Creating a Balanced and Organic Garden

Brief Organic Gardening History

J. I. Rodale-father of Organic gardening

1940's

"Non-Chemical" Approach

No Herbicides

No Synthetic fertilizers

No Petro-chemical pesticides

Crop Rotation

Turning green waste and crop residues back into the soil,(today we use cover crops)

The linkage between Organic Gardening and Biological Control

Robert Van Den Bosch- 1960's

- Understanding the importance of limiting the scope of pesticide use and using biological factors to limit and/or control pests in an agricultural setting.
- An Organic Garden IS NOT pest-free!

Examples of Biological Control

- Vineyards- Roads=Dust= Mites. Solution= Tree breaks
- San Diego Zoo-

  Salt pads for snails instead of bait to protect the plant life and birds
  - Use of parasitic wasps to control larvae
  - Use of fly parasites to eliminate nuisance flies
  - Use of hyperparasite wasps to control outside dwelling cockroaches

Why do we need Organic Food?

- It reduces your body's total toxic burden (a toxic body has to work harder)
- Most of our exposure of herbicides and pesticides are through the food we eat
- Studies show that a switch to an organic diet for 15 days will dramatically reduce the concentration of pesticides in your system
- Many of these products or their inerts are probable cancer causing substances

What are the two age groups most susceptible?

Other Reasons to go Organic

- It’s good for the earth
  - Organic farmers rely of crop rotation, companion planting and natural fertilizers
  - No weed killers, petroleum based Pesticides, and Synthetic Fertilizers
  - A 2000 study showed that agricultural pollution is the largest factor on water quality (LOOK AT LSM)

Other Reasons to go Organic

Organic Food is more nutritious

U of W study showed that organic foods are richer in nutrients and antioxidants

Lower in heavy metals, especially Cadmium a known potential carcinogen

Denmark study shows that good soil nutrients increases production of flavonoids (they fight cancer!)

Most pesticides are petroleum products that are hormone disrupters cause endocrine cancers (breast, uterus, ovaries, prostate)

“Our Big Little Farm” Axiom

Small changes create big results

Diversity reduces risk

Finding Natural solutions are better than Synthetic ones

Even when you believe you’ve reached balance, things can still go wrong

Richer soil may bring healthier plants but may also bring things like snails and slugs

On farms, the introduction of ducks can control the snails and slugs

- **In our garden, when we increased the size of our crops we attracted more moth and butterfly larvae, What did we do?**

The give and take of an organic garden

- The healthier the soil, the healthier the plant, the healthier the plant enables it to bounce back after a “trauma”.
- Organic gardens are never **perfect.** Flowers get eaten, fruit may have imperfections, some vegetables may not survive to be eaten. If you want “perfect” then you have to use the chemicals that “Production Farms” use. You have to pick fruit and vegetables prior to ripening and gas them with ethylene. Things like tomatoes, bananas and pears are just a few products picked early and artificially ripened.
- **Do you notice the taste difference between your home grown tomatoes and the ones bought in the store?**

Things that Help keep Balance

Birdhouses

Earthworms

Healthy Organic Seeds and Seedlings

Curry/Cayenne/DE

Drip Irrigation and Moisture Levels

The Dirty Dozen!

Here's the 2023 'Dirty Dozen'

Here's the full list of the top 12 fruits and vegetables with the most pesticides this year.

1.Strawberries

2.Spinach

3.Kale, collard & mustard greens

4.Peaches

5.Pears

6.Nectarines

7.Apples

8.Grapes

9.Bell & hot peppers

10.Cherries

11.Blueberries

12.Green beans

"More than 90 percent of samples of strawberries, apples, cherries, spinach, nectarines and grapes tested positive for residues of two or more pesticides,"

“The Clean Fifteen”

The ‘Clean Fifteen’ 2023

These are the top 15 produce items with “the lowest amount of pesticide residues”:

1.Avocados

2.Sweet corn

3.Pineapple

4.Onions

5.Papaya

6.Sweet peas (frozen)

7.Asparagus

8.Honeydew melon

9.Kiwi

10.Cabbage

11.Mushrooms

12.Mangoes

13.Sweet potatoes

14.Watermelon

15.Carrots

“Almost 65 percent of Clean Fifteen fruit and vegetable samples had no detectable pesticide residues,” EWG’s report notes.

All samples from the top six produce items on the list didn’t test positive for more than three pesticides. And for avocados and sweet corn, “less than two percent of samples showed any detectable pesticides.”