A REVIEW ON THE APPLICATION AND DEVELOPMENT OF EFFECTIVE MICROORGANISMS (EM) IN WATER POLLUTION CONTROL, WASTE MANAGEMENT, AND AGRICULTURE IMPROVEMENT IN MALAYSIA

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ABSTRACT

Effective Microorganisms (EM), which were originally employed as soil additions in agriculture, are now used in a variety of different applications, including water pollution prevention for both natural waterbodies and facilities such as wastewater treatment plants, as well as domestic waste management. The most compositions of EM are the frequent microorganisms in EM such as lactic acid bacteria and yeasts, a combination of molasses (sugar cane), EM.1 (microbial inoculant), red earth or topsoil, and some of the balls contain Bokashi. Various studies have been undertaken around the world to demonstrate the efficacy of EM since its introduction in the 1970s. The application of EM in Malaysia has just lately been scientifically researched. Aside from researching its usefulness in various ecosystems, numerous studies are being conducted to improve and further develop the technology to meet its potential in the country. This review gathers studies on the application and development of EM in Malaysia with a focus on water pollution control, waste management and agriculture improvement to understand its potential in Malaysian context.

Keywords: *Effective Microorganisms (EM), water pollution control, waste management, and agricultural improvement*

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