, ecology, fairness, and care. Organic vegetable production can thus be an important innovation to combat malnutrition and provide a safe source of vegetables for the populace.

Production of Organic Vegetables

Organic vegetables are produced without the use of synthetically-based inputs such as chemical fertilizers and pesticides.

Compost and other animal manures can be used as fertilizer in the form of compost and manure tea. To prepare manure tea, soak 32 kg of animal manure in 120 L of water. Place the manure in a sack and soak in water. Water will penetrate and diffuse the solution out of the sack. Incubate for 1 week to 1 month.

After a week, nitrogen in the solution ranges from 300 ppm to 400 ppm and after a month, 800 ppm to more than 1000 ppm. Dilute the tea to about 75 ppm to 100 ppm and use it to drench the leafy/green vegetables at 1 L/week. For fruit vegetables, dilute the tea to about 100 ppm to 180 ppm (lower rate is used if the plants are still young) and drench at the rate of 1 L-1.5 L/hill per week.

Botanical Pesticide Preparation

You can use the following plants as bio-pesticide to control insect pests: 'oregano' (leaves); mint (leaves); hot pepper fruit, Capsicum annum ('siling labuyo', fruits); marigold Tagetes erecta (leaves and flower), Euphorbia Euphorbia sp. (stem and leaves) fire plant, Lantana camara (leaves and flower); 'luyang dilaw' (tuber); and Jatropha (leaves).

To prepare botanical pesticides, weigh and chop 1 kg of the material to be used. Add 2 L distilled water before blending in a blender. Ferment the solution for 24 hours. Squeeze off the solid particles in a fine cloth. To be more effective, prepare the extract a day before spraying. With a snapsack sprayer, spray the extracts to run-off on plants at weekly interval. Dilute 4 cups of the extracts in 16 L to produce one spray load of solution.

In combination with the botanical insecticides, use other methods of pest management, such as use of biological control (parasitoid) and trapping (sticky traps).