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## Soil Microorganisms from Compost Tea

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Eric Broberg, heading to Latin America with the Peace Corps, wrote to us: "I found the article on 'Multiplication and Use of Soil Microorganisms' in the January 2011 EDN (Issue 110) to be interesting yet glaringly absent was any mention of compost tea, especially since Dr. Elaine Ingham is referenced at the beginning of the article. I recently had the privilege of attending a two-day workshop on compost and compost tea given by Ian Davidson of Biologic Systems, USA, who is a protégé of Dr. Ingham.

"Compost tea is created aerobically and multiplies the vast diversity of microorganisms in the soil foodweb including bacteria, fungi, protozoa, microarthropods, nematodes, etc. EM is created anaerobically and does not nearly contain this diversity. Ian believes that it offers only a fraction of the benefits of compost tea.

"There are two kinds of compost tea, a compost extract and an actively aerated compost extract. The extract is a very simple method that would be appropriate to rural areas in the nonindustrialized world. It consists of putting some high-quality compost, worm castings, and/or native humus into a 'tea bag' (old shirt, nylon stocking, etc), and submerging this in a bucket or a barrel. The bag is then massaged roughly in the water for five minutes, to knock off the microbes. The bag is taken out and food for the microbes is added, such as fish hydrolysate, a proteinaceous product easily made from fish that feeds not only bacteria...but fungi as well. The whole concoction is then immediately applied as a root drench or foliar spray.

"More equipment, namely some kind of air pump, is needed to make an actively aerated compost tea 'brew.' The main benefit of doing this is that it activates the microorganisms to create a 'slime layer' that helps them stick on leaf surfaces when applied as a foliar spray.

"It seems to me that compost tea, when combined with the knowledge base of the 'Soil Food Web approach,' is the future of sustainable agriculture. The science is being done very thoroughly by Dr. Ingham and company. Take note!"