

and are thus more sustainable. The mining of peat is a less sustainable process, as it requires the destruction of vast acres of peat bogs.

In my SARE research project, I collected data on the nitrate-N concentrations of both compost tea and tea produced from compost that has been exposed to the activities of earthworms (earthworm/compost) over time. As is indicated on the graphs that were produced from the collected data and supplied with the final report, nitrate-N concentrations were high during the initiate stages of the research and decreased with time. As compared to the compost tea, the earthworm/compost tea initially contained a very high concentration (1200 ppm) of nitrate-N. Through time, this nitrate-N decreased at a slower rate than nitrate-N content in the tea produced from compost alone. The tea created from compost alone also had nitrate-N concentrations worthy of direct use by growers. Some growers may reason that it is not worth the extra effort associated with the vermiculture aspects of this research. Why not use the compost tea directly? The compost tea analysis on 4/23/02 and 5/7/02 contained high concentrations of nitrate-N. If growers use a compost-based growing mix, then tea collected throughout the research time would more than likely supply adequate levels of nitrate-N to supplement a compost-based growing mix.

In any event, whether a grower produces tea from compost or from an earthworm/compost blend, tea should be collected for a period of time. The collection and storage process will produce a mixture of various concentrations of nitrate-N. This mixture should be kept under cool conditions and used as soon as possible. Prior to its use, the tea should be tested for nutrient content and dilution rates determined based on the recommendations from the University of Massachusetts website listed above.

As relates to the unsustained spike in the nitrate-N levels on 6/4/02, I reviewed both the analysis data and my field notes. The nitrate-N level numbers are the same as I received from the lab. My field notes do not indicate any abnormalities or other suspicions that might lead to a hypothesis about this spike. I would not totally stake my reputation on the consistent validity of the testing services but I recognize that all human activity has unintended consequences.

After review of my field notes, the only event that might explain the drop in nitrate-N levels at the 7/31 and 8/15 sampling is the fact that the drip at the tea collection pipe- as mentioned in the report- dried the control compost to a point that bio-activity in the bin decreased due to the reduction of moisture. To confirm this hypothesis, further research is needed.

There are many questions generated with ever research project. If I so desired, I could research this topic for the rest of my life.