

**MASTER HOMOEOPATHIC
AGRICULTURAL RESEARCH STATION**

**M.I.G. 95
“PRASAMANI”
OPP.: Z.P. COLONY
SRIKAKULAM - 532001
ANDHRA PRADESH**

SCIENTIFIC STUDIES

***ON
PERFORMANCE OF***

RICE, OTHER CROPS, VEGETABLES & COCONUT ETC.

**WITH
HOMOEOPATHIC NUTRIENTS
IN COMPARISON WITH
CHEMICAL FERTILIZERS**

BY

**G.S.R MURTHI
CHIEF INVESTIGATOR**

&

**Smt. M. BHASKARAM
AGRICULTURAL SCIENTIST**

A PARTLY “CAPART” FUNDED PROJECT



Foreword

The urge to save the withering plants in summer led me to the invention of this new science "**Homoeopathy in Agriculture**". Perhaps the Gods of the Vegetable kingdom have chosen me as a medium. My Master's advise to take this as a life work and to be consistent in this pursuit, had given me the courage to take up this task single handed with no financial back up. However I could do it with their blessings. Of course CAPART had supported to some extent.

As the ultimate aim is the yields, it is imperative to compare with the existing NPK and so in all the experiments the yields under "Homoeo" are compared with "Chemical Fertilizers" and also to "no manure".

The data on crops raised more frequently is compiled & brought in a book form for information of all concerned.

With great difficulty I could compile the data of these 30 years of work, as it may be useful for somebody to continue and establish as a science by itself after 'His' call to me.

Dedicating this to the Gods of Vegetable Kingdom. I remain.

G.S.R. MURTHI.

ACKNOWLEDGEMENT

My sincere and heartfelt thanks to the following friends who had kindled light in me, educated me & guided me in this task. But for them, I could not have accomplished this huge work.

- 1) Dr. K. Kanaka Prasada Rao
- 2) Dr. P.V. Raghava Reddi
- 3) Sri Rami Reddy
- 4) Dr. Sri Rama Murthy
- 5) Dr. M. Venkateswara Rao
- 6) Sri K. Subrahmanyam
- 7) Janab S.A. Khader
- 8) Dr. I. Nageswara Rao
- 9) Dr. Ganesh Babu
- 10) Dr. Hanumantha Rao
- 11) Dr. Sri Rama Murthi
- 12) Dr. Sheik Ismail
- 13) Dr. Sarma
- 14) Dr. P. Rama Mohana Rao
- 15) Sri R.V. Appa Rao
- 16) Smt. G. Satyavathi
- 17) Smt. T. Susila
- 18) Sri N. Rameshbabu
- 19) Dr. P. Hari Prasad
- 20) Dr. N.V. Koteswara Rao

and many more who might have gone out of my memory in this long period of time.

My special thanks and blessings to Mrs. K. Bhaskaram who had sacrificed her comforts all these years in making my work a useful one. But for her, these experiments could not have been carried out & the data collected.

Very lately, I got the best wishes & support to my task from Dr. M.V.Rao to whom I am ever grateful.

My special thanks to Dr. K.Subrahmanyam who had given full support to this science & educated me in Agrl. Science as well.

I may be excused if any name is not cited as it is due to my poor memory but not ingratitude.

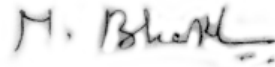
G.S.R. MURTHI.

Master Homoeo Agricultural Research Station

MIG - 95, Opp. Z.P. Colony, Srikakulam
Projects funded by CAPART, New Delhi
(under the ageies of Ministry of Rural Development, Govt. of India)

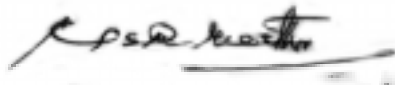
CERTIFICATE

I, M. Bhaskaram, Agricultural Officer, of Master Homoeo Agricultural Research Station, Srikakulam, Certify that the experiments contained herein under MHARS, have been conducted by me and the data shown therein also have been collected by me, and are true to the best of my knowledge.



M. BHASKARAM, Ag.B.Sc.,
Agricultural Officer
Master Homoeo Agricultural Research Station
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∴ Countersigned ∴-



G.S.R. MURTHY
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MASTER HOMOEOPATHIC AGRICULTURAL RESEARCH STATION

PRASAMANI
M.I.G. 95, Opp. : Z.P. COLONY
SRIKAKULAM

Scientific Article on the research carried out with
Homoeo Nutrients in comparison with Chemical Fertilizers on crops

- 1. Vegetables**
 - a) Comparative costs of Fertilizers - HCV costs
 - b) Amaranthus - HCV - 1
 - c) Ridge guard - HCV - 2
 - d) Chillies - HCV - 3
 - e) Cauliflower - HCV - 4
 - f) Brinjal - HCV - 5
 - g) Tomato - HCV - 6
 - h) - HCV - 7
 - i) Baby corn - HCV - 8
 - j) Onion - HCV - 9
 - k) Lady fingers - HCV - 10
 - l) Maize - HCV - 11
 - m) Hybrid Roses - HCF - 1
 - o) Crysanthimum - HCV - 2
- 2. Black Gram** - B.G.
- 3. Ground nut** - G.N.
- 4. Sunflower** - S.F.
- 5. Coconut** - C
- 6. Ganoderma on coconut** - C.G.D.
- 7. Rice** - S.E.
(Years 1987-1997 - 24 Experiments)

SCIENTIFIC ARTICLE

on

**Study on performance & input costs on vegetables & flowering plants
with Homoeo Nutrients Vs Chemical Fertilizers.**

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ABSTRACT

The present investigations were undertaken to study the performance, & input costs on high value low input crops viz, vegetables and flowering plants, with Homoeopathically processed nutrients in comparison with Chemical fertilizers ie. N.P.K.. Homoeo Nutrients have been found to be effective in giving yields “at par” with chemical fertilizers.

Having found positive results with Homoeopathically processed plant nutrients & plant protectors on crops & horticulture incl. Vegetables and flowering plants, a scientific experiment on high value and low input crops like vegetables and flowering plants has been taken up & results recorded.

MATERIALS & METHODS

These experiments were laid in RBD as per standard practice.

- T1 - Absolute control no manure (No. Po Ko)
- T2 - Chemical fertilizers (recommended schedule)
- T3 - Homoeo Nutrients.

All the cultural practices for each crop were followed as per the recommendations of A.N.G.R. A.U.(A.P.) including chemical fertilization. The periodicity of application of Homoeo treatment (H) was as per NPK fertilizer schedule. The method of application of Homoeo Nutrients is that 20 ml of tincture is mixed in 10 lts of water and applied on to the soil. The quantity varies with the age of the plant;

ex:-20 ml of mixture at sowing/transplantation stage, to 50 ml at the end of vegetative stage. In case of broad cast the nutrient mixed water is sprayed or sprinkled on the soil after wetting when the soil is moist @ 150 lts per acre.

No other fertilizer like farm yard manure, bio-fertilizers, compost etc., were applied during the crop period and at harvest, all the biometric observations such as plant height no.of branches, no. of leaves, length of leaves, no.of nodes, inter-nodal distances and yields were taken at an average of 5 plants and the data was recorded. All these details including the yields of 1.44 sqm. plots, equated to one hectare are given in the table, crop wise.

1. Yield Components & yields :

Data pertaining to yield components and yields revealed that in all crops, the yields with homoeo nutrients (T3) when compared to chemical fertilizers (T2) are all “AT PAR”

SUMMARY :

The results reveal that Homoeo nutrients are able to produce yields AT PAR with chemical fertilizers. As Homoeo Nutrients do not have any physical matter since they are potentized to the degree of $1/10^{13}$ (in many cases), the bad effects of physical matter are totally avoided. Thus these Homoeo Nutrients could help in bringing out healthy crops and produces of natural colour, taste & flavour.

As the Homoeo Nutrients are dynamic in nature the pests & diseases do no more find congenial conditions to thrive on and thus helps in bringing healthy crops. This has been found to be true from the observations, and from the need to resort to pesticides.

Application of organic fertilizers would further help in obtaining more yields.

ECONOMICS :

The enclosed chart reveals that the total cost of Nutrition with Homoeo Products, is by far less than chemical fertilizers. This helps the small farmers in using the Nutrients in time and grow vegetables and get good returns, as they are suitable to their low purchasing capacity.



MAIZE
ABSTRACT
Experiment on yields with Homoeo Nutrients in comparison with Chemical Fertilizers

S.No.	Data	Control (no manure) T1				C.F. T2				Homoeo T3			
		R1	R2	R3	A.V.	R1	R2	R3	A.V.	R1	R2	R3	A.V.
1)	Plant Ht.in m	1.18	1.00	0.85	1.01	1.92	1.75	1.39	1.34	1.49	1.47	1.42	1.44
2)	No.of nodes	8	7	7	7.3	11.6	9.4	8.8	9.9	11.2	10.6	8.4	10.1
3)	No.of fruits per plant	2.6	3	2.4	2.7	2.8	2.4	2.6	2.6	3	2.8	2.8	2.9
4)	Yield in Mt/ha.	12.48	8.8	10.4	10.6	16.9	14.3	15.6	18.6	18.5	16.6	17.2	17.4

**MHARS
MAIZE
R - I**

SI No.	DATA	Control (no manure)						C.F.						Homoeo T3					
		1	2	3	4	5	AV	1	2	3	4	5	AV	1	2	3	4	5	AV
1)	Plant Ht. m	1.22	1.31	0.81	1.15	1.35	1.18	1.86	2.17	2.05	1.96	1.56	1.92	1.77	1.91	1.41	0.93	1.42	1.49
2)	No.of Leaves	9	11	8	8	10	10.4	12	14	13	12	12	12.6	12	13	11	12	12	11.8
3)	No.of nodes	8	9	7	7	9	8	11	13	11	12	11	11.6	11	12	11	11	11	11.2
4)	Inter Nodal Length	10.1	10.3	7.5	5	10.2	9.2	11.8	12.3	13.6	11.6	10.3	11.92	11.7	13.2	9.9	12.3	9.3	11.3
5)	Yield / Pl No.of fruits	3	3	2	2	3	2.6	3	3	2	3	3	2.8	3	3	3	3	3	3
6)	Yield /Pl in Kg.	0.54	0.62	0.38	0.33	0.51	0.48	0.66	0.72	0.48	0.69	0.71	0.65	0.74	0.71	0.74	0.69	0.68	0.71
7)	Yield /ha mt.	12.48						16.9						18.46					

**MHARS
MAIZE
R - II**

SI No.	DATA	Control (no manure)						C.F.						Homoeo T3					
		1	2	3	4	5	AV	1	2	3	4	5	AV	1	2	3	4	5	AV
1)	Plant Ht. m	1.1	1.06	1.05	0.9	0.9	1.0	1.91	1.96	1.65	1.72	1.55	1.75	1.59	1.85	1.37	1.07	1.50	1.47
2)	No.of Leaves	9	7	7	8	9	8	11	11	9	12	11	10.8	11	13	12	11	12	11.8
3)	No.of nodes	8	6	6	7	8	7	10	10	8	10	9	9.4	10	11	11	10	11	10.6
4)	Inter Nodal Length	11.01	10.1	9.8	11.05	10.7	10.5	12.3	12.6	15.1	13.1	12.2	13.6	12.2	11.5	9.6	9.8	10.4	10.7
5)	Yield / Pl No. of fruits	3	2	2	3	3	2.6	3	2	3	1	3	2.4	3	3	3	2	3	2.8
6)	Yield /Pl in kg	0.34	0.36	0.35	0.51	0.49	0.34	0.72	0.44	0.70	0.22	0.68	0.55	0.66	0.69	0.65	0.50	.072	0.64
7)	Yield / ha. mt.	8.8						14.3						16.64					

**MHARS
MAIZE
R - III**

Sl No.	DATA	Control (no manure)						C.F.						Homoeo T3					
		1	2	3	4	5	AV	1	2	3	4	5	AV	1	2	3	4	5	AV
1)	Plant Ht.m	0.84	0.91	0.78	0.98	0.72	0.85	1.22	1.42	1.53	1.31	1.46	1.39	1.40	1.33	1.65	1.17	1.56	1.42
2)	No.of Leaves	7	8	6	8	6	7	9	10	11	9	10	9.8	9	9	11	8	10	9.4
3)	No.of nodes	6	7	5	7	5	6	8	9	10	8	9	8.8	8	8	10	7	9	8.4
4)	Inter Nodal Length	9.1	9.4	8.3	8.9	8.2	8.78	11.8	12.1	12.7	11.9	12.3	12.16	12.8	11.9	13.2	12.2	13.8	12.78
5)	Yield / Pl No. of fruits	2	3	2	3	2	2.4	3	3	2	2	3	2.6	3	3	3	2	3	2.8
6)	Yield /pl in kg	0.35	0.51	0.32	0.54	0.33	0.40	0.67	0.59	0.52	0.49	0.72	0.60	0.69	0.68	0.73	0.44	0.74	0.65
7)	Yield / ha. mt.	10.4						15.6						17.2					

**STUDIES ON THE PERFORMANCE OF
BLACK-GRAM UNDER
HOMOEEO NUTRIENTS
IN COMPARISON WITH
CHEMICAL FERTILIZERS**

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ABSTRACT

The present investigations were undertaken to study the performance of black-gram crop under the influence of Homoeopathically processed nutrients in comparison with Chemical Fertilizers. NPK.. Homoeo Nutrients have been found to be effective as the yields of black-gram are found to be “AT PAR” with Chemical Fertilizers or even “significant” in some cases, capitals as can be seen from the recorded results for 3 consecutive years.

Considering the ever increasing losses due to pests and complexity of pests and disease due to Chemical Fertilizers, alternative sources of biological and organic sources have become imperative. Basing on the views expressed by great botanist and a Homeopath Mr.Dorothy shepherd of England, the Homeopathically processed products were developed as nutrients to substitute the Chemicals. A few Homoeo combinations were studied in bulk with promising results, have been selected for the present study.

MATERIAL & METHODS :

Experiments were conducted at Master Homoeo Agricultural Research Station, Srikakulam in their fields at Khajipeta with the financial aid of CAPART., New Delhi.

The experiments were laid out in R.B.D. at per standard practice. The details of plot size, replications, cultivar variety, soil etc. are given in tables 1/1,2/1 & 3/1.

The treatments imposed were

- 1) Absolute control - No manure - T1 (No Po Ko)
- 2) Chemical Fertilizers N.P.K. - T2
as per recommendations of Agrl University AP
- 3) Homoeo Nutrients - 1,2,3, (H1, H2, H3-T3)-T3,4,5

All the Cultural practices of the black-gram crop were followed as per the recommendations of Agricultural University of Andhra Pradesh. The Chemical Fertilizers were applied as per the recommendations of the University. The method of application of Homoeo Nutrients is that 30 ml. of tincture is added to 10 Lts. of water and the mixture is sprayed as foliar application & sool application. 15 such sprayers are to be applied for one acre ie., 450 ml of Homoeo Nutrient per acre or 1125 ml per hectare is required.

No other organic or biological nutrients or fertilizers have been applied to any treatment.

The yield per plot was taken and equated to one hectare and are given table-II.

