SHORT COMMUNICATION

EFFECT OF BIOSIL-DE APPLICATION AT DIFFERENT LEVEL AND TIME ON RICE (*ORIZA SATIVA*) UNDER RAINFED CONDITION OF KYMORE PLATAEU AND SATPURA HILLS OF M.P.

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Abstract: Rice *(Oryza sativa* L.*)* is the most important cereal food crop in the world providing major source of food energy for more than half-human population. About 80% of the rice is produced and consumed in Asia, where rice is the integral part of culture and tradition**.** In India, it is cultivated in 101.7 m ha with production of 117.3 MT and productivity of 1143 kg/ ha (Economic survey of India 2012-13). In Madhya Pradesh, it is cultivated on 1.76 m ha with annual production of 3.02 MT and productivity of 1807 kg/ha (MP, Krishi net, 2012 -13). Low and declining crop response to applied nutrients through chemical fertilizer are the result of continuous nutrient mining, because of indiscriminate use of fertilizers, leading to an imbalance of soil nutrients by 2020. Thus, there is an urgent need to increase the rice production under the deteriorating resource base such as land, labour, water and other inputs. Direct seeded rice cultivation is popular and best alternative of transplanted rice in India. It is practiced nearly in one third of total rice area of the country as transplanting is a labour intensive and costly practice. The natural sources of nutrients such as FYM, vermicompost, green manures and such other organics provide to be a cheapest source of macro as well as micro plant nutrients. They also provide an opportunity to proliferate microbes, hence, create a favorable environment to soil and plants resulted in enhanced the productivity of soil water and crop. In nutrient recycling from such organic sources, the soil microorganisms play an important role within the soil ecosystem.The organic sources of nutrients Viz. FYM, vermicompost, Neem cake, crop residue, poultry manure, spent wash, fly ash etc. are mostly drawn from local resources and developed locally which are easy to handle and proved cheaper to others.

Keywords: Application, Biosil-de, Rice, Yield attributes

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