Indigenous Micro-organisms

The following recipes have been developed for hundreds of years by the farmers of Asia, particularly Korea and Japan. They have been used, successfully to increase soil fertility and to accelerate biological activity in compost.

Forest Micro-organisms

Locate a healthy forested area near you, the closer the better. Look for a healthy robust tree with a lot of humus litter around it's base. This will be where you will collect the most healthy colony of micro-organisms.

Prepare enough rice to fill a shallow plastic container half full. Dig into the duff beneath the selected tree and place the container in the hole. Put a lid on the container, leaving it loose enough that air can pass into the container. If there is a lot of rodent activity then surround the container with a metal mesh to keep them out. Leave the container buried for 2 – 10 days, depending on temperature. If the rice is covered with colored mold, the collection has been successful.

Next add molasses at 1/3 the volume of the cooked rice and let set for one week. After a week the rice/molasses mixture will look like liquid, sticky rice. Then add an equal part by volume more molasses and store in a cool place to arrest microbial activity. When you are ready to use this concoction strain it to keep out the solids and then mix the strained serum with twenty parts water.
The diluted liquid can be sprayed onto the plants, soil, and compost to inoculate them.

Meadow Micro-organisms

Locate a healthy meadow near your farm and under the healthiest plants place the plastic container and follow the instructions for Forest Micro-organisms.

Lacto Bacilli

The Lacto Bacilli organism is very useful in arresting odor in composting; the bacteria thrive on the ammonia released in the decomposition process. Spraying a dilute solution of Lacto Bacilli serum on soil and plants increases growth and health of the plants.

Pour water used to rinse rice into a container with a lid. Leave 50 – 75% air space in the container. The lid should be loose to allow air flow. Place the container in a cool area with no direct sunlight for 5 – 7 days. Lactic acid bacteria will gather on the water when the temperature is between 70 and 75 degrees Fahrenheit. Once you see a thin sour smelling film formed on the water surface, strain the liquid into a larger container and add 10 parts milk. The milk will eliminate other bacteria that will have contaminated the rice water. In an additional 5-7 days the carbohydrates, protein, and fats will coagulate and float on a clear yellow liquid serum that contains the Lacto Bacilli. Separate the serum into another container and add an equal amount by volume of molasses. The molasses will keep the bacilli alive at room temperature. Store this pure culture in a refrigerator until ready to use.

To use mix 20 parts water and spray on plants, to fortify phyllosphere microbes, as well as on compost and soil.

A combination of 50% Lacto Bacilli and the remaining 50% of other micro organism is a very effective inoculants spray for plants and soil.