RESULTS & DISCUSSIONS :

1. Grain yield : Data on grain yield for 3 years shows that the yield with Homoeo treatment T3 is either ATPAR with or significant to Chemical Fertilizers.

CONCLUSION :

As Homoeo Nutrients are dynamic in form (attenuated/potentized to a degree of 1/10⁹ to 1/10¹³) the bad effects of physiological chemicals are totally avoided and tringe out health crop. The plants having not been with physiological nitrogen, can no longer be a host to the pests and diseases. Thus nutrients are equalent to organic farming helps in protecting not only the plants but also the soils and soil bacteria, thus way for sustainable agriculture.

The Homoeo nutrients are cheaper than Chemical fertilizers help the small & marginal farmers, economically.

Ref: A Physicions posy by Mr. Dorothy Shepherd, C.W.Daniat Co., Ltd. p.p.256

**MASTER HOMOEOPATHIC AGRICULTURAL RESEARCH STATION,
SRIKAKULAM**

**SCIENTIFIC EXPERIMENT
BLACK GRAM**

DETAILS OF DESIGN & REPLICATIONS

- | | | | |
|----|----------------------------|---|--------------------|
| 1) | Year | - | 1991 Rice - fallow |
| 2) | Design | - | R.B.D. |
| 3) | No.of replications | - | 4 |
| 4) | Net plot size | - | 30 S.qm. 5m x 6m |
| 5) | culture variety | - | Local |
| 6) | Location | - | MHARS Khajipeta |
| 7) | Soil | - | Medium Loamy |
| 8) | Treatments | - | 5 |
| 1) | T1 Control (No manure) CNL | | |
| 2) | T2 Chemical fert.(C.F.) | | |
| 3) | T3 Homolonutrients (H1) | | |
| 4) | T4 Homolonutrients (H2) | | |
| 5) | T5 Homolonutrients (H3) | | |

**MHARS
SCIENTIFIC EXPERIMENT ON PERFORMANCE OF
BLACK GRAM WITH
HOMOEIO NUTRIENTS Vs CHEMICAL FERTILIZERS
YIELDS
1991**

YIELD PER 3 Sq.m. grms.

Sl. No.	No.	Treatment	R1	R2	R3	R4	A.V.	Yield /ha.
1)	T1	Control (No manure)	400	410	480	390	420	1.40
2)	T2	Che.Fert.	450	470	440	560	480	1.60
3)	T3	Homoeo 1	430	380	395	455	415	1.39
4)	T4	Homoeo 2	615	650	690	585	635* £	2.12
5)	T5	Homoeo 3	680	705	620	635	660* £	2.20

CD = 74.3

**MHARS
SCIENTIFIC EXPERIMENT
BLACK GRAM
DETAILS OF DESIGN & REPLICATIONS**

- | | | | |
|----|----------------------------|---|--------------------|
| 1) | Year | - | 1992 Rice - fallow |
| 2) | Design | - | R.B.D. |
| 3) | No.of replications | - | 3 |
| 4) | Net plot size | - | 2x2 4 S.qm. |
| 5) | Culture variety | - | Local |
| 6) | Location | - | MHARS Khajipeta |
| 7) | Soil | - | Medium Loamy |
| 8) | Treatments | - | 7 |
| 1) | T1 Control (No manure) CNL | | |
| 2) | T2 Chemical fert.(C.F.) | | |
| 3) | T3 Homolonutrients (H1) | | |
| 4) | T4 Homolonutrients (H2) | | |
| 5) | T5 Homolonutrients (H3) | | |
| 6) | T6 Homolonutrients (H4) | | |
| 7) | T7 Homolonutrients (H5) | | |

**MHARS 1992 rice follows
SCIENTIFIC EXPERIMENT ON PERFORMANCE OF
BLACK GRAM
YIELDS**

YIELD PER 4 Sq.m. grms.

Sl. No.	No.	Treatment	R1	R2	R3	AV	Mt./Ha
1)	T1	CNL (No manure)	135	170	205	170	0.425
2)	T2	Che.Fert.	175	142	202	173	0.432
3)	T3	Homoeo 1	240	205	200	215	0.504
4)	T4	Homoeo 2	195	202	149	182	0.455
5)	T5	Homoeo 3	265	220	271	252* £	0.630
6)	T6	Homoeo 4	215	205	174	198	0.495
7)	T7	Homoeo 5	200	198	205	201	0.502

CD = 48.2

**MHARS
SCIENTIFIC EXPERIMENT
BLACK GRAM
DETAILS OF DESIGN & REPLICATIONS**

- | | | | |
|----|----------------------------|---|--------------------|
| 1) | Year | - | 1993 Rice - fallow |
| 2) | Design | - | R.B.D. |
| 3) | No.of replications | - | 3 |
| 4) | Net plot size | - | 5 m x8m = 40 S.qm. |
| 5) | Cuiture variety | - | LBG 402 |
| 6) | Location | - | MHARS Khajipeta |
| 7) | Soil | - | Medium Loamy |
| 8) | Treatments | - | 7 |
| 1) | T1 Control (No manure) CNL | | |
| 2) | T2 Chemical fert.(C.F.) | | |
| 3) | T3 Homolonutrients (H1) | | |
| 4) | T4 Homolonutrients (H2) | | |
| 5) | T5 Homolonutrients (H3) | | |
| 6) | T6 Homolonutrients (H4) | | |
| 7) | T7 Homolonutrients (H5) | | |

BG-T3/2

**MHARS 1993 Rice fallows
SCIENTIFIC EXPERIMENT ON PERFORMANCE OF
BLACK GRAM**

Sl. No.	No.	Treatment	R1	R2	R3	AV	Mt./Ha
1)	T1	CNL (No manure)	470	525	425	473	1.18
2)	T2	Che.Fert.	510	533	570	538	1.34
3)	T3	Homoeo 1	490	475	515	493	1.24
4)	T4	Homoeo 2	525	495	580	533	1.33
5)	T5	Homoeo 3	605	590	545	580*	1.45
6)	T6	Homoeo 4	505	620	360	495	1.24
7)	T7	Homoeo 5	635	475	540	550	1.83

CD =102.2

**STUDIES ON THE PERFORMANCE OF
GROUND NUT CROP
WITH
HOMOEEO NUTRIENTS
IN COMPARISON WITH
CHEMICAL FERTILIZERS**

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ABSTRACT

The present investigations were under taken to study the performance of Ground-nut crop with Homoeopathically processed nutrients in comparison with Chemical Fertilizers NPK.. Homoeo Nutrients were found to be effective as the yields are ATPAR with Chemicals, on the CV. TMV2 the ruling variety in coastal A.P. for 3 consecutive years.

Due to ever increasing reduction in yields, increasing seed-cost and fertilizer-cost, the farmers are hesitating to take-up raising the ground-nut crop, which was once an alluring cash crop. Studies revealed the causes for reduction in yields to be

- 1) The death rate of the plants within one month of sowing due to collar-rot, could not be reduced to E.T.L.
- 2) Germination failure due to inferior quality of seed
- 3) Due to pests
- 4) Damage due to pod-borers.

Keeping these in view scientific experiments have been conducted to see if the yields can be increased by counteracting the above factors with Homoeopathy nutrients and plant protectors.

MATERIALS & METHODS :

The experiments were conducted at Master Homoeo Agricultural Research Station at Khajipeta near Srikakulam town in the years 1992, 1993 & 94 with the financial aid of CAPART, New Delhi (under the Ministry of Rural Development)

The experiments were laid out in R.B.D. as per the standard practice. The details of plot size, treatments etc. are given in Tables 1/1, 2/1, & 3/1.

All the cultural practices are as per the recommendations of Andhra Pradesh Agricultural University. As for the seed treatment. with Homoeo, 20 ml. of plant protector is mixed in 1 ltr. of water and applied to the seeds, 1 hour. before sowing and allowed to dry in shade. As for Homoeo nutrition application, 30 ml of nutrient is mixed in 10 lts. of water and sprayed as both soil & folliar spray. This is done after wetting when the soil is moist. 15 such sprayers ie., 150 lts. of mixture is required for one acre. (1125 ml of nutrient in 375 lts. per Hectare).

For Homoeo plots, Homoeopathi plant protectors were used, for pests diseases.

No farm yard manure or any other Bio-fertilizers were applied.

The net yield for the plots were taken and equated to 1 Sq.m and are given in the yield tables. In all the three years the yields are either AT-PAR or significant w.r. to Chemicals & controls

The yield components are also ATPAR/significant with respect to Chemicals & controls.

CONCLUSIONS:

The results clearly indicate that the Homoeo nutrients are effective and equivalent to Chemical Fertilizers. As the Homoeo Nutrients are in the form of energy without any physiological matter ie., Chemicals, the bad effects are totally avoided. The soils, plants, produces, environment and ecology are safe and not disturbed from the natural conditions. It can be noticed from the findings of elders that these attract the solar and cosmic energies & rejuvenicate the soils, which is a great advantage in addition to restoring the natural conditions for the humanity to live healthily, happily and safely.

It can also be seen that the damages due to pests & diseases are reduced resulting in higher yields.

The cost of fertilizers is very less about Rs.200/- per acre as against Rs.380/- towards chemicals, which would help the small & marginal farmers very much.

**MHARS
EXPERIMENT ON
GROUND NUT**

DETAILS OF DESIGN & REPLICATIONS Etc.

1)	Year	-	1992 RABI
2)	Design	-	R.B.D.
3)	No.of replications	-	3
4)	Net plot size	-	3 x 4 = 12 S.qm.
5)	Cultivar variety	-	TMV2
6)	Location	-	Khajipeta
7)	Soil	-	Loamy
8)	Treatments	-	7
1)	Control (no manure)	-	T6,9,14
2)	Chemical Fertilizers (C.F.)	-	T7,8,13
3)	Homoeo Nutrients 2 = Homoeo - 2		T2
4)	Homoeo Nutrients 4 = Homoeo - 2		T4
5)	Homoeo Nutrients 5 = Homoeo - 5		T5
6)	Homoeo Nutrients 7 = Homoeo - 7		T11
7)	Homoeo Nutrients 8 = Homoeo - 8		T12

**MHARS
KHAJIPETA 1992 RABI
SCIENTIFIC EXPERIMENT ON PERFORMANCE
OF GROUND NUT CROP WITH
HOMOEONUTRIENT IN COMPARISON
WITH CHEMICAL FERTILIZERS**

ABSTRACT

No.	Treatment	Yield per 1 S.qm.				Mt./ha
		R1	R2	R3	AV	
T6 9,14	Control no manure	160	80	70	103	1.03
T7,8,13	Chef.Fert.	180	120	145	148	1.48
T2	Homoeo 2	88	125	130	112	1.12
T4	Homoeo 4	190	175	205	190*	1.90
T5	Homoeo 5	165	120	98	128	1.28
T11	Homoeo 7	195	120	210	175*	1.75
T12	Homoeo 8	240	120	195	185*	1.85

CD =59.3

**MHARS KHAJIPETA
SCIENTIFIC EXPERIMENT**

**GROUND NUT - RABI 1992
DATA PER 1 S.qm.**

Trt. No.s	Treatment	No.of Plants	Ineffective pods		Effective Pods	Yield in gms/S.qm
			Diseased	Undeveloped		
T1	Homoeo 1	Very less germination & survival - hence not considered				
T2	Homoeo 2	12/160	6	4	150	112
T3	Homoeo 3	Very less germination & survival - hence not considered				
T4	Homoeo 4	23/382	3	101	278	190
T5	Homoeo 5	16/193	8	20	165	128
T6	CNL no manure	22/321	7	131	183	160
T7	Ch.Fertilizers-1	31/351	10	121	220	180
T8	Ch.Fertilizers-2	18/225	6	60	159	120
T9	Control-2	16/158	12	37	109	80
T10	Homoeo-6	Very less germination & survival				
T11	Homoeo-7	22/358	4	95	259	175
T12	Homoeo-8	28/490	5	80	320	185
T13	Ch.Fertilizers-3	25/299	8	12	179	145
T14	CNL no manure	13/139	2	39	98	70
T15	Ch.Fertilizers-4	Very less germination & survival				

**MHARS
KHAJIPETA
EXPERIMENT ON GROUND NUT**

DETAILS OF DESIGN, REPLICATIONS Etc.

1)	Year	-	1993 RABI
2)	Design	-	R.B.D.
3)	No.of replications	-	4
4)	Net plot size	-	4 x 5 = 20 S.qm.
5)	Cultivar variety	-	TMV2
6)	Location	-	Khajipeta
7)	Soil	-	Loamy
8)	Treatments	-	6
	1)Control (no manure)	-	T1
	2) Chemical Fertilizers (C.F.)	-	T2
	3) Homoeo Nutrients 1 = Homoeo - 1	-	T3
	4) Homoeo Nutrients 2 = Homoeo - 2	-	T4
	5) Homoeo Nutrients 3 = Homoeo - 3	-	T5
	6) Homoeo Nutrients 4 = Homoeo - 4	-	T6

**MHARS
KHAJIPETA 1993 RABI
SCIENTIFIC EXPERIMENT ON PERFORMANCE
GROUND NUT CROP WITH
HOMOEONUTRIENT IN COMPARISON
WITH CHEMICAL FERTILIZERS**

ABSTRACT

No.	Treatment	Yield per 1 S.qm.					Mt./ha
		R1	R2	R3	R4	AV	
T1	Control	115	83	85	105	97	0.97
T2	Chem.Fert.	150	105	85 *	127	117	1.17
T3	Homoeo1	145	200	225	163	183*	1.83
T4	Homoeo 2	115	180	175	150	130	1.30
T5	Homoeo 3	205	135	105	135	145	1.45
T6	Homoeo 4	185	115	95	119	128	1.28

CD =51.7

* Sever pest attach collar rot.

**MHARS
KHAJIPETA
EXPERIMENT ON GROUND NUT**

DETAILS OF DESIGN, REPLICATIONS Etc.

1)	Year	-	1994 RABI
2)	Design	-	R.B.D.
3)	No.of replications	-	4
4)	Net plot size	-	3 x 4 = 12 S.qm.
5)	Cultivar variety	-	TMV2
6)	Location	-	Khajipeta
7)	Soil	-	Loamy
8)	Treatments	-	5
	1) Control (no manure)	-	T1
	2) Chemical Fertilizers(C.F.)	-	T2
	3) Homoeo Nutrients 1 = Homoeo - 1	-	T3
	4) Homoeo Nutrients 2 = Homoeo - 2	-	T4
	5) Homoeo Nutrients 3 = Homoeo - 3	-	T5

**MHARS
KHAJIPETA 1994 RABI
SCIENTIFIC EXPERIMENT ON PERFORMANCE
GROUND NUT CROP WITH
HOMOEONUTRIENT IN COMPARISON**

ABSTRACT

No.	Treatment	Yield per 1 S.qm.					Mt./ha
		R1	R2	R3	R4	AV	
T1	Control	85	90	75	70	80	0.80
T2	Chem.Fert.	115	110	100	90	104	1.04
T3	Homoeo1	140	110	120	135	127*	1.27
T4	Homoeo 2	85	100	140	90	103	1.03
T5	Homoeo 3	100	85	80	150	103	1.03

CD =33.7

SCIENTIFIC ARTICLE

on

**Study on performance & input costs on vegetables & flowering plants
with Homoeo Nutrients Vs Chemical Fertilizers.**

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ABSTRACT

The present investigations were undertaken to study the performance, & input costs on high value low input crops viz, vegetables and flowering plants, with Homoeopathically processed nutrients in comparison with Chemical fertilizers ie. N.P.K.. Homoeo Nutrients have been found to be effective in giving yields “at par” with chemical fertilizers.

