

# Gardening 101 (condensed from Victory Gardens, SD. Regional Garden Education Center)

## Lesson 1

### Introduction and Basics of Organics

#### Learning objectives

1. Define organic gardening principles
2. Distinguish between organic and conventional gardening practices

#### Organic Gardening

Defined by US dept. of Food and Agriculture: A production system that avoids or largely excludes the use of:

Synthetically compounded fertilizers,

Pesticides,

Growth regulators, and

Livestock feed additives.

Organic gardening is defined primarily as not using synthetic chemicals. Organic gardeners give careful attention and thought to create healthy soil and encourage positive natural interactions among a diversity of species. E.g. using crop rotation technique. The goal in organic gardening is to create soil rich in nutrients and a garden structure that fosters disease prevention. In organic gardening, problems are treated, but the primary aim is to prevent them from occurring in the first place.

Farmers and gardeners that follow organic practices without getting certification often refer to their practices as no-spray or chemical-free. Flowers and plants can be grown with the main crop to prevent bugs and diseases.

#### Activity 1

As a class, brainstorm substances of all kinds that might be added to a garden.  
Is the substance organic or not?

#### Why are chemical fertilizers bad?

- they do not contain any trace minerals/micro nutrients. After a few years the soil has been depleted from those elements. Overtime those elements are not contained in the fruits or in the vegetables anymore diminishing their quality.
- Chemical fertilizers are used together with chemical pesticides, herbicides and fungicides. Use of chemicals have a negative impact on the soil, the water as well as the crop as the vegetables, for instance, still contain chemical traces which are then absorbed upon eating
- Chemical fertilizers kill microorganisms which in turn will make the soil useless where

nothing can grow

- Chemical fertilizers and pesticides are responsible for water contamination. For excessive enrichment of ponds, rivers and lakes is due to an overuse of chemical fertilizers
- Usage of chemical fertilizers have a long term effect on the plants, the soil, the environment and you.

## Activity 2

Discuss why organic farming is good for the environment.