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Agrohomeopathy: New practice in agriculture from seed germination to field trial

Sandhimita Mondal
Techno India University, India

The extensive use of synthetic nitrogen fertilizer in agriculture is causing environmental problem. In this situation it is desirable to find out suitable agents, which would increase plant growth without compromising with the quality of food and of soil. High level of salinity deteriorates seed germination, growth and yield of crops in cultivated lands. There is no effective remedy to mitigate this global problem. In homeopathy a substance, which produces morbid symptoms at high doses on healthy individuals, ameliorates the disease in a patient showing similar symptoms at ultra low doses. During the last seven years, we have observed that, certain plant growth retardants promote growth of crops at ultrahigh dilutions. Of the substances tested (2-chloroethyl) trimethyl ammonium chloride (CCC) proved most effective in increasing photosynthesis and plant growth. Following the principle of homeopathy, CCC 200CH was prepared by successive dilution followed by succession. The purpose of the present study is to see whether potentized *Natrum mur* could mitigate salt stress in germinating cowpea seeds and to see if plant growth inhibitors serve as growth promoters at their ultra low doses. Water-soaked seeds were kept over moist filter paper in covered petri dishes which were divided into five groups: 1) unstressed and untreated control in sterile distilled water, 2) seeds pretreated with 90% ethanol, 3) seeds pretreated with *Natrum mur* 200CH and then kept in sterile distilled water, 4) in 100mM sodium chloride solution and 5) seeds pretreated with *Natrum mur* 200CH and then transferred to 100mM NaCl solution. Both *Natrum mur* 200 CH and its diluent medium 90% ethanol were diluted with distilled water 1:100 before use for treatment. No fertilizers and pesticides were applied in the plots under experiment. CCC 200CH was used in a field trial at the Rice Research Station, Government of West Bengal, Chinsurah, Hooghly, West Bengal during the wet season. CCC 200CH was diluted with water 1:100 and applied by foliar spray on rice plants 22 days after transplantation. A second treatment was given after 15days. At ultra high dilution the same drug produces the opposite effect promoting growth and yield of the plant tested. Potentized *Natrum mur* can be safely used with profit on plants grown on brackish soil. CCC 200CH significantly increased chlorophyll, protein and sugar in the leaves. It is concluded that CCC 200CH promoted growth and yield in rice varieties tested under natural field condition.

Biography

Sandhimita Mondal has completed her MSc in Microbiology from Calcutta University in 2008 and qualified CSIR-UGC NET in 2009. She has completed her PhD in 2014 from Visva Bharati University (A central University), West Bengal. Now, she is the Head of the Department of Microbiology, Techno India University, Kolkata, West Bengal, India. She has published more than 12 papers on Microbiology, Agrohomeopathy in reputed journals and reviewer of some peer reviewed journals. Now, she is doing a project work on Biofertilizer and use of potentized drugs in the field.

sandhimita@gmail.com

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