Having found positive results with Homoeopathically processed plant nutrients & plant protectors on crops & horticulture incl. Vegetables and flowering plants, a scientific experiment on high value and low input crops like vegetables and flowering plants has been taken up & results recorded.

MATERIALS & METHODS

These experiments were laid in RBD as per standard practice.

- T1 - Absolute control no manure (No. Po Ko)
- T2 - Chemical fertilizers (recommended schedule)
- T3 - Homoeo Nutrients.

All the cultural practices for each crop were followed as per the recommendations of A.N.G.R. A.U.(A.P.) including chemical fertilization. The periodicity of application of Homoeo treatment (H) was as per NPK fertilizer schedule. The method of application of Homoeo Nutrients is that 20 ml of tincture is mixed in 10 lts of water and applied on to the soil. The quantity varies with the age of the plant;

The treatment imposed were

- 1) Absolute control (no manure) - T1
- 2) Chemical Fertilizers (C.F.) - T2
- 3) Homoeo nutrients - 1 - Homoeo - 1 - T3
- 4) Homoeo nutrients - 2 - Homoeo - 2 - T4
- 5) Homoeo nutrients - 3 - Homoeo - 1 - T5

All the cultural practices of Sun-Flower crop were followed as per the recommendation of the University and are similar for all the plots. The Chemical fertilizers have been applied as per recommendations of A.P. Agricultural University. The method of application of Homoeo Nutrients is that 450 ml of tincture is added to 150 lts. of water and applied on the soil over the root zone by broad cast in one acre ie., 1125 ml. of tincture in 375 lts. of water per hectare.

No farm yard manure or organic or biological fertilizers or nutrients have been applied to any treatment.

The yield per plot was taken and equated to 1 Sq.m and 1 hectare are reflected in the tables.

RESULTS :

The data on grain yield for 3 consecutive years reveal that the yields with homoeo treatment are “AT PAR” with Chemical Fertilizers and significant to control.

CONCLUSION :

The Physiological matter of Chemicals is the cause for many ill effects on plant life. Homoeopathy which converts the Physiological matter into energy form aids the plant life to grow healthily and eradicates the tendency to host insects & pests and harbour diseases. Thus these homoeo nutrients serve as organic farming and pave way for sustainable agriculture and since no poisons are used, there is no atmospheric pollution and ecological inbalance etc.,

These being cheaper and easy to carry, helps the small & marginal farmers economically.



**MHARS
SCIENTIFIC EXPERIMENT
ON SUNFLOWER**

DETAILS OF DESIGN, REPLICATIONS Etc.

- | | | |
|----|------------------------------------|---|
| 1) | Year | - 1991 RABI
1992 RABI
1993 RABI |
| 2) | Design | - R.B.D. |
| 3) | No.of replications | - 4 |
| 4) | Net plot size | - 5m x 5m = 25 S.qm. - 1991
4.5 X 4.5 m = 20.25 S.qm-1992
5 X 4.5 m = 22.50 S.qm-1993 |
| 5) | Cultivar variety | - MSFH - 8 |
| 6) | Location | - MHARS - Khajipeta |
| 7) | Soil | - Medium Loamy |
| 8) | Treatments | - 5 |
| | 1) Control (no manure) | - T1 |
| | 2) Chemical Fertilizers(C.F.) | - T2 |
| | 3) Homoeo Nutrients 1 = Homoeo - 1 | - T3 |
| | 4) Homoeo Nutrients 2 = Homoeo - 2 | - T4 |
| | 5) Homoeo Nutrients 3 = Homoeo - 3 | - T5 |

**MHARS
KHAJIPETA 1991 RABI**

**SCIENTIFIC EXPERIMENT ON YIELDS OF SUN FLOWER
CROP WITH HOMOEIO NUTRIENTS
IN COMPARISON WITH CHEMICAL FERTILIZERS**

Trtt. No.	Treatment	Yield per 1 S.qm.					Mt./ha
		R1	R2	R3	R4	AV	
T1	CNL no manure	790	630	730	690	710	0.71
T2	Chem.Fert.	850	1030	780	860	880	0.88
T3	Homoeo1	690	525	805	620	660	0.66
T4	Homoeo 2	890	1115	935	1200 [*] _£	1035	1.04
T5	Homoeo 3	970	890	1140	780	945	0.95

CD = 206.6

**MHARS
KHAJIPETA 1992 RABI**

**SCIENTIFIC EXPERIMENT ON YIELDS OF SUN FLOWER
CROP WITH HOMOEIO NUTRIENTS
IN COMPARISON WITH CHEMICAL FERTILIZERS**

Trtt. No.	Treatment	Yield per 1 S.qm.					Mt./ha
		R1	R2	R3	R4	AV	
T1	CNL no manure	505	610	730	635	620	0.62
T2	Chem.Fert.	1010	920	560	790	820	0.82
T3	Homoeo1	630	855	730	645	715	0.72
T4	Homoeo 2	890	785	1020	865	890*	0.89
T5	Homoeo 3	980	730	795	815	830	0.83

CD = 232.4

**MHARS
KHAJIPETA 1993 RABI**

**SCIENTIFIC EXPERIMENT ON YIELDS OF SUN FLOWER
CROP WITH HOMOEIO NUTRIENTS
IN COMPARISON WITH CHEMICAL FERTILIZERS**

Trtt. No.	Treatment	Yield per 1 S.qm.					Mt./ha
		R1	R2	R3	R4	AV	
T1	CNL no manure	585	705	490	600	595	0.60
T2	Chem.Fert.	920	815	1005	780	880	0.88
T3	Homoeo1	740	1115	1070	995	980	0.98
T4	Homoeo 2	1010	820	620	990	860	0.86
T5	Homoeo 3	840	610	630	860	735	0.74

CD = 174.6

**STUDIES ON PERFORMANCE
OF
COCONUT TREES**

With

**Homoeo Nutrients Vs Chemical Fertilizers
(A Scientific case study)**

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ABSTRACT

The present investigations were undertaken to study the performance of coconut trees with Homoeopathically processed products as nutrients in comparison with Chemical Fertilizers. Homoeo Nutrients are found to be effective in getting yields "AT PAR" with respect to Chemical Fertilizers and "Significant" with respect to no manure, were recorded.

Having found definite effect on general health of the coconut trees with Homoeopathically processed nutrients and on yields, several thousand of house-hold trees were tested to confirm the effectiveness. A few tens of trees were kept on observation with continuous treatment for over a decade from 1973. Making it doubly sure that there are no ill-effects and that the trees are maintaining healthy condition with optimum yields, a scientific case study has been taken-up in the years 1992-93 and 94 with Homoeo nutrients and chemical fertilizers in comparison with absolute control i.e. no manure.

MATERIALS & METHODS :

The experiments were conducted in farmers' arcades spreading over "Srikakulam and Vijayanagaram District in A.P.

The details are under

1. Replication - 5 arcades
2. Treatments - T1 - Homoeo Nutrients (trade name Maitreya/Gangadhar)
T2 - Chemical Fertilizer NPK as recommended by
Agricultural University
T3 - Control - no manure
3. Age groups 1) 10 - 15 Years
2) 15 - 30 Years
4. No. of trees in each group - 5 trees
5. Observations :-
 - 1) Increase in number of leaf scars
 - 2) Girth above 1 meter from ground level
 - 3) Average Length of leaves
 - 4) No.of Inflorescence
 - 5) Average no.of boles per spadice
 - 6) Yields
6. Periodicity of observation - Quarterly
7. Period of observation - 2 Years

The data was recorded and the abstract is enclosed after evaluation.

Discussion:

Components of all the parameter of yields under Homoeo treatment are "AT PAR" with chemically treated ones, though the yields are more than chemicals. Both Homoeo & chemicals have given significant yields with respect to absolute control (no manure)

Results :

There is significance in all the parameters, over control ie., no manure in both Chemical Fertilizer treatment and Homoeopathic treatment.

All the paramters are "AT PAR" with Homoeo treatment in comparison with Chemical Fertilizer treatment.

The yields also shown similar results and even more than the Chemical Fertilizers though statistically are "AT PAR".

Conclusion :

The Homoeo nutrients are found to the effective in the performance of coconut trees. Since Homoeo products do not contain any physical matter but only carries its force in a higher plan there will be no side effects like hosting pests and diseases, as in the case of chemical fertilizers. This would go a long way in getting healthy life and would lead to sustained yields and full longevity.

**Data on coconut yields with
Homoeo Nutrients
in Comparison with
Chemical Fertilizers**

ABSTRACT

S.No. Treatments	Homoeo Nutrients	Chemical Fertilizers	Control No manure	CD @ 5% e
1. Girth in meters	1.21	1.24	1.18	--
2. No. of leaves	30.5	30.7	28.9	--
3. Ag. Length of leaves	4.44	4.65	4.51	--
4. No.of inflorescence	*12.7	11.15	10.80	0.62
5. No. of female flowers	*33.2	32.8	24.6	5.85
6. Yields (Nuts / annum)	*145	120	87	30.9

* Significant

**Scientific Experiment on Coconut yields with
Homoeo Nutrients in Comparison with Chemical Fertilizers**

	Control no manure T3						Chemical Fertilizers T2						Homoeo Nutrients T1						
Data	R1	R2	R3	R4	R5	AV	R1	R2	R3	R4	R5	AV	R1	R2	R3	R4	R5	AV	C.D.
1) Girth	1.37	1.42	1.36	0.97	0.96	1.18	1.25	1.18	1.20	1.16	1.37	1.24	1.38	1.03	1.33	1.26	1.10	1.21	--
2) No.of Leaves	28.5	29.1	29.5	29.5	29	28.9	29.9	32.9	30.4	30.15	30.7	30.7	30.7	30.3	32.7	29.6	29.1	30.5	--
3) Length of leaves	4.28	4.58	4.82	4.62	4.24	4.51	4.44	5.01	5.01	4.49	4.32	4.65	4.68	4.79	4.68	3.67	4.41	4.44	--
4) No.of Inflour scences	11.2	10.7	11.1	10.6	10.58	10.8	11.4	11.0	11.5	10.8	11.1	11.15	13.1	12.7	12.7	11.6	13.4	12.7	0.62
5) No.of female flowers	28.45	27.15	22.05	22.05	20.9	24.6	31.8	33.05	36.7	34.2	29.8	32.8	32.5	35.5	35.6	29.2	33.5	33.2	5.85
6) Yield	110.5	110.5	72	73.5	69	87	128	114.5	138	109	121	120	160	131	144.6	102.9	187	145	30.9

**MASTER HOMOEOPATHIC AGRICULTURAL RESEARCH STATION,
SRIKAKULAM**

**SCIENTIFIC EXPERIMENT ON
MANAGEMENT OF GANODERMA WILT ON COCONUT TREES
WITH HOMOEOPATHIC PLANT PROTECTOR
IN COMPARISON WITH CHEMICAL PESTICIDES**

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Plantation crops occupy nearly four million Ha. of area in India which is about 2.3% of total cropped area. Their contribution to the gross national product at current market price comes to about Rs.2,98,500 million and export earnings nearly Rs.30,925 million during 1994-95 which is about 27% of the total from agricultural commodities and 4.8% of total exports. Among plantation crops coconut, arecaut, cashewnut, black papper known as 'small holders' plantations where as rubber, tea and coffee known as 'estate crops' are generally large plantations. India is second largest producer of coconut in the world.

Coconut plays an important role in the economic, social and cultural activities of the people of India especially in the state like Kerala, Tamilnadu, Karnataka and Andhra Pradesh with an area of 1.80 million hectares and an annual production of 13,968 million Ha. (1995) India ranks second in the world map of coconut. In India more than 91% of the area under coconut is in the four southern states viz., Kerala, Tamilnadu, Karnataka & Andhra Pradesh sharing about 92% of the India's total production. The average productivity of coconut in India is 7779 nuts ha. during 1995-96. The state of Andhra Pradesh occupies fourth position in area (90,000 ha., 5% of total area) in production (1231.4 million , 9% of total production) the four southern states. However it ranks second with 13,682 nuts/ha. which is very close to the productivity of coconut in Tamilnadu (14,553 nuts/ha) which contributes 16% area to total coconut production.

In Andhra Pradesh about 90% of the coconut plantations are in the districts of East & West Godavari, Srikakulam, Visakhapatnam and Chittoor under East Coast tall variety whose annual yield is in the range of 75-100 nuts / palm. The production and productivity of coconut in Andhra Pradesh was influenced by several factors like Ganoderma / root rot wilt (now called basal stemrot), Tatipaka disease and insect pestililla rhinoceros beetle, red palm weevil and the leaf eating caterpillar (*Opisina* sp). The debilitating and dreaded basal stem rot (ganoderma wilt/root rot) is affecting this production and productivity of coconut in Andhra Pradesh which contributes to 9% of total production in India. The disease has affected many coconut gardens raised in light soils (sandy & sandy loam) along the coastal belt in the state. Even the best managed gardens fell victims to this dreaded malady. A conservative estimate indicates that out of 40 lakh coconut palms in “Konaseema” belt of East Godavari Dist. nearly 75,000 are affected with one of the twin problems viz., Tatipaka and basal stem rot out of which the basal stem rot is the most serious malady.

In Srikakulam Dist. which contributes 16% of total area and 16.3% of total production in the state, major area (about 90% under plantation) is grown as rainfed crop and is generally affected by the long dry spell of 3-4 months a year and the plantations are further debilitated by destructive malady basal stem rot, resulting in less production and productivity compared to Godavari district in Andhra Pradesh. Now the loss in coconut yield is very severe, (eventhough precise/valid estimates are not available) Therefore the farmers are alarmed about raise in incidence of this malady and spending anxious moments. Wilt / root rot caused by *Ganoderma Luciderm* is also known as ‘Anabe’ disease means a disease caused by bracket forming fungus, Thanjavur wilt and basal stem rot. This occurs mostly in light soils and in palms aged below 40 years and is causing substantial annual recurring loss.

The pathogen being soil borne invades underground injured roots initially and it is very difficult to detect the disease at this stage. Gradually the infection spreads to the trunk, where small pockets of brown gummy substance bleeds out of the numerous growth cracks around the trunk. This is the earliest detectable external symptom and any control is contemplated is to be taken forthwith. Any lapse or tackling the disease will be disastrous as the disease spread further to the trunk, leading to drooping of lower whorl of leaves. Soon all nuts, including immature nuts drop within 6-8 months, the palm succumbs to disease. The disease is manifested severely during dry months of the year when the palnts are subjected to waterstress. In certain localities of the Srikakulam District association of *xyloborus* (pinhole borer) with wilt / basal rot affected plants was noticed in which case the end of the palms life comes swiftly.

