

### Fact Sheet: How to Use Plant Fertilizer to Imitate Agricultural Runoff

As you know from your reading, agricultural runoff is not just chemical fertilizer. It may also include animal manure, a rich, natural fertilizer. In your experiment, you will use a fertilizer that contains many of the nutrients in both kinds of runoff.

1. How rich in nutrients should the imitation agricultural runoff be? Here are the facts:
  - The recommended dose is 2.5 ml ( $\frac{1}{2}$  tsp) of fertilizer to 2 liters (2 qt) of water.
  - In some areas, about 10 times the recommended dose washes into the water system. This means you would add 25 ml (5 tsp) of fertilizer to 2 liters (2 qt) of water.
2. Now that you know the facts, discuss with your group how to set up your own experiment.
  - Decide how much fertilizer you will use.
  - Figure out how much fertilizer you will add each time to make sure the runoff enters the aquatic ecosystem. Remember that you should use about the same number of dropperfuls of water that the class has been using throughout the unit to water your ecocolumn.
  - Decide how often you will create runoff. Water the ecocolumn as often as the class did before. Remember, you don't want to overwater your terrarium.
  - Set up a recordkeeping system in order to keep track of this information on a daily basis (for example, a chart, calendar, or diagram).