

“2008”

“Soil Fertility”

Fertility is more than just nutrients such as Nitrogen, Phosphorus, Potash, Calcium & Magnesium.

Fertility includes:

- 1) Organic Matter
- 2) Soil Capacity CEC
- 3) Ability to hold water
- 4) Ability to breath oxygen
- 5) Ability to store excess nutrients

Fertility depends on the microbial activity

- to produce minute nutrients
- to rearrange complexes of nutrients
- to deliver nutrients necessary for healthy plants in the root zones
- to cultivate soil around the roots
- to maintain balance of various forms of life in the soil
- to reduce weeds by eating the seeds

875,000 Arthropods include: Insects, crustaceans (grass hoppers, beetles, crickets), spiders, centipedes and related organisms.

Fertility depends on management:

- 1) Selection of crops for rotation
- 2) Proper use of manures
- 3) Proper levels of nutrients – short changing causes greater demands on other nutrients and the soil life
- 4) Using soil testing to guide in making the right choices.

Organic methods encourage expansion and growth rather than suppression.

Set your goals -

- 1) Work toward these goals one step at a time, learn with each step
- 2) Use all the help available. Determine which best suits you , use those that fit your budget, discard the ones that don't.
- 3) Enjoy your successes – Let the accomplishments motivate you to move on, use them as mile posts in your goal achievements.

Basics of Soil Fertility on Certified Organic Farms

- 1) Composting of manure increases benefits beyond those derived from the raw manures
- 2) Biotech innovations are indented to make the farmer more dependent on outside sources of input. Disregard for rotation has opened the doors to Biotech
- 3) Diversity of crops will increase your chances of success organically – because each specie makes demands peculiar to them – But they also Make valuable contributions. Klaas & Mary Howell Martens
- 4) Failure to observe changes in your soil and crops can be costly in actual money and overall quality.
- 5) When our farmers fail, the effects reach far and wide. Many people actually suffer financially, as well as physically.
- 6) Supplements can help, but are not as efficient as naturally accuring nutrients from proper decaying actions.
- 7) Cover crops have positive effects for the natural – organic farmer so much so, that conventional farmers are now using cover crops.
- 8) Residues can be more valuable plowed down than harvested and sold. Moisture retention, organic matter, food for microbes,
- 9) Get to know your crops before you plant them – know what nutrients are necessary for healthy reproduction.....
- 10) Healthy crops are not a good choice for insects to reproduce.
- 11) Brix Readings – (sugar content) is very important in rejecting insect attacks.
- 12) Cell structure is another consideration in the rejection of insect attacks. Healthy cells have higher levels of solids making them less susceptible to the infectious juices from the insects.