The management strategy suggested is

- (a) avoiding injuries to roots and root pruning
- (b) avoiding high density planting
- (c) balanced fertilization and substituting urea with neem cake in endemic areas
- (d) Orchard sanitation
- (e) isolation of diseased palms
- (f) water conservation in basins by husk burying and
- (g) root feeding with tridemorph 2 ml in 20 ml of water (Tridemorph is suggested as curative)

But the above measures are met with partial success because

- (a) the coconut plantations in the district are mostly raised under rainfed conditions in light soils in which the disease almost became an endemic
- (b) the farmers usually do not fertilize the gardens and if at all they practice, only apply N.fertilizers in the form of urea which further aggravates the disease situation
- (c) Not feeding of tridemorph requires some expertise and is difficult for an illiterate farmer to adopt
- (d) non-availability of tridemorph in local market and many a time the farmers have to get from far off places
- (e) no information on the aspects like residues of tridemorph in coconut milk/water even though a waiting period of the month was recommended after root administration of tridemorph.
- (f) similarly no information on beneficial VAM fungi (vesicular arbuscular Mycorrhizal fungi).
- (g) Tridemorph root feeding was found to be effective only if given at apt stage of the disease i.e., in the initial stage when exudation of gum just appeared on the trunk from small crevices (growth cracks) and is ineffective in advanced stages. Reappearance of disease in treated young palms in which it was disappeared after few months under conditions of stress.

It is difficult for a farmer to monitor and decide the correct stage of disease to take curative measure. Therefore keeping the difficulties / drawbacks in view and to develop a management strategy which will not pollute the rhizosphere and rhizoplane

environment and coconut products and at the same time triggering and sustaining plant defence by improving its vigour and stress tolerance, which fits into presently advocated which aims judicious use of resources without upsetting of environmental equilibrium and preserving plant & soil health (sustainable plant protection strategy) the present investigation was made with homoeo medicines with pesticidal potential in order to evaluate their prophylactic and therapeutic capabilities which is a novel approach to tackle difficult problem like basal stem rot. An attempt is also made to compare the performance of homoeo plant protector with tridemorph which is presently recommended by plant pathologists as an effective curative measure against basal stem rot. The results of the study and procedure adopted is presented hereunder cost of treatments with respect to fungitoxicant tridemorph and homoeo plant protectors was also worked out in order to explore the possibility of suggesting an alternative strategy, which shall be cost effective / low cost, so that large segment of marginal & small farmers can reap benefit from this new novel approach in years to come. We are sure this small leap in the right direction will galvanize the field of plant protection and bring qualitative change in their outlook and approach, so that future challenges can be tackled with courage and confidence.

MATERIAL & METHODS:

Observations on the characters associated with the disease were recorded for 132 basal rot affected palms in the age group of 6-45 years which were given calixin, homoeo treatments and left untreated. These palms were distributed in 9 plots of sandy / sandy loam soils of Gollapeta, Kaviti, Majjiputtuga, Nizamabad villages of Srikakulam Dist. and Gudivalasa village of Vizianagaram dt. of A.P. to test efficacy of treatments, the following observations were recorded. These are (a) area of bleeding patch in Sq.cms (b) no.of drooped leaves (c) reduction of leaf size (score ranging from 0-4) (d) tapering of stem (score ranging from 0-4) (e) Pinhole borer infestation (xyloborus) - score ranging from I-V (f) yield of nuts.

Area of bleeding patch was worked out from the actual measurements of length and breadth of the patch whether they occur individually or apart from one another. Tapering of stem and reduction of leaf size occur when the disease is in the middle stage of infection. A visual score of 4 was given to those palms where the girth of trunk apex was half that of the girth at one meter height and girths in-between were given proportional scores of 1 to 3 (by visual observation).

Reduction in leaf size was scored in a scale of 0-4, grade '0' was given when there was no reduction in leaf size and '4' where there was 50% or more reduction in leaf size by visual observation compared to healthy palm in the same garden. Leaf size reduction in-between were given grades 1,2, or 3.

Xyloborus incidence was graded in the scale of 0 to V where 'V' in maximum severity with almost the entire bleeding area of the stem damaged by xyloborus beetle and '0' when there is no xyloborus beetle incidence.

No. of drooped leaves and nuts were counted initially and periodically and finally to assess the effectiveness of treatments and to evaluate yield of nuts.

Area of bleeding patch was considered as a main criteria for assessing the severity of the disease and grade values were assigned from A to D (grade-A0 - 250 cm², grade-B 250-500 cm², grade-C, 500-1000 cm². grade-D 1000 cm² and above No. of palms in each grade and age group were recorded.

TREATMENTS : Treatments being tested under the experiment consist of 3 viz.

Treatment-I Check no treatment

Treatment-II Tridemorph (Calixim 35 EC) 2ml mixed in 20 ml water and administered through roots (this is presently recommended).

Treatment-III Sambhavi Potentized to 1/10⁵ (Homoeo medicine) of
20 ml in 10 lit of water soil application

The treatments were repeated for every 2 months totalling to 6 applications in an year.

The experiment was conducted for one and half years. The treatments were arranged in a completely randomized design. Locally predominant variety 'East Coast tall' was chosen in the experiment. Optimum growth conditions were maintained in the selected gardens. One hundred thirty two plants selected at random in different age groups between 6 to 40 were used in the experimentation. Data were subjected to statistical analysis and the results are presented in the form of tables to find out whether homoeo treatment is at par or superior to tridemorph treatment in the suppression of disease and in the rejuvenation of palms. A comparison was also made with untreated (check) palms to ascertain in which treatment maximum benefit in terms of disease suppression is obtained. In addition, 17 Nos of palms in endemic areas adjacent to diseased palms have also been subjected to prophylactic observation, both with calixin & Homoeo treatments. The results are given at table V. Simultaneously cost of fungitoxicant and homeo treatments in worked out to explore the cost effectiveness of these treatments and with an objective of developing a low cost technology which can be easily adopted by marginal and small farming communities.



MHARS

SCIENTIFIC EXPERIMENT

LIST OF OBSERVATIONS MADE

- 1) Age of the tree
- 2) Total Height
- 3) Ht. of bleeding zone
- 4) Area of bleeding zone
- 5) Total No. of leaves
 - a) functional
 - b) drooped
- 6) Leaf area reduction
- 7) Tapering of stem
- 8) xyloborus severity
- 9) Yield of nuts

Treatments

Chemical	-	CALIXIN once in very 2 months (root feeding)
Homoeo	-	Plant protector every 2 months & Plant Nutrient every 2 months in alternation Soil application
		Quality :
		a) 20 ml. of tincture 10 lts. of water tree per applications.
		b) Nutrient : 10 ml. of tinctur in 10 lts. of water per tree per application.

MASTER HOMOEIO AGRICULTURAL RESEARCH STATION**Scientific Experiment on Management of
Ganderma Wilt on Coconut trees with Homoeo plant
protectors in comparison with Chemical Fungicide**

- | | | |
|----------------------------------|---|-----------------------------|
| 1) Year | : | 13-9-95 to 26-2-97 |
| 2) Design | : | C.R.D. |
| 3) No.of Replications | : | 6 |
| 4) No. of affected trees treated | | |
| a) 6 - 10 years of age | - | 14 |
| b) 11-25 years of age | - | 20 |
| c) 26-40 years of age | - | 29 |
| d) Prophylaxis | - | 10 |
| e) Observation | - | 6 |
| 5) Cutivar Variety | : | East Coast tall |
| 6) Location | : | As detailed in table C.GD.3 |
| 7) Soil | : | Sandy & Sandy loam |

MHARS
SCIENTIFIC EXPERIMENT

DETAILS OF ARCADES AND LOCATIONS

<u>St.No.</u>	<u>Village</u>	<u>Name</u>
1.	Gollapeta (Gara Mandal)	Sri K. Appalanaidu
2.	Gollapeta	Sri Palem Gangulu
3.	Gollapeta	Sri Kistapa
4.	Gollapeta	G. Mallesu
5.	Gudivalasa (Bhogapuram Mandal)	Sri Kommuru Sanjeeva Rao
6.	-do-	Sri K. Ramakrishna Reddy
7.	Kaviti (Kaviti Mandal)	Bendalam Prakasa Rao
8.	Majjiputtuga (Kaviti Mandal)	Majji Dondapani
9.	-do-	Majji Duryodhana

MHARS

SCIENTIFIC EXPERIMENT

**Graduations of different parameters
and
Abbreviations**

- 1) Area of bleeding zone
(Bleeding patch)
 - i) Gr. A - 0-250 Sq.cm. (cm.²)
 - ii) Gr. B - 251 - 500 Sq.cm.
 - iii) Gr.C - 501 - 1000 Sq.cm.
 - iv) Gr.D - above 1000 Sq.cm.

- 2) Pin-hole borer
 - i) Gr. I - Low
 - ii) Gr.II - Medium
 - iii) Gr.III - High
 - iv) Gr.IV - Very high
 - v) Gr.V - Most Severe

- 3) Nut yield
 - i) Gr. 0 - Nil
 - ii) Gr. I - Low
 - iii) Gr.II - Average
 - iv) Gr.III - Good
 - v) Gr.IV - very good

ABBREVIATIONS

- 1) E.C.T. - East Coast Tall variety
- 2) B.P. - Bleeding Patch
- 3) P.H.B. - Pin-HOLE borer
- 4) N.A.B. - No active bleeding
- 5) A.B. - Active bleeding
- 6) I - Initial
- 7) F - Final
- 8) CNL - Control (T1)
(No Treatment)
- 9) Ch. - Chemical (T2)
fungicide
- 10) H - Homoeo treatment (T3)
- 11) Sq.cm. - Square Centimeters
cm.²
- 12) Gr. - Grade

**MASTER HOMOEOPATHIC AGRICULTURAL RESEARCH STATION
SRIKAKULAM
SCIENTIFIC EXPERIMENT**

Period of Experiment 3-9-95 to 26-2-97

ABSTRACT - II

	<u>No.</u>	<u>%</u>	<u>No.</u>	<u>%</u>	<u>No.</u>	<u>%</u>
1. No. Affected	15	100	23	100	28	100
2. No. Recovered	4	27	8	34	24	86
3. No. Not recovered	6	40	7	32	2	7
4. No. Died	5	33	8	34	2	7

PROPHYLAXIS

1. No. treated	1	100	6	100	7	100
2. No. affected	1	100	1	17	-	0
3. No. net affected	-	0	5	83	7	100

**MASTER HOMOEOPATHIC AGRICULTURAL RESEARCH STATION
SRIKAKULAM
SCIENTIFIC EXPERIMENT ON MANAGEMENT OF GANODERMA OF
COCONUT WITH HOMOEOPATHIC
PLANT PROTECTORS IN COMPARISON CHEMICAL FUNGICIDE**

ABSTRACT

	Age Group								
	6-10 Years			11-25 Years			25-40 Years		
	<u>CNL</u>	<u>Ch.P</u>	<u>H</u>	<u>CNL</u>	<u>Ch.P.</u>	<u>H</u>	<u>CNL</u>	<u>Ch.P</u>	<u>H</u>
1. No. Affected	3	5	6	10	5	5	2	11	16
2. No. Recovered	-	1	5	2	2	5	2	7	15
3. No. Not recovered	2	2	--	3	2	--	--	2	--
4. No. Died	1	2	1	5	1	--	--	2	1
<u>PROPHYLAXIS</u>									
1. No. treated	--	--	1	--	4	3	1	2	3
2. No. affected	--	--	--	--	--	--	1	1	--
3. No. net affected	--	--	1	--	4	3	--	1	3

**SCIENTIF EXPERIMENT ON MANAGEMENT OF GANODERMA WILT OF
COCONUT WITH CHEMICAL Vs HOMOEIO**

Sl. No.	Tree No.	B.P.		P.H.B.		% Drooped Leaves		Nut Yield		Remaks
		I	F	I	F	I	F	I	F	
Age group 6-10 years										
T1 Control										
1.	1/1	D-920	D-1220	V	V	2-20%	0	I	0	Tree died after 1 year 4 months
2.	3/1	D-5600	D-7800	0	0	2-20%	0	0	0	Sickly B.A.
3.	10/7	D-2000	D-9760	0	0	1-5%	1-9.1	II	II	B.A. - Sickly
T2 Chemical										
1.	2/3	D-3050	D-NAB	0	0	0	0	0	0	Slight improvement
2.	2/8	D-1800	D-3150AB	I	0	III46%	0	0	0	Died after 6 months
3.	2/9	D-4010	D-4510	0	0	III40%	II20%	0	0	Condition bad
4.	3/8	D-3600	D-7920AB	I	I	II25%	II25%	0	0	Tree died after 1 year months
5.	10/6	D-12160	D-20320AB	II	V		III30%	II	I	deteriorated
T3 Homoeo										
1.	2/1	D-9500	D-9860	0	III	0	III40%	I	II	NAB-Improved
2.	2/2	D-15000	A-NAB	0	0	II10%	I 3%	II	II	Improved
3.	3/2	D-16800	-	V	V	III30%	-	0	-	Tree died after 5 months
4.	3/3	D-1500	D-1950 NAB	0	0	II20%	I0%	I	III	Imrpvoed
5.	3/7	D-1500	D-NAB	II	0	III30%	0	0	0	Improved
6.	7/10	A-73	A-NAB	0	0	0	0	0	I	Improved
11-25 years										
T1 Control										
1.	1/3	D-1800	D-3800	0	0	III40%	III50%	0	0	deteriarated about to die
2.	1/4	D-10400	D-31500	II	III	III30%	III40%	II	II	-do-
3.	3/1	D-5600	D-7800	I	I	II20%	II25%	0	0	-do-
4.	5/1	D-6600	D-7260 NAB	0	0	III50%	III35%	0	II	improving
5.	10/1	D-8000	D-10000	III	III	III50%	III50%	0	0	died in 10 months
6.	10/7	D-2000	D-3825 AB	0	0	0	I9%	I	II	Improving
7.	10/14	D-8000	D-11600 AB	0	0	II25%	III45%	0	0	Died 11 months
8.	10/18	D-1090	D-1360 AB	0	0	0	0	I	I	Deteriorated
9.	10/19	D-3780	D-6640 AB	0	0	I5%	II20%	III	II	-do-
10.	10/20	D-5600	D11450 AB	IV	V	II25%	III35%	0	II	-do-

Sl. No.	Tree No.	B.P.		P.H.B.		% Drooped Leaves		Nut Yield		Remaks
		I	F	I	F	I	F	I	F	
Age group 11-25 contd.										
T2 Chemicals										
1.	3/4	B-495	B-515 NAB	0	0	II25%	0	III	III	Improved
2.	4/1	D-2178	D-3476 NAB	0	0	III 30%	I%	II	II	Improved
3.	10/6	D-12160	D-20360BA	IV	V	III30%	III30%	II	I	Deteriorating
4.	10/9	D-10800	D-15250BA	I	V	III30%	III30%	II	III	Deteriorating
5.	10/16	D-1230	BA	I	II	II20%	0	I	0	Died in 3 months
T3 Homoeo										
1.	1/2	D-3150	NAB	0	0	II30%	0	I	II	Improved
2.	4/2	D-13440	D-NAB	III	0	II33%	0	I	II	Improved
3.	10/10	D-7500	D-NAB	0	0	I8%	0	II	III	Improved
4.	10/15	D-9000	D-NAB	0	0	II30%	0	I	II	Improved
Age Group - 26-40 years										
T1 Control										
1.	5/8	D-5850	D-6750NAB	0	0	0	0	III	III	Slight recovery
2.	7/6	D-5260	D-6190	0	0	III30%	II10%	III	I	Slight recovery
T2 Chemical										
1.	5/2	D-34780	D-41,260 (Bl.Active)	0	0	II18%	III27%	I	II	Likely to die
2.	5/6	D-13,920	D-24,800 (Bl.Active)	0	0	IV52%	II10%	IV	III	Recovering
3.	6/1	D-11,850	D-10300	0	0	III40%	III40%	IV	III	Recovered
4.	7/1	D-7130	D-7130NAB	0	0	I9%	III40%	III	I	Recovering
5.	7/8	D-1440	D-2775NAB	0	0	0	0	I	II	Likely to recovered
6.	7/9	D-5880	D-10,830	0	0	III30%	III26%	II	I	Sickly, No.4 leaved reduced
7.	7/11	D-4430	D-10,000	0	0	III40%	--	IV	-	Died 4 months later
8.	7/16	D-15,500	D-19,450NAB	0	0	I	-	III	III	Recovered
9.	7/17	D-10720	D-12,390 BA	0	0	II10%	II0	III	III	Bleeding Active

