SCIENTIFIC EXPERIMENTATION OF HOMOEOPATHIC PLANT NUTRIENTS AND PLANT PROTECTORS

MID TERM PROGRESS REPORT

2009-10

Department of Soil Science and Agricultural chemistry.

College of Agriculture

Orissa University of Agriculture and Technology

Bhubaneswar-751003,Orissa

Title	:	Effect of Chemical Fertilizers and Homeo Nutrients on growth and yield of different crops (Rice, Black gram, Sugarcane, Mango and Coconut)
Name of the Scientists	:	**1. Dr. D. Jena (Professor)-PI** **Department of Soil Science and Agricultural Chemistry** **2. Dr. G. H. Santra (Professor)-CO-PI** **Department of Soil Science and Agricultural Chemistry**
Place of Work	:	**Department of Soil Science and Agricultural Chemistry** **Orissa University of Agriculture & Technology,** **Bhubaneswar-751003, Orissa.**
Objective	:	**To study the effect of Homeo Nutrients and Chemical Fertilizers on growth and yield of different crops**

The experiments were conducted during 2009-2010. The treatments were as follows.

T_1= No Manure (Control)

T_2= Recommended dose of fertilizer (RDF)

T_3= Homéo nutrient

T_4= 50% RDF+ Homoeo nutrients

Selection of sites:

The five experiments were conducted on different crops in five places like Bhubaneswar, Phulbani, Gope, Nuagaon and Jalna.

Experiment-1

Title: Effect of homeo nutrients "Aparamurtha" on yield and biometric characters of Black Gram.

Objectives: To study the effect of one homeo nutrient "Aparamurtha" on seed yield and important morphological characters of Blackgram.

Location: Phulbani

22-1-10

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Treatments: T_1=Control

T_2= Recommended dose of fertilizer (RDF) 20:40:20Kg N- P_2O_5-K_2O/ha

T_3= Homeo nutrients spray twice at 20DAS and flowering

T_4= 50% RDF+ Homéo nutrients at 20DAS

Plot Size: 5m X 3m,

Experimental Design- RBD Replication -5

Date of Sowing: 13.08.09,

Seed Rate (Kg/ ha): 25

Fertilizer: All fertilizers were applied at the time of sowing.

Table1: Effect of Homeo nutrient and chemical fertilizer on yield and yield attributing character of Blackgram.

Sl No.	Treatment	Plant Height (cm)	Branches/ Plant	Pods/Plant	Dry-Plant Biomass (Q/ha)	Seed Yield(Q/ha)
T_1.	Control	54.24	5.44	24.64	15.83	5.85
T_2.	RDF	55.40	5.68	25.60	19.60	6.11
T_3.	Homoeo-nutrient (Twice)	52.36	5.76	27.24	16.82	6.68
T_4.	50% RDF+ Homeo nutrient (once)	60.52	5.20	26.44	17.88	6.75
	CV (%)	**7.13**	**12.59**	**7.59**	**7.26**	**12.25**
	C. D.(P=0.05)	**2.44**	**0.43**	**1.22**	**0.78**	**0.48**

Results: Highest seed yield (6.75q ha^{-1}) of Black gram was obtained when half dose of chemical fertilizer was applied along with single dose of homeo nutrient (Table-1). However the seed yield of this treatment was at per with application of homeo nutrients twice. Dry biomass was highest in treatment receiving recommended fertilizer dose. Homeo nutrient was found to have good effect on seed yield of black gram.

Experiment-2

Title	:	**Effect of homeo nutrients "Sasya Syamala" on grain yield of rice.**
Objective	:	**To study the effect of one homeo nutrient "Sasya Syamala" on grain yield and important biometric characters of rice.**
Location	:	**Bhubaneswar**
Technical Programme	:	**Experiment Design-RBD** **No. of Replications-5**

22.1.2010

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T_1=Control

T_2= Recommended dose of fertilizer (RDF) 80:40:40Kg/ha N- P_2O_5-K_2O

T_3= Homeo nutrients spray four times at

(i) After pudding before transplanting.

(ii) 15 Days after transplanting.

(iii) 30 Days after transplanting.

(iv) 60 Days after transplanting.

T_4= 50% RDF+ Homéo nutrient spray (Three times). 15days, 30days and 60 days after transplanting.

.Plot Size: 6m X 5m

Date of Transplanting: 18.08.09

Spacing: 20cmX15cm

Crop Variety: Rice-CV Swarna (MTU7029)

Fertilizer: Rice received full dose of P and K and 25% Nitrogen at transplanting . Rest 50% N and 25% was applied through Urea at tillering and PI stage respectively.

Table2: Effect of Homeo nutrient and chemical fertilizer on Rice yield

Sl No.	Treatment	Mean plant Height (cm)	Mean Panicle Length(cm)	No.of effective tiller /hill.	Grain Yield (t/ha)	Straw yield(t/ha)
T_1.	Control	94.88	20.12	7.00	2.12	5.98
T_2.	RDF	100.91	22.08	8.40	4.44	6.99
T_3.	Homeo nutrients	97.44	2.88	8.16	4.25	6.47
T_4.	50% RDF+ Homeo nutrients(Three times)	103.56	22.36	9.32	4.68	6.96
	C. D.(P=0.05)	**2.3**	**0.37**	**0.54**	**0.20**	**0.39**

Results: Highest grain yield of rice was obtained when half dose of chemical fertilizer was applied along with homeo nutrient. However the grain yield of this treatment was at per with application of four times of homeo nutrient. Straw yield was highest in treatment receiving recommended dose of fertilizer. Homeo nutrient was found to have good effect on grain yield of Rice.

22.1.10

Signature of P.I

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