

**M.S. SWAMINATHAN RESEARCH FOUNDATION**  
**Project on Sustainable Management of Natural Resources**

**STUDIES ON THE EFFECT OF ORGANIC SUPER SEAWEED AND ORGANIC MICRO BOOST IN RAINFED GROUNDNUT AND MUNG BEAN**

M.S. Swaminathan Research Foundation is running a Project on Sustainable Management of Natural Resources in rainfed alfisols in Ariyamuthupatti village, Annavasal Block, Pudukottai District of Tamil Nadu, India, since January 2001. The main aim of the project is to demonstrate the conservation of natural resources such as rainwater, soil and locally available organic residues for sustainable high productivity of rainfed crops. As a part of the project, **organic Super Seaweed** and organic **Micro Boost**, supplied by Agri Infotech Inc., Salem, New Hampshire., USA, were tested in mung bean and groundnut, respectively, in kharif (June – Sept.) season of 2003 under rainfed conditions. The soil of the test site belongs to the series, Vayalogam, in the order Alfisol. It is highly eroded, devoid of 'A' horizon, low in organic carbon, available nitrogen and phosphorus and medium in available potassium. The soil is highly deficient in zinc. The surface soil has a pH of 5.5. The test variety of mung bean was Vamban 2, maturing in about 65 days. Groundnut variety used was VRI 2, a bunch type, maturing in 105 days. There was a rainfall of 359.8 mm received in 19 rainy days during the cropping season, compared to the 32-year mean of 415.9 mm. The crops did not suffer water stress at any of the critical growth stages. A basal dose of 2.5 tonne of compost, prepared from locally available crop residues and enriched with rock phosphate at 2.5 kg/tonne of compost, *Trichoderma viride*, Rhizobium and Phosphobacteria, was applied basally at the time of last ploughing to both the crops. No chemical fertilizers were applied. Super Seaweed was sprayed at 5 ml per litre of water at the initiation of flowering of mung bean. Micro Boost was sprayed at one ml per litre of water at the peak vegetative stage of groundnut. About 500 litres of spray fluid was used to cover one ha, using a knapsack sprayer. There was an unsprayed control in the nearby plot for comparison. The results of the study are given below:

Crop	Sprayed	Unsprayed	% increase over unsprayed
Mung bean (grain yield, kg/ha)	408	339	16.9
Groundnut (pod yield, kg/ha)	2350	1935	17.7

There was substantial yield increase in both the crops due to spray of the organic materials. From this preliminary study, it appears that there could be substantial benefit in terms of yield and farm income by using the organic materials, Super Seaweed and Micro Boost, in rainfed crops.

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