Sl. No.	Tree No.	B.P.		P.H.B.		% Drooped Leaves		Nut Yield		Remaks
		I	F	I	F	I	F	I	F	
10.	8/3	D-2,300	D-2,616	0	0	I0%	II20%	II	II	Recovering
11.	9/1	D-2400	D-2,400 BA	0	0	II33%	II15%	II	II	Likely to recovered
T3 Homoeo										
1.	5/4	D-18650	D-NAB18650	I	0	II25%	I 6%	I	IV	Recovered
2.	5/5	D-12320	D-15120NAB	0	0	0	0	II	IV	Recovered
3.	5/7	D-13440	D-17100BA	0	0	IV44%	II16%	I	II	Slight recovery
4.	7/2	D-9450	D-12950NAB	0	0	III33%	II14%	II	IV	Recovered
5.	7/3	D-14000	D-14000	0	0	II16%	II16%	0	0	Died after 8 months
6.	7/5	D-13770	A-o NAB	0	0	0	0	III	IV	Recovered fully
7.	7/7	D-17750	C-850	0	0	III36%	0	III	III	Recovering
8.	7/10	D-17,50	A-NAB	0	0	0	0	II	III	Recovered
9.	7/13	D-8100	D-9955NAB	0	0	III27%	0	II	II	Likely to recover
10.	8/1	D-12480	D-12790NAB	0	0	II17%	II20%	I	II	Recovering
11.	8/2	D-12,520	0	0	0	II20%	II20%	I	II	Recovered
12.	9/2	D-8416	D-7000 NAB	0	0	III39%	0	0	II	Recovered
13.	9/3	D-8400	D-8400 NAB	0	0	IV46%	I.5%	I	IV	Recovered
14.	10/10	D-7500	8,700 NAB	0	0	I8%	10%	I	I	Recovered
15.	10/11	D-1295	4800 NAB	0	0	I0%	I0%	I	II	Recovered
16.	10/15	D-9000	D-9000NAB	0	0	III30%	1%	I	II	Recovered

MHARS
Experiment on management of Ganodrma wilt on coconut trees with
Homoeopathic Plant protectors in comparison with Chemical Pesticides
PROPHYLACTIC TREATMENT

Sl. No.	Tree No.	B.P.		P.H.B.		% Dropped Leaves		Net Yield		Remarks
		I	F	I	F	I	F	I	F	
T1 Control										
1.	2/5	0	0	0	0	15	15	V	V	Not effected
2.	7/12	A-spot	A-spot	0	0	0	0	II	II	Infected
T2 Chemical										
1.	2/7	0	0	0	0	39	25	V	V	Not effected
2.	7/14	0	0	0	0	6	6	I	I	Not effected
3.	8/4	0	C-750	0	0	7	24	III	II	Intected
4.	10/2	0	0	0	0	0	0	IV	IV	Not affected
5.	10/4	0	0	0	0	0	0	0	0	Not affected
T3 Homoeo										
1.	2/4	0	0	0	0	0	0	V	V	Not affected
2.	2/6	0	0	0	0	25	0	V	V	Not affected
3.	7/15	0	0	0	0	4	0	II	III	Not affected
4.	7/18	0	0	0	0	0.4	0	IV	IV	Not affected
5.	7/19	0	0	0	0	6	0	II	III	Not affected
6.	10/3	0	0	0	0	0	0	I	IV	Not affected
7.	10/5	0	0	0	0	0	0	I	IV	Not affected
8.	10/8	0	0	0	0	0	0	0	0	Not affected

MHARS**Experiment on management of Ganodrma wilt on coconut trees with Homoeopathic Plant protectors in comparison with Chemical Pesticides****Observation of very severely affected palms**

Palm No.	Age	B.P.		P.H.B.		% Dropped Leaves		Net Yield		General Condition
		I	F	I	F	I	F	I	F	
HOMOEEO										
1/2A	15	D-2000	D-3,600	0	0	90	--	0	0	Dead in Jan-97
3/5A	15	D-18,640	--	0	IV	12	-	I	0	Dead in Jan-96
7/4	35	D-34,400	--	0	0	27	-	0	0	Dead in Aug-96
GALIXIN										
5/3	45	D-15,900	D-15,900	0	0	28	60	I	I	Partial recovery noticed

MASTER HOMOEOPATHIC AGRICULTURAL RESEARCH STATION
SRIKAKULAM
SCIENTIFIC EXPERIMENT
COST EFFECTIVENESS OF HOMOEOPATHIC TREATMENT

	Chemical Rs.	Homoeo Rs.			Cost benefit Ratio
		P.P.	Nutrient	Total	
1. Cost of one Application	55-00	7-00	5-00	12-00	--
2. Total cost per annum	330-00	--	--	72-00	358%

SCIENTIFIC STUDIES
ON
PERFORMANCE OF
RICE CROP
WITH
HOMOEOPATHIC NUTRIENTS
VS
CHEMICAL FERTILIZERS
(AN EXTENSIVE AND EXHAUSTIVE CASE STUDY)

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HISTORY :

Intuitively it was found that certain Homoeo Medicines have got nutritive effects on flowering plants. After a prolonged and extensive study, having been well proved on floriculture, the study was extended first to Rice Crop on my own fields and then to other crops and Horticulture. Later on, their powers on plant protection also had been explored successfully.

In this year 1986, the Director Research of Andhra Pradesh Agricultural University had been approached who had readily agreed to conduct scientific experiment on Rice with Homoeo plant nutrients in comparison with Chemical Fertilizers. Scientific studies for 5 successive years in their Regional Agricultural Research Station at Ragolu, proved beyond doubt that these Homoeo Nutrients are capable of getting yields "AT PAR" or even SIGNIFICANT.

To improve these formulae, to do it myself and make close observations, CAPART / New Delhi had been approached, who have, with a good gesture sanctioned a project in the year 1991. This has given a good impetus to this research.

ABSTRACT

The present investigations were under taken to study the performance of Rice crop with Homoeopathically processed products, as Nutrients in comparison with Chemical Fertilizers - NPK. Homoeo Nutrients have been found to be effective as seen from the yields, which are either “AT PAR” or even SIGNIFICANT over Chemical Fertilizers NPK. 22 Scientific experiments 5 by APAU & 17 by MHARS were recorded in 11 years.

Homoeopathy goes with nature, which when applied to the plants, helps the life force of the plant, to live well naturally which means ORGANIC FARMING. In addition, these products being cheaper play a very important role in reducing the input costs for fertilizers and pesticides. Considering the steadily escalating cost of fossil fuel based fertilizers, the burden of subsidies on the Government and low purchasing capacity of small & marginal farmers (Resulting in irregular, untimely and less use of Chemical Fertilizers) alternate source of nutrients, has become imperative.

Dr.Dorothy Shepherd of England (20th Century) a great botanist and a Homoeopath expressed that Homoeopathically processed nutrients improves the general health of plant life in addition to getting optimum yields. They simultaneously improve the soil condition especially that of Humus.

Keeping these in-view, the present study was conducted with Rice crop at Regional Agricultural Research Station at Ragolu of A.P.A.U. for 5 successive years and at Master Homoeo Agricultural Research Station at Khajipeta and Arasavilli field with the financial aid by CAPART / New Delhi, using Homoeopathic Nutrients, to substitute the Chemical Fertilizers totally or partially leaving an option to the farmers.

MATERIALS & METHODS :

These experiments were laid out in R.B.D. as per standard practice. All the Cultivar Varieties selected are “High Yielding” variety. The details of plot size, replications, Cultivar varieties, treatments imposed etc. are given on the cover sheet of each experiment.

All the cultural practices for the rice crop, including Chemical Fertilizers’ application were followed as per the recommendation of Andhra Pradesh Agricultural University except the Homoeo nutrient application. The method of application of Homoeo Nutrients is that, 20 ml. of nutrient is mixed in 10 Liters of water and sprayed on the soil. In all 500 ml. of nutrients in 250 lts. of water is sufficient per Hectare.

YIELDS & YIELD COMPONENTS :

In all the 22 experiments conducted the yield data show that Homoeo Nutrients are able enough to produce yields AT PAR with Chemical Fertilizers. In some cases, even “SIGNIFICANTS” HIGHLY SIGNIFICANT” (with error at 1%) yields can be noticed.

All the yield components are recorded for each experiment, which reveal that the Homoeo Nutrients are effective enough and produced results AT PAR with Chemical Fertilizers in all most all cases and significant & Highly significant results are also achieved. In some years, the “Gall Midge” and silver Hoots were also recorded for a better appreciation.

Simultaneously, these Nutrients were applied to the bulk (as LAB-TO-LAND) for a total study and the recorded results are reflected separately to be read with the results of RBD.

RESULTS & DISCUSSION

It is proved beyond doubt that Homoeo Nutrients are capable of giving yields equivalent to Chemical Fertilizers, and also the yield components.

When 50% Chemicals are added the yields are significantly more than Chemical Fertilizers. That means the input of N is reduced by 50% which shall result in reduced pests & diseases, simultaneously getting increased yields with reduced cost of cultivation.

CONCLUSION :

Much can be said, but it may be too early, as it may take several decades to take shape, after the scientific community accepts this new science.

ABBREVIATIONS & SYMBOLS

P.H.	:	Plant Height
P.L.	:	Panicle Length
E.T.	:	Effective Tillers
I.E.T.	:	In effective Tillers
F.G.	:	Filled Grains
U.F.G.	:	Un filled Grains
Sq.m	:	Square Meter
R.B.D.	:	Replicated Block Design
Ha.	:	Hectare
M.T./Ha	:	Metric Tonnes per Hectare
*	:	Significant to Control
>	:	“AT PAR” with 100% Chemical Fertilizers
@	:	Significant” with respect to 100% Chemical Fertilizers
#	:	Highly Significant with respect to control
\$:	Highly significant with respect to 100 % Chemical Fertilizers

INDEX

Sc.Expt. No.	YEAR	SEASON	LOCATION
01.	1987	KHARIFF	APAU / RAGOLU
02.	1988	KHARIFF	APAU / RAGOLU
03.	1989	KHARIFF	APAU / RAGOLU
04.	1990	KHARIFF	APAU / RAGOLU
05.	1992	KHARIFF	APAU / RAGOLU
06.	1991-92	RABI	MHARS / ARS
07.	1992	KHARIFF	MHARS / ARS F1
08.	1992	KHARIFF	MHARS / ARS F2
09.	1992	KHARIFF	MHARS / ARS F3
10.	1992	KHARIFF	MHARS / ARS F4
11.	1992	KHARIFF	MHARS / ARS F5
12.	1992	KHARIFF	MHARS / AV OF 5
13.	1992	KHARIFF	MHARS / KHAJIPETA
14.	1993	KHARIFF	MHARS / KHAJIPETA
15.	1993	FACTORIAL	MHARS / KHAJIPETA
16.	1993-94	RABI	MHARS / KHAJIPETA
17.	1994	KHARIFF	MHARS / ARS
18.	1994	KHARIFF	MHARS / KHAJIPETA
19.	1994-95	RABI	MHARS / ARS
20.	1994-95	RABI	MHARS / KHAJIPETA
21.	1995	KHARIFF	MHARS / KHAJIPETA
22.	1996	KHARIFF	MHARSN / KHAJIPETA
23.	1997	KHARIFF	MHARS / KHAJIPETA
BULK YIELDS			
B1	1992	KHARIFF	MHARS / KHAJIPETA
B2	1993	KHARIFF	MHARS / KHAJIPETA
B3	1994	KHARIFF	MHARS / KHAJPETA ARASAVILLI
B4	1996	KHARIFF	MHARS / KHAJIPETA
B5	1997	KHARIFF	MHARS / KHAJIPETA

**ANDHRA PRADESH AGRICULTURAL UNIVERSITY
REGIONAL AGRICULTURAL RESEARCH STATION, RAGOLU**

Experiment on Rice

S.E.1/1

Homoeo Nutrients
Vs
Chemical Fertilizers

1. Year	-	1987 KHARIFF
2. Design	-	R.B.D.
3. No.of Replications	-	3
4. Net plot size	-	2.0m x 2.5m = 5 Sq.m
5. Cultivar variety	-	Phalguna - R.P.17
6. Location	-	ANGRAU - RARS, Ragolu
7. Soil	-	Medium sandy loam

Treatments

1. No manure (C N L)
2. Chemical fertilizers 100% (100F)
3. Chemical fertilizers 50% (50F)
4. Homoeo nutrients (100 H)
5. 50% Chemical fertilizers
+
50% Homoeo nutrients | (50F + 50H)

1987 KHARIFF - YIELDS
Kg. / PLOT

S.E.1/2

<u>Treatment</u>	<u>R1</u>	<u>R2</u>	<u>R3</u>	<u>A.V.</u>	<u>M.T./Ha.</u>
1. CNL	1.28	2.25	2.85	2.13	2.46
2. 100 F	2.50	2.80	2.50	2.60	2.98 *
3. 100 H 1	1.95	2.12	2.00	2.02	2.33
4. 100 H 2	2.47	2.54	2.05	2.50	2.79 >
5. 50 F+50H 1	2.30	2.65	2.95	2.63	3.03 * >
6. 50 F+50H 2	3.42	2.65	3.03	3.03	3.55 * @

C.D. @ 5% e = 0.35

ANGRAU

S.E.1/3

1987 KHARIFF

APAU - RARS - RAGOLU

YIELD COMPONENTS

SUMMARY

<u>Treatment</u>	<u>P.H.</u> <u>Cm.</u>	<u>P.L.</u> <u>Cm.</u>	<u>No.of</u> <u>Tillers</u> <u>Per Hill</u>	<u>E.T.</u> <u>No./</u> <u>Pan.</u>	<u>I.E.T.</u> <u>No./</u> <u>Pan.</u>	<u>F.G.</u> <u>No./</u> <u>Pan.</u>	<u>U.F.G.</u> <u>No./</u> <u>Pan.</u>	<u>S.H.</u> <u>No./</u> <u>Hill</u>	<u>G.M.</u> <u>No./</u> <u>Hill</u>	<u>1000</u> <u>Gr.wt.</u> <u>gm.</u>	<u>YIELD</u> <u>mt./</u> <u>Ha.</u>
CNL	76	19.3	7.7	5.6	3.23	58	25	0.05	4.43	31.8	2.46
100 F	79*	19.1	8.0	6.1	3.67	64	15*	0.20	4.28	30.4	2.98*
100 H1	77	18.5>	6.2>	4.8	2.33>	62	16*	0.15>	3.83*>	30.4	2.33
100 H2	78*>	18.5>	7.1>	5.4>	3.00>	61	1.3*@	0.11>	4.35>	30.5	2.79>
50F+50H1	83*@	19.3>	8.3>	6.6*>	3.0>	71*	20*	0.27>	4.10>	30.0	3.03*>
50F+50H2	88*@	20.6*	8.0>	6.8*@	3.00>	66*	16*	0.18>	4.25>	31.1@	3.55*@
C.D.	1.66	1.11	2.3	0.69	0.76	8.03	3.70	0.31	0.66	0.90	0.35

APAU / RARS / RAGOLU

S.E.1/4

1987 KHARIFF - YIELD COMPONENTS

1000 Gr. WEIGHT IN gms.

<u>Treatment</u>	<u>R1</u>	<u>R2</u>	<u>R3</u>	<u>A.V.</u>
1. CNL	30	32	31	31
2. 100 F	31	30	30	30
3. 100 H 1	30	30	30	30
4. 100 H 2	30	31	30	30
5. 50 F + 50 H 1	30	31	30	30
6. 50 F + 50 H 2	30	30	32	31 @

C.D. @ 5% e = 0.09

ANGRAU
APAU / RARS / RAGOLU

S.E.1/5

1987 KHARIFF

YIELD COMPONENTS

UNFILLED GRAINS PER PANICLE in no.

