

EM balls - a flood hoax?



An interesting development in Thailand's ongoing crisis is the distribution of "EM balls" to deal with stagnant and noxious flood waters. As *The Nation* [reports](#):

Business operators in Ratchaprasong area will lead an effort to help flood victims, with the project to produce 100,000 EM balls. ... The EM balls will be distributed by Thai Health Foundation. The needy can take home no more than 30 balls (with own boxes).

There was a [twitter report](#) that Yingluck had caused a flurry by placing some of the balls in a monk's alms bowl.

I have some experience with EM. As Tim Forsyth and I wrote in [Forest Guardians, Forest Destroyers](#) about an environmental project in northern Thailand:

In order to redress this [ecological] balance the project promotes a product called EM (Effective Micro-organisms). The product has been developed as part of the Japanese "Kyusei nature farming" system for which the overall objectives is to "save the world and mankind through natural farming methods". According to information from the international

EMTrading web site "Effective Microorganisms...are a group of beneficial microorganisms that jump start healthy microbial processes in the soil-plant ecosystem. The use of the EM culture allows gardeners and farmers to concentrate on building and feeding a healthy micro flora in soil." At the meditation temple in Fang, considerable emphasis is placed on the safety of the EM, with visitors to the demonstration garden urged to drink a glassful. Posters on display at the project state that EM can be used for direct application to plants or it can be used in the production of microbial-based fertiliser. It can also be fed to animals to promote strength and restore health. Various "environmental" uses are also promoted including bathroom and kitchen cleaning **and treatment of wastewater**. The effectiveness of the EM product is demonstrated in a series of gardens in which various vegetables, herbs and flowers are grown. (p. 188)

A *New Mandala* reader has written to me raising doubts about the effectiveness of EM for treating stagnant flood waters:

The King's Chaiphathana Foundation is producing "EM Balls" (mixtures of allegedly benign bacteria) for flood water decontamination, and dozens of charities are now using volunteers to make them instead of sandbags or emergency supply kits. Supposedly, you throw a couple balls into a room full of stagnant floodwater and in a day or two, it cleans it all up. Sort of like eating "good bacteria"-containing yogurt when you've got an upset stomach. Only problem is that even the Japanese scientist who came up with the concept [says](#), "...the main limitation in using microbial inoculants is the problem of reproducibility and lack of consistent results." That sounds suspiciously like something that should appear in the *Annals of Irreproducible Results*. Of course, the Japanese scientist is no match for Thailand's Number One Scientist. I just hope that some officials at the Chaiphathana Foundation actually tested these things out in real flood zones, rather than just follow royal orders.

I am a little less sceptical. As noted above, at the environmental project in Fang visitors were invited to drink a glass of the EM mixture. I did. My bowels worked like a dream for a few days afterwards. Perhaps Yingluck was doing the monk a favour after all!