

Quiz 2 Soils Part II and Vermicomposting

Soils Part 2.

1. Maine soils are naturally (acidic / alkaline), and liming soil with calcium carbonate (raises / lowers) soil pH.
2. Gardeners often overlook the soil pH. It is important to know what your soil's pH is for the crops you are growing because:
3. The 3 numbers listed on fertilizer bags stand for _____ _____ and _____. These numbers represent the ___ of that nutrient in the bag.
4. A bag 50-pound bag of Happy Gardener fertilizer is listed as 4-3-3. How many pounds of Phosphorus (P_2O_5) are in the bag?
5. Name a good organic soils source of Nitrogen fertilizer and list the percentage (Hint: the fact sheet from your soils manual from MOFGA will help) of N:
6. How would you collect a soil sample that is a good representative sample from the field/garden you are sampling?

Squirmy Wormy Composting

7. Describe materials you might use to set up a worm bin (bin and bedding materials):
8. What kind of worms should you use in vermicomposting system?
9. Would regular old night crawlers be ok to use in worm composting. Why or why not?

10. What kind of organic feedstock materials would you put into a worm bin for the worms to consume – other than the bedding?

11. How would you know when you have fed too little, just right or too much?

12. How would you know when to harvest your worm compost, and how would you do so?

Answer Sheet - Quiz 2

1. Maine soils are naturally (**acidic** / alkaline), and liming soil with calcium carbonate (**raises** / lowers) soil pH.
2. Gardeners often overlook the soil pH. It is important to know what your soil's pH is for the crops you are growing because:

The pH of the soil effects nutrient availability for crop growth, and if the pH is far outside the desirable range for a crop some nutrients such as Iron or Aluminum may reach toxic levels.

3. The 3 numbers listed on fertilizer bags stand for **Nitrogen**, **Phosphorus** and **Potassium**. These numbers represent the **%** of that nutrient in the bag.
4. A bag 50-pound bag of Happy Gardener fertilizer is listed as 4-3-3. How many pounds of Phosphorus (P_2O_5) are in the bag?

1.5 pounds of P_2O_5

5. Name a good organic soils source of Nitrogen fertilizer and list the percentage (Hint: the fact sheet from your soils manual from MOFGA will help) of N:

Soil Bean Meal	7.24 % N
Cotton Seed Meal	7.6 % N
Blood Meal:	12 % N

6. How would you collect a soil sample that is a good representative sample from the field/garden you are sampling?

Take approximately 12-15 sub samples with a garden trowel randomly from throughout the field or garden; put them in a clean bucket or box. Mix well and then fill your box with this “representative soil sample”.

Squirmy Wormy Composting

7. Describe materials you might use to set up a worm bin (bin and bedding materials):

Peat Moss, shredded paper, sawdust, shavings, chopped leaves, a small handful of soil for grit.

8. What kind of worms should you use in vermicomposting system?
Red Wigglers

9. Would regular old night crawlers be ok to use in worm composting. Why or why not?

No, the organic environment of the bedding and food waste would be too rich, they would thrive in that environment and would do a poor job of composting the food waste.

10. What kind of organic feedstock materials would you put into a worm bin for the worms to consume – other than the bedding?

It is a food waste system only.

11. How would you know when you have fed too little, just right or too much?

Too Little: the worm population would drop

Just Right: They would keep up with the food waste added

Too Much: They would not be able to keep up with the food waste and you run the risk of attracting fruit flies, maggots, etc.

12. How would you know when to harvest your worm compost, and how would you do so?

The bedding material would be rich and dark and well consumed. You would follow the instructions on separating the worms from the compost, store the compost for use on your favorite plants, and put the worms back into the bin with new fresh bedding.