<u>Treatment</u>	<u>R1</u>	<u>R2</u>	<u>R3</u>	<u>A.V.</u>
1. CNL	30	19	25	25
2. 100 F	17	16	12	15 *
3. 100 H 1	14	15	20	16 * >
4. 100 H 2	1	2	1	1.3 * @
5. 50 F + 50 H 1	15	24	20	20 *
6. 50 F + 50 H 2	17	18	13	16 * @

C.D. @ 5% e = 3.70

1987 KHARIFF

YIELD COMPONENTS

FILLED GRAINS (no.) / PANICLE

<u>Treatment</u>	<u>R1</u>	<u>R2</u>	<u>R3</u>	<u>A.V.</u>
1. CNL	63	42	70	58
2. 100 F	68	60	64	64
3. 100 H 1	69	62	56	62 >
4. 100 H 2	76	54	53	61 >
5. 50 F + 50 H 1	70	70	72	71 * >
6. 50 F + 50 H 2	59	66	73	66 * >

C.D. @ 5% e = 8.03

ANGRAU
RARS - RAGOLU
1987 KHARIF

S.E.1/7

YIELD COMPONENTS

LENGTH OF PANICLE in cms.

<u>Treatment</u>	<u>R1</u>	<u>R2</u>	<u>R3</u>	<u>A.V.</u>
1. CNL	20.1	16.7	21.0	19.3
2. 100 F	20.0	18.7	18.7	19.1
3. 100 H 1	19.9	18.5	17.9	18.5 >
4. 100 H 2	19.2	18.0	18.2	18.5 >
5. 50 F + 50 H 1	19.1	19.0	19.8	19.3 >
6. 50 F + 50 H 2	19.2	22.4	20.2	20.6 * >

C.D. @ 5% e = 1.11

1987 KHARIF

S.E.1/8

YIELD COMPONENTS

EFFECTIVE TILERS PER HILL (no.)

<u>Treatment</u>	<u>R1</u>	<u>R2</u>	<u>R3</u>	<u>A.V.</u>
1. CNL	4.5	6.4	7.7	5.6
2. 100 F	6.5	5.4	6.4	6.1
3. 100 H 1	4.7	5.2	4.6	4.8
4. 100 H 2	5.4	5.3	5.5	5.4
5. 50 F + 50 H 1	6.0	6.3	7.5	6.6 * >
6. 50 F + 50 H 2	6.0	7.0	7.0	6.8 * @

C.D.@ 5% e = 0.69

ANGRAU
APAU / RARS / RAGOLU

S.E.1/9

1987 KHARIF
YIELD COMPONENTS
NO.OF TILLERS / HILL

<u>Treatment</u>	<u>R1</u>	<u>R2</u>	<u>R3</u>	<u>A.V.</u>
1. CNL	6.5	7.6	8.0	7.7
2. 100 F	8.4	6.8	8.8	8.0
3. 100 H 1	6.2	6.7	5.7	6.2 >
4. 100 H 2	6.8	7.0	7.5	7.1 >
7. 50 F + 50 H 1	7.2	7.8	9.3	8.3 >
8. 50 F + 50 H 2	7.8	8.5	7.6	8.0 >

C.D.@ 5% e = 2.3

1987 KHARIF YIELD COMPONENTS

S.E.1/10

PLANT HEIGHT

<u>Treatment</u>	<u>R1</u>	<u>R2</u>	<u>R3</u>	<u>A.V.</u>
1. CNL	65.7	77.5	84.2	76
2. 100 F	77	80	80	79 *
3. 100 H 1	74	82	74	77
4. 100 H 2	77	77	79	78 * >
5. 50 F + 50 H 1	84	83	82	83 * @
6. 50 F + 50 H 2	84	90	90	88 * @

C.D.@ 5% e = 1.66

APAU - RARS - RAGOLU

S.E.2/1

Experiment on Rice

Homoeo Nutrients

Vs

Chemical Fertilizers

1. Year	-	1988 KHARIFF
2. Design	-	R.B.D.
3. No.of Replications	-	4
4. Net plot size	-	4X3 = 12 Sq.m
5. Cultivar variety	-	Phalguna - R.P.-17
6. Location	-	RARS - RAGOLU
7. Soil	-	Medium sandy loam

Treatments

1. No manure (C N L)
2. Chemical fertilizers 100% (100F)
3. Chemical fertilizers 50% (50F)
4. Homoeo nutrients (100 H)
5. 50% Chemical fertilizer
50% Homoeo nutrients⁺ | (50F + 50H)

APAU - RARS - RAGOLU

S.E.2/2

1988 KHARIFFm.t. / Hect.

<u>Treatment</u>	<u>R1</u>	<u>R2</u>	<u>R3</u>	<u>R4</u>	<u>A.V.</u>
1. CNL	5.10	5.0	4.90	4.80	4.95
2. 50 F	5.38	4.80	5.95	4.50	5.15
3. 100 F	5.30	5.70	5.10	4.80	5.23
4. 100 H 1	5.75	5.80	5.65	4.85	5.51 * >
5. 100 H 2	5.80	6.20	5.62	4.00	5.40 * >
6. 50 F + 50 H 1	6.15	5.95	5.65	5.50	5.81 * >
8. 50 F + 50 H 2	6.20	5.45	5.70	5.80	5.74 * >
9. 100 F + 50 H 1	7.10	6.30	5.90	5.80	6.28 * >
10. 100 F + 50 H 2	7.20	6.00	6.80	5.90	6.48 * >

C.D. @ 5% e = 0.44

APAU - RARS - RAGOLU

S.E.2/3

1988 KHARIF

MHARS - F1
YIELD COMPONENTS

SUMMARY

<u>Treatment</u>	<u>P.H.</u> <u>cm.</u>	<u>P.L.</u> <u>cm.</u>	<u>E.T.</u> <u>No./Hill</u>	<u>I.E.T.</u> <u>No./Hill</u>	<u>F.G.</u> <u>No./Pan</u>	<u>U.F.G.</u> <u>No./Pan.</u>	<u>G.M.</u>	<u>S.H.</u>	<u>1000</u> <u>gr/wt.</u> <u>(gms.)</u>
CNL	92.8	23.02	5.2	3.12	116	62	4.4	1.75	31.82
50 F	96.9*	23.4	6.4*	3.9	134*@	87	4.2	1.0	30.6
100 F	96.3*	23.20	6.8*	4.1	119	91	4.3	2.5	30.39
100 H1	98.6*@	24.1*@	6.9*>	3.2	113	71>	3.8>	1.25@	30.52>
100 H2	96.4*>	23.73*@	4.8	3.01	116	58@	4.3>	2.0>	30.40>
50F+50H1	97.2*>	23.8*@	6.9*>	3.62>	120	82>	4.1>	1.50@	32.99@
50F+50H2	97.6*	23.9*@	7.2*>	3.5>	133*@	96>	4.0>	2.0>	29.20
C.D. @1%	1.62	0.45*@	0.81	0.82	71	26	0.66	0.88	0.11

APAU - RARS - RAGOLU

S.E.2/4

1988 KHARIF

PANICLE LENGTH cm.

<u>Treatment</u>	<u>R1</u>	<u>R2</u>	<u>R3</u>	<u>R4</u>	<u>A.V.</u>
1. CNL	23.5	22.4	22.9	23.3	23.0
2. 50 F	24.4	22.7	23.7	22.4	23.4
3. 100 F	23.6	22.3	22.9	22.8	23.2 >
4. 100 H1	24.2	22.7	24.4	25.1	24.1 * @
5. 100 H2	23.4	23.6	23.5	24.4	23.7 * @
6. 50 F + 50H1	23.4	23.8	23.7	24.3	23.8 * @
7. 50 F + 50 H2	23.7	23.8	23.5	24.6	23.9 * @
8. 100 F + 50 H1	23.1	24.1	23.0	24.0	23.3 >
9. 100 F + 50 H2	24.2	24.3	23.6	25.0	24.3 * @
C.D. @ 5% e = 0.45					

1988 KHARIFF

FILLED GRAINS NO / PANICLE

<u>Treatment</u>	<u>R1</u>	<u>R2</u>	<u>R3</u>	<u>R4</u>	<u>A.V.</u>
1. CNL	125	105	112	123	116
2. 50 F	153	118	13.0	134	134 * @
3. 100 F	131	99	118	116	119
4. 100 H1	128	99	108	116	113
5. 100 H2	119	113	121	100	116
6. 50 F + 50H1	132	121	114	114	120
7. 50 F + 50 H2	138	135	118	141	133 * @
8. 100 F + 50 H1	133	119	114	127	123 *
9. 100 F + 50 H2	134	124	119	159	134 * @

C.D. @ 5% e = 7.09

1988 KHARIFF

GALL MIDGE NO. / HILL

<u>Treatment</u>	<u>R1</u>	<u>R2</u>	<u>R3</u>	<u>R4</u>	<u>A.V.</u>
1. CNL	4.4	4.8	5.0	3.0	4.4
2. 50 F	3.2	3.9	6.2	3.6	4.2
3. 100 F	3.6	3.9	5.7	3.9	4.3
4. 100 H1	3.8	3.2	4.5	3.8	3.8 >
5. 100 H2	4.5	4.7	4.2	4.0	4.3 >
6. 50 F + 50H1	4.1	3.7	3.8	4.8	4.1 >
7. 50 F + 50 H2	3.4	4.0	3.4	6.2	4.0 >
8. 100 F + 50 H1	3.6	5.7	4.4	6.1	4.9 >
9. 100 F + 50 H2	3.6	5.2	4.2	5.6	4.6 >

C.D. @ 5% e = 0.66

APAU - RARS - RAGOLU

S.E.2/7

1988 KHARIFF

YIELD COMPONENTS

PLANT HEIGHT CM.

<u>Treatment</u>	<u>R1</u>	<u>R2</u>	<u>R3</u>	<u>R4</u>	<u>A.V.</u>
1. CNL	94.1	96.4	90.1	90.6	92.8
2. 50 F	98.3	96.7	99.1	93.7	96.9 *
3. 100 CF	100.0	95.3	96.4	93.3	96.3 *
4. 50 H1	104.3	97.9	97.2	95.1	98.6 * @
5. 100 H2	95.0	96.5	95.4	98.5	96.4 * >
6. 50 CF + 50H1	100.6	96.5	95.6	96.2	97.2 * >
7. 50 CF + 50 H2	100.8	96.6	94.7	98.4	97.6 * >
8. 100 C F + 50 H1	100.8	100.6	95.1	101.0	99.4 * @
9. 100 CF + 100 H2	99.6	95.7	96.0	97.9	97.3 * >

C.D. @ 5% e = 1.62

APAU - RARS - RAGOLU

S.E.2/8

1988 KHARIFF

YIELD COMPONENTS

SILVER HOOTS NO.

<u>Treatment</u>	<u>R1</u>	<u>R2</u>	<u>R3</u>	<u>R4</u>	<u>A.V.</u>
1. CNL	1	3	1	2	1.75
2. 50 F	0	2	2	0	1
3. 100 F	6	1	3	0	2.5
4. 100 H1	2	2	1	0	1.25 @
5. 100 H2	3	2	1	2	2 >
6. 50 F + 50H1	3	2	1	0	1.5 @
7. 50 F + 50 H2	2	2	2	2	2 >
8. 100 F + 50 H1	0	1	0	2	0.7 * @
9. 100 F + 50 H2	3	2	1	2	2 >

C.D. @ 5% e = 0.88

APAU - RARS - RAGOLU

S.E. 3/1

Experiment on Rice

Homoeo Nutrients

Vs

Chemical Fertilizers

- | | | |
|-----------------------|---|--|
| 1. Year | - | 1989 KHARIFF |
| 2. Design | - | R.B.D. |
| 3. No.of Replications | - | 4 |
| 4. Net plot size | - | 7.35 X 4.3 = 31.6 Sq.m
Net.size 21.5 Sq.m |
| 5. Cultivar variety | - | MTU 7029 |
| 6. Location | - | RARS - RAGOLU - APAU |
| 7. Soil | - | Medium sandy loam |

Treatments

1. No manure (C N L)
2. Chemical fertilizers 100% (100F)
3. Chemical fertilizers 50% (50F)
4. Homoeo nutrients (100 H)
5. 50% Chemical fertilizers
+
50% Homoeo nutrients | (50F + 50H)

APAU - RARS - RAGOLU

S.E. 3/2

1989 KHARIFF - YIELDS KG / 21.5 Sq.m

<u>Treatment</u>	<u>R1</u>	<u>R2</u>	<u>R3</u>	<u>R4</u>	<u>A.V.</u>	MT.Ha
1. CNL	10.1	12.0	9.20	10.50	10.46	4.87
2. 50 F	12.7	12.4	11.6	11.45	12.04	5.60 #
3. 100 F	14.8	14.7	13.85	12.1	13.86	6.42 #
4. 50 H	13.5	13.4	12.6	11.5	12.75	5.93 #
5. 100 H	13.5	13.1	12.5	10.9	12.5	5.81 #
6. 100 H	14.3	13.8	13.4	13.6	13.77	6.39 #>
7. 50 F+50H	13.8	15.0	12.2	13.6	13.68	6.36 #>
8. 50 F+100H	14.2	14.35	12.80	13.5	13.71	6.38 #>
9. 100 F+50H	13.5	14.1	13.3	13.8	13.53	6.29 #
10. 100 F + 100 H	14.4	14.3	13.7	13.4	13.95	6.41 #>
C.D. @ 5% e-					0.30	0.205
@ 1%					0.41	0.28

APAU - RARS - RAGOLU

S.E. 3/3

1989 KHARIFF

MHARS - F1
YIELD COMPONENTS
SUMMARY

<u>Treatment</u>	<u>P.H.</u> <u>cm.</u>	<u>P.L.</u> <u>cm.</u>	<u>E.T.</u> <u>No./Hill</u>	<u>I.E.T.</u> <u>No./Hill</u>	<u>F.G.</u> <u>No./Hill</u>	<u>U.F.G.</u> <u>No./Hill</u>	<u>S.H.</u> <u>No./Hill</u>	<u>1000</u> <u>gr.wt</u> <u>(gms.)</u>
CNL	90.83	21.9	8.6	3.6	1401	182	0.17	29.2
50 F	99.40	22.1	9.5*	4.2	1415	179	0.35	33.97*
100 F	96.1*	23.5*	8.85	4.1	1515*	205	0.42	33.26*
100 H1	90.68	22.1	8.5>	3.9>	1292	197>	0.17@	35.06*>
100 H2	91.15	22.73*	9.05>	4.1>	1419>	206>	0.27>	--
50F+50H1	94.5*>	23.0*	8.53>	4.3>	1430>	166@	0.3	33.0*>
50F+50H2	96.38*>	23.2*>	7.95	2.8	1635*@	173@	0.22>	--
C.D. @ 5%	2.93	0.43	0.76	1.05	107	29	0.16	2.48

APAU - RARS - RAGOLU

S.E. 3/4

1989 KHARIFF

YIELD COMPONENTS
1000 GRAIN WEIGHT GMS.

<u>Treatment</u>	<u>R1</u>	<u>R2</u>	<u>R3</u>	<u>R4</u>	<u>A.V.</u>
1. CNL	30.8	28.4	27.2	20.6	29.2
2. 50 F	34.8	36.2	32.2	32.6	33.97 *
3. 100 F	36.4	33	32.4	31.6	33.26 *
4. 100 H1	30.4	38.6	36.4	34.8	35.0 * >
5. 50 F + 50H1	34.4	32.6	34.2	31.0	33.0 * >
C.D. @ 5% e = 2.48					

APAU - RARS - RAGOLU

S.E. 3/5

1989 KHARIFF

YIELD COMPONENTS

PANICLE LENGTH CM.

<u>Treatment</u>	<u>R1</u>	<u>R2</u>	<u>R3</u>	<u>R4</u>	<u>A.V.</u>
1. CNL	21.1	22.0	19.65	24.85	21.9
2. 50 F	22.20	22.75	22.00	23.30	22.06
3. 100 F	23.55	22.67	25.10	22.70	23.50 *
4. 100 H1	22.45	21.85	23.00	21.70	22.11
5. 100 H2	23.85	2.80	21.35	2.95	22.73 *
6. 100 H3	22.85	23.30	22.50	24.55	23.30 * >
7. 50 F + 50H1	23.25	22.60	21.95	24.40	23.05 * >
8. 50 F + 50 H2	22.00	23.85	23.70	23.15	23.17 * >
9. 100 F + 50 H1	23.10	22.55	23.15	22.85	22.90 *
10. 100 F + 50 H2	22.33	22.55	24.75	24.05	23.40 * >

C.D. @ 5% e = 0.43

S.E. 3/6

APAU - RARS - RAGOLU

1989 KHARIFF

YIELD COMPONENTS

FILLED GRAINS no / hill

<u>Treatment</u>	<u>R1</u>	<u>R2</u>	<u>R3</u>	<u>R4</u>	<u>A.V.</u>
1. CNL	1208	1503	1239	1655	1401
2. 50 F	1482	1544	1279	1354	1415
3. 100 F	1640	1644	1563	1213	1515 *
4. 100 H1	1308	1363	1437	1163	1292
5. 100 H2	1372	1586	1242	1475	1419 >
6. 100 H3	1465	1633	1358	1583	1510 *
7. 50 F + 50H1	1445	1403	1359	1511	1430 >
8. 50 F + 50 H2	1360	1748	1798	1630	1635 *
9. 100 F + 50 H1	1622	1415	1679	1392	1528 *
10. 100 F + 50 H2	1053	1420	1581	1467	1380

C.D. @ 5% e = 107

APAU - RARS - RAGOLU

S.E. 3/7

1989 KHARIFF

YIELD COMPONENTS

SILVER HOOTS no / Hill

<u>Treatment</u>	<u>R1</u>	<u>R2</u>	<u>R3</u>	<u>R4</u>	<u>A.V.</u>
1. CNL	0.2	0.0	0.0	0.5	0.17
2. 50 F	0.5	0.0	0.5	0.4	0.35
3. 100 F	0.0	0.6	0.7	0.4	0.42
4. 100 H1	0.0	0.1	0.4	0.2	0.17 @
5. 100 H2	0.0	0.3	0.5	0.3	0.27 >
6. 100 H3	0.4	0.2	0.4	0.2	0.3 >
7. 50 F + 50H1	0.0	0.5	0.2	0.5	0.3 >
8. 50 F + 50 H2	0.0	0.3	0.3	0.3	0.22 @
9. 100 F + 50 H1	0.4	0.2	0.3	0.3	0.3 >
10. 100 F + 50 H2	0.6	0.6	0.1	0.5	0.45 >

C.D. @ 5% e = 0.16

APAU - RARS - RAGOLU

S.E. 3/8

1989 KHARIFF

YIELD COMPONENTS

EFFECTIVE TILLER No / Hill

<u>Treatment</u>	<u>R1</u>	<u>R2</u>	<u>R3</u>	<u>R4</u>	<u>A.V.</u>
1. CNL	8.8	7.7	9.0	8.9	8.6
2. 50 F	10.3	8.4	9.2	10.1	9.5
3. 100 F	8.3	7.0	9.1	11.0	8.85
4. 100 H1	9.1	8.3	8.1	8.5	8.50
5. 100 H2	9.1	10.9	7.9	8.3	9.05
6. 100 H3	8.8	8.7	8.8	9.3	8.88
7. 50 F + 50H1	9.1	8.7	8.6	7.7	8.53
8. 50 F + 50 H2	7.4	8.1	8.0	8.3	7.95
9. 100 F + 50 H1	9.4	9.6	9.4	9.5	9.4*
10. 100 F + 50 H2	9.2	6.7	8.6	10.8	8.8

C.D. @ 5% e = 0.76

APAU - RARS - RAGOLU

S.E. 3/9

1989 KHARIFF

YIELD COMPONENTS

PLANT HEIGHT cm.

<u>Treatment</u>	<u>R1</u>	<u>R2</u>	<u>R3</u>	<u>R4</u>	<u>A.V.</u>
1. CNL	98.3	88.2	87.0	89.8	90.8
2. 50 F	101.2	88.3	97.2	95.6	99.4
3. 100 F	101.2	95.0	106.6	94.7	96.1 *
4. 100 H1	95.0	89.3	89.0	89.4	90.7
5. 100 H2	94.9	91.3	99.4	89.0	91.2
6. 100 H3	101.0	98.0	97.3	99.0	98.8 *>
7. 50 F + 50H1	96.6	100.0	90.5	90.9	94.5 *>
8. 50 F + 50 H2	95.5	103.1	95.1	91.9	96.48 *>
9. 100 F + 50 H1	97.3	102.6	99.0	96.5	98.9 *>
10. 100 F + 50 H2	98.1	99.1	96.3	89.5	95.75 *>

C.D. @ 5% e = 2.93

APAU - RARS - RAGOLU

S.E. 3/10

1989 KHARIFF

YIELD COMPONENTS

UN FILLED GRAINS cm.

<u>Treatment</u>	<u>R1</u>	<u>R2</u>	<u>R3</u>	<u>R4</u>	<u>A.V.</u>
1. CNL	45	194	171	278	182
2. 50 F	180	153	220	162	179
3. 100 F	186	173	193	268	205
4. 100 H1	249	122	274	143	197 >
5. 100 H2	176	218	150	279	206 >
6. 100 H3	203	132	255	218	202 >
7. 50 F + 50H1	226	113	137	187	166
8. 50 F + 50 H2	176	189	155	172	173
9. 100 F + 50 H1	196	163	255	262	220 *>
10. 100 F + 50 H2	230	163	319	162	216 *>

C.D. @ 5% e = 29

APAU - RARS - RAGOLU

S.E. 4/1

Experiment on Rice

Homoeo Nutrients

Vs

Chemical Fertilizers

1. Year	-	1990
2. Design	-	R.B.D.
3. No.of Replications	-	3
4. Net plot size	-	6.5 Sq.m
5. Cultivar variety	-	MTU 7029
6. Location	-	ANGRAU - RARS - RAGOLU
7. Soil	-	MEDIUM SANDY - LOAM

Treatments

- No manure (C N L)
- Chemical fertilizers 100% (100F)
- Chemical fertilizers 50% (50F)
- Homoeo nutrients (100 H)
- 50% Chemical fertilizers + 50% Homoeo nutrients (50F + 50H)

APAU

S.E. 4/2

1990 KHARIFF**RARS - RAGOLU gm. / Sq.m**

<u>Treatment</u>	<u>R1</u>	<u>R2</u>	<u>R3</u>	<u>A.V.</u>	<u>MT./Ha.</u>
1. CNL (no manure)	450	480	430	453	4.53
2. 50 F	470	460	480	470	4.70
3. 100 F	480	510	500	497	4.97 *
4. 100 H	485	460	460	475	4.75 *>
5. 50 F + 50 H	495	510	440	482	4.82 *>
6. 50 F + 100 H	485	460	430	485	4.85 *>
7. 100 F + 100 H	420	490	430	447	4.47 *>
8. 100 F + 100 H	495	490	500	495	4.95 *>
9. Compost 2.T	460	470	450	460	4.60
10. Comp. + 50 H	480	450	460	463	4.63
11. Comp. + 100 F	530	470	520	506	5.06 *>
C.D. @ 5% e = 22					0.22

**ANDHRA PRADESH AGRICULTURAL UNIVERSITY
REGIONAL AGRICULTURAL RESEARCH STATION, RAGOLU**

Experiment on Rice

S.E.5/1

Homoeo Nutrients
Vs
Chemical Fertilizers

1. Year	-	1992 KHARIFF
2. Design	-	R.B.D.
3. No.of Replications	-	3
4. Net plot size	-	12 Sq.m
5. Cultivar variety	-	MTU 7029
6. Location	-	RARS - RAGOLU (APAU)
7. Soil	-	LIGHT SANDY - LOAM

Treatments

1. No manure (C N L)
2. Chemical fertilizers 100% (100F)
3. Chemical fertilizers 50% (50F)
4. Homoeo nutrients (100 H)
5. 50% Chemical fertilizers
+
50% Homoeo nutrients | (50F + 50H)

1992 KHARIFF

S.E.5/2

APAU - RARS - RAGOLU

GRAIN YIELD gms. /Sq.m

<u>Treatment</u>	<u>R1</u>	<u>R2</u>	<u>R3</u>	<u>A.V.</u>	<u>MT./ Ha.</u>
1. CNL				372	3.72
2. 50 F				402	4.02
3. 100 F	Replication -wise details are with RARS / Ragolu			380	3.80 >
4. 100 H1				428	4.28 *@
5. 50 + 50 H1				422	4.22 *@
C.D. @ 5% e = 0.27					

APAU - RARS - RAGOLU

S.E.5/3

1992 KHARIFF

YIELD COMPONENTS

SUMMARY

<u>Treatment</u>	<u>P.H.</u> <u>cm.</u>	<u>P.L.</u> <u>cm.</u>	<u>E.T.</u> <u>No./Hill</u>	<u>I.E.T.</u> <u>No./Hill</u>	<u>F.G.</u> <u>No./Hill</u>	<u>U.F.G.</u> <u>No./Hill</u>	<u>GM</u>	<u>S.H.</u>	<u>1000</u> <u>gr/wt</u> <u>(gms.)</u>
CNL	77.4	17.1	4.5	3.1	288	50.6	2.8	2.0	25.9
50 F	93.0*	19.3*	4.5	6.5	402*	56.7	2.1*	2.1	30.6*
100 F	95.6*	19.5*	5.3	7.2	395*	49.2	1.8*	3.8	34.8*
100 H1	82.4	18.2	5.0>	3.5	415*>	73.5	3.2	2.0>	32.2*>
100 H2	82.2	17.4	5.2>	3.2	398*>	66.4	2.0*>	2.2>	34.4*>
50F+50H1	89.4*	19.1*>	5.2>	4.0	493*@	65.9	2.6	2.6>	33.0*>
50F+50H2	88.8*	19.3*>	4.9>	4.2	442*@	43.6*@	1.7*>	2.7>	26.4
C.D. @5%e= 5.5	1.13	0.72	0.78	21	3.2	0.23	0.44	2.33	

APAU - RARS - RAGOLU

S.E.5/4

1992 KHARIFF

YIELD COMPONENTS

PLANT HEIGHT cm.

<u>Treatment</u>	<u>R1</u>	<u>R2</u>	<u>R3</u>	<u>A.V.</u>
1. CNL				77.4
2. 50 F				93.0 *
3. 100 F				95.6 *
4. 100 H1				82.4
5. 100 H2				82.2
6. 50 F + 50H1				89.4 *
7. 50 F + 50H2				88.8 *
C.D. @ 5% e = 5.5				

APAU - RARS - RAGOLU

S.E.5/5

1992 KHARIF

APAU-RARS - RAGOLU
YIELD COMPONENTS
LENGTH OF PANCILE cm.

<u>Treatment</u>	<u>R1</u>	<u>R2</u>	<u>R3</u>	<u>A.V.</u>
1. CNL				17.1
2. 50 F				19.3 *
3. 100 F				19.5 *
4. 100 H1				18.2 *>
5. 100 H2				17.4
6. 50 F + 50H1				19.1 * >
7. 50 F + 50H2				19.3 *>

C.D. @ 5% e = 1.13

1992 KHARIF

S.E.5/6

APAU - RARS - RAGOLU
YIELD COMPONENTS
EFFECTIVE TILLERS No. / Hill

<u>Treatment</u>	<u>R1</u>	<u>R2</u>	<u>R3</u>	<u>A.V.</u>
1. CNL				4.6
2. 50 F				4.5
3. 100 F				5.3
4. 100 H1				5.0 >
5. 100 H2				5.2 >
6. 50 F + 50H1				5.2 >
7. 50 F + 50 H2				4.9 >

C.D. @ 5% e = 0.72

APAU - RARS - RAGOLU

S.E.5/7

1992 KHARIFF

YIELD COMPONENTS
IN EFFECTIVE TILLERS No. / Hill

<u>Treatment</u>	<u>R1</u>	<u>R2</u>	<u>R3</u>	<u>A.V.</u>
1. CNL				3.1
2. 50 F				6.5
3. 100 F				7.2
4. 100 H1				3.5 @
5. 100 H2				3.2 @
6. 50 F + 50H1				4.0 @
7. 50 F + 50H2				4.2 @

C.D. @ 5% e = 0.78

1992 KHARIFF

S.E.5/8

APAU - RARS - RAGOLU
YIELD COMPONENTS
FILLED GRAINS No. / Hill

<u>Treatment</u>	<u>R1</u>	<u>R2</u>	<u>R3</u>	<u>A.V.</u>
1. CNL				288
2. 50 F				402 *
3. 100 F				395 *
4. 100 H1				415 *>
5. 100 H2				398 *>
6. 50 F + 50H1				493 *@
7. 50 F + 50 H2				442 *@

C.D. @ 5% e = 21

APAU - RARS - RAGOLU

S.E.5/9

1992 KHARIF

YIELD COMPONENTS

UNFILLED GRAINS No / Hill

<u>Treatment</u>	<u>R1</u>	<u>R2</u>	<u>R3</u>	<u>A.V.</u>
1. CNL				50.6
2. 50 F				56.7
3. 100 F				49.2
4. 100 H1				73.5
5. 100 H2				66.4
6. 50 F + 50H1				65.1
7. 50 F + 50H2				43.6 *@

C.D. @ 5% e = 3.2

MASTER HOMOEEO AGRICULTURAL RESEARCH STATION.ARASAVALLI

A "CAPART" PROJECT.

Experiment on Rice

S.E. 6/1

Homoeo Nutrients

Vs

Chemical Fertilizers

1. Year	-	1991-1992 RABI
2. Design	-	R.B.D.
3. No.of Replications	-	3
4. Net plot size	-	5 Sq.m
5. Cultivar variety	-	RGL 2624
6. Location	-	MHARS/ARASAVILLI
7. Soil	-	SANDY - LOAM

Treatments

1. No manure (C N L)
2. Chemical fertilizers 100% (100F)
3. Chemical fertilizers 50% (50F)
4. Homoeo nutrients (100 H)
5. 50% Chemical fertilizers | (50F + 50H)
50% Homoeo nutrients

MHARS

S.E.6/2

1991-92 RABI

YIELD Kg / 25 Sq.m

<u>Treatment</u>	<u>R1</u>	<u>R2</u>	<u>R3</u>	<u>A.V.</u>	<u>MT./Ha.</u>
1. CNL	5.64	11.34	7.24	8.07	3.22
2. 50 F	13.45	12.88	12.31	12.88 #	5.15
3. 100 F	16.73	17.75	12.51	15.66 #	6.26
4. 100 H 1	16.36	17.08	12.69	15.38 #>	6.15
5. 100 H 2	13.96	12.16	13.43	13.18 #	5.23
6. 100 H 3	16.55	16.1	15.43	16.02 #>	6.41
7. 50 F + 50 H 1	15.98	14.38	15.04	15.13 #>	6.05
8. 50 F + 50 H 2	14.27	16.37	20.54	17.06 #>	6.82
9. 50 F + 50 H 3	14.34	12.77	21.24	16.12 #>	6.45
10. 50 F + Compost	12.33	14.69	16.0	14.34 #>	5.73
11. 50 H1 + Comp	10.34	12.46	15.92	12.91 #	5.13
12. Compost 2T/Acr.	13.94	13.79	13.11	13.61 #>	5.42

C.D. @ 5% e=2.34

C.D. @ 1% e= 4.05

MHARS - ARASAVALLI

S.E.6/3

1991-92 RABI**YIELD COMPONENTS****SUMMARY**

<u>Treatment</u>	<u>P.H.</u> <u>cm.</u>	<u>E.T.</u> <u>No./Hill</u>	<u>I.E.T</u> <u>No./Hill</u>	<u>1000 gr.</u> <u>Wt.(gms.)</u>	<u>White</u> <u>ears.(nos)</u>	<u>Yield</u> <u>mt./ha.</u>
CNL	67.7	7.3	1.6	23.7	0.06	3.22
50 F	87.0*	9.0*	1.8	25.4*	0.1	5.15#
100 F	87.7*	9.2*	1.9	28.4*	0.06	6.26#
100 H1	80.9>	7.1	1.9>	26.4*	0.06>	6.15#>
100 H2	76.0>	7.3	1.3	25.0*	0.1	5.23#>
100 H3	81.1>	7.6	1.9>	26.0*	0.06>	6.41#>
50F+50H	85.0>	7.8	1.9>	24.5	0.1	6.05#>
50 F + 50 H2	86.8*>	8.3>	1.9>	25.0*	0.06>	6.82#>
50 F + 50 H3	85.9*>	8.0	1.6>	25.0*	0.06>	6.45#>
C.D. @5%	17.7	1.12	0.68	1.26	0.01	1.62(1%)

MHARS - ARS

S.E.6/4

1991 - 1992 RABI**MHARS - ARS****YIELD COMPONENTS****PLANT HEIGHT cm.**

<u>Treatment</u>	<u>R1</u>	<u>R2</u>	<u>R3</u>	<u>A.V.</u>
1. CNL	62.9	68.2	72.1	67.7
2. 50 F	92.0	83.0	86.1	87.0 *
3. 100 F	88.9	90.3	84.0	87.7 *
4. 100 H1	86.4	77.9	77.7	80.9 >
5. 100 H2	78.0	77.4	72.7	76.0 >
6. 100 H3	84.5	79.2	79.6	81.1 >
7. 50 F + 50H1	86.5	84.4	84.2	85.0 >
7. 50 F + 50H2	82.8	90.1	87.7	86.8 *>
9. 50 F + 50 H3	104.5	86.2	86.1	85.9 *>
C.D. @ 5% e = 17.7				

MHARS - ARASAVILLI

S.E.6/5

1991- 1992 RABI**MHARS - ARS****YIELD COMPONENTS****EFFECTIVE TILLERS No. / Hill**

<u>Treatment</u>	<u>R1</u>	<u>R2</u>	<u>R3</u>	<u>A.V.</u>
1. CNL	6.9	8.7	6.4	7.3
2. 50 F	9.3	10.3	7.3	9.0 *
3. 100 F	9.1	10.4	8.1	9.2 *
4. 100 H1	7.1	7.2	7.0	7.1
5. 100 H2	6.9	8.8	6.1	7.3
6. 100 H3	7.0	7.8	7.9	7.6
7. 50 F + 50H1	8.1	6.7	7.7	7.8
8. 50 F + 50H2	7.5	9.0	8.4	8.3 >
9. 50 F + 50 H3	7.5	8.9	7.6	8.0

C.D. @ 5% e = 1.12

MHARS

S.E.6/6

1991-1992 RABI**MHARS - ARS****YIELD COMPONENTS****IN EFFECTIVE TILLERS No. / Hill**

<u>Treatment</u>	<u>R1</u>	<u>R2</u>	<u>R3</u>	<u>A.V.</u>
1. CNL	1.2	1.8	2.0	1.6
2. 50 F	2.0	1.4	2.0	1.8
3. 100 F	2.1	1.9	1.8	1.9
4. 100 H1	1.8	2.1	1.7	1.9 >
5. 100 H2	1.9	1.3	0.6	1.3 >
6. 100 H3	1.7	1.8	2.0	1.9 >
7. 50 F + 50H1	1.9	1.8	1.9	1.9 >
8. 50 F + 50 H2	1.9	1.8	2.0	1.9 >
9. 50 F + 50 H3	2.2	1.6	1.2	1.6 >

C.D. @ 5% e = 0.68

MHARS - ARASAVILLI

S.E.6/7

1991 - 1992 RABI**MHARS - ARS
YIELD COMPONENTS
1000 GRAIN WEIGHT gms.**

<u>Treatment</u>	<u>R1</u>	<u>R2</u>	<u>R3</u>	<u>A.V.</u>
1. CNL	23.7	23.7	23.7	23.7
2. 50 F	25.4	25.4	25.3	25.4 *
3. 100 F	28.4	28.3	28.5	28.4 *
4. 100 H1	26.4	26.5	26.3	26.4 *
5. 100 H2	25.0	25.1	25.0	25.0 *
6. 100 H3	26.2	26.0	25.8	26.0 *
7. 50 F + 50H1	24.5	24.4	24.6	24.5
8. 50 F + 50H2	25.0	25.1	24.9	25.0 *
9. 50 F + 50 H3	25.1	25.0	25.0	25.0 *

C.D. @ 5% e = 1.26

MHARS

S.E.6/8

1991-1992 RABI**MHARS - ARS
YIELD COMPONENTS
WHITE EARS No.**

<u>Treatment</u>	<u>R1</u>	<u>R2</u>	<u>R3</u>	<u>A.V.</u>
1. CNL	0.1	0.1	0.0	0.06
2. 50 F	0.0	0.1	0.2	0.1
3. 100 F	0.1	0.0	0.1	0.06
4. 100 H1	0.0	0.1	0.1	0.06 >
5. 100 H2	0.1	0.1	0.1	0.1
6. 100 H3	0.1	0.0	0.1	0.06 >
7. 50 F + 50H1	0.2	0.1	0.0	0.1
8. 50 F + 50 H2	0.2	0.0	0.0	0.06 >
9. 50 F + 50 H3	0.0	0.1	0.1	0.06 >

C.D. @ 5% e = 0.01

MHARS / ARASAVALLI

S.E. 7/1

Experiment on Rice

Homoeo Nutrients

Vs

Chemical Fertilizers

Field No.1

1. Year	-	1992
2. Design	-	R.B.D. - F1
3. No.of Replications	-	3
4. Net plot size	-	12 Sq.m
5. Cultivar variety	-	MTU 7029
6. Location	-	MHARS - ARASAVALLI - F1
7. Soil	-	Sandy loam

Treatments

1. No manure (C N L)
2. Chemical fertilizers 100% (100F)
3. Chemical fertilizers 50% (50F)
4. Homoeo nutrients (100 H)
5. 50% Chemical fertilizers
+
50% Homoeo nutrients | (50F + 50H)

MHARS - ARASAVALLI
1992 KHARIFF - YIELDS

S.E. 7/2

<u>Treatment</u>	<u>R1</u>	<u>R2</u>	<u>R3</u>	<u>A.V.</u>	<u>M.T./Ha.</u>
1. CNL	315	215	275	335	3.35
2. 50 F	370	350	335	352	3.52
3. 100 F	320	405	380	368	3.68
4. 100 H 1	325	450	390	389	3.89 *>
5. 100 H 2	340	370	450	387	3.87 *>
6. 50 F+50H 1	330	395	355	360	3.60 >
7. 50 F+50H 2	370	345	360	358	3.58 >
C.D. @ 5% e = 45.52					0.455

1992 KHARIFF

S.E.7/3

MHARS - ARASAVALLI
YIELD COMPONENTS**SUMMARY**

<u>Treatment</u>	<u>P.H.</u> <u>cm.</u>	<u>P.L.</u> <u>cm.</u>	<u>E.T.</u> <u>No./Hill</u>	<u>I.E.T.</u> <u>No./Hill</u>	<u>F.G.</u> <u>No./Pan</u>	<u>U.F.G.</u> <u>No./Pan.</u>	<u>G.M.</u>	<u>Yield</u> <u>mt/ha</u>
CNL	80.8	16.1	4.1	2.2	290.5	56.4	1.7	2.68
50 F	88.6*	18.0*	4.7	3.7	387.7*	43.6	2.0	3.52*
100 F	98.0*	16.2	4.2	3.4	417.7*	40.3	1.7	3.69*
100 H1	88.5*	18.2*@	4.7>	3.2>	378.1*>	38.6*>	0.0*@	3.88*>
100 H2	83.7*	17.6*@	5.4*@	2.9>	379.7*>	63.7	1.0>	3.87*>
50F+50H1	86.9*	16.8*@	4.8>	4.1>	338.9	53.9>	1.4>	3.60*>
50F+50H2	89.2*	18.5*@	5.0*@>	4.2>	437.7*>	52.3>	1.2>	3.58*>
C.D. @5%	37	0.25	7.3	1.05	729	16.7	1.4	0.45

1992 KHARIFF

S.E.7/4

MHARS - ARASAVILLI / F1
YIELD COMPONENTS**PLANT HEIGHT in cm.**

<u>Treatment</u>	<u>R1</u>	<u>R2</u>	<u>R3</u>	<u>A.V.</u>
1. CNL	83.3	74.3	84.7	80.7
2. 50 F	71.6	87.5	86.8	88.6 *
3. 100 F	97.5	95.8	101.5	98.3 *
4. 100 H1	85.9	93.6	86.0	88.5 *
5. 100 H2	86.9	88.0	86.3	87.1 *
6. 50 F + 50H1	89.0	86.5	85.3	86.9 *
7. 50 F + 50H2	88.1	91.8	87.8	89.2 *
C.D. @ 5% e = 3.7				

MHARS

S.E.7/5

1992 KHARIFF

MHARS - ARASAVILLI - F1

YIELD COMPONENTS

PANICLE LENGTH in cm.

<u>Treatment</u>	<u>R1</u>	<u>R2</u>	<u>R3</u>	<u>A.V.</u>
1. CNL	15.5	16.7	16.1	16.1
2. 50 F	18.1	18.1	17.8	19.5 *
3. 100 F	19.8	19.6	19.1	18.0 *
4. 100 H1	18.1	17.9	18.5	18.2 *>
5. 100 H2	17.9	16.9	18.0	17.6 *>
6. 50 F + 50H1	17.0	17.3	16.2	16.8 *
7. 50 F + 50H2	18.8	18.1	18.7	18.5 *@

C.D. @ 5% e = 0.25

1992 KHARIFF

S.E.7/6

MHARS - ARASAVILLI - F1

YIELD COMPONENTS

EFFECTIVE TILLERS No. / Hill

<u>Treatment</u>	<u>R1</u>	<u>R2</u>	<u>R3</u>	<u>A.V.</u>
1. CNL	4.0	3.6	4.6	4.1
2. 50 F	4.0	5.0	5.0	4.7
3. 100 F	5.1	3.5	4.9	4.5 >
4. 100 H1	5.9	4.2	5.1	5.1 *>
5. 100 H2	6.1	4.2	5.9	5.4 *@
6. 50 F + 50H1	4.6	5.0	4.7	4.8 >
7. 50 F + 50H2	5.0	5.6	4.3	5.0 >

C.D. @ 5% e = 0.73

MHARS

S.E.7/7

1992 KHARIFF

MHARS - ARSAVILLI - F1 YIELD COMPONENTS INEFFECTIVE TILLERS No. / Hill

<u>Treatment</u>	<u>R1</u>	<u>R2</u>	<u>R3</u>	<u>A.V.</u>
1. CNL	2.0	2.1	2.6	2.2
2. 50 F	3.1	4.1	4.0	3.4 *
3. 100 F	3.1	3.0	4.1	3.7 *
4. 100 H1	2.4	2.5	4.8	3.2 >
5. 100 H2	3.0	2.4	3.4	2.9 >
6. 50 F + 50H1	3.2	5.6	4.4	4.4 *>
7. 50 F + 50H2	4.3	4.2	4.2	4.2 *>

C.D. @ 5% e = 1.05

1992 KHARIFF

S.E.7/8

MHARS - ARASAVILLI - F1 YIELD COMPONENTS FILLED GRAINS No. / Hill

<u>Treatment</u>	<u>R1</u>	<u>R2</u>	<u>R3</u>	<u>A.V.</u>
1. CNL	248.4	276.6	346.5	290.5
2. 50 F	341.5	382.2	439.2	354.3
3. 100 F	424.3	345.9	483.0	417.7 *
4. 100 H1	424.1	271.3	438.9	378.1 *>
5. 100 H2	440.2	257.5	441.4	379.7 *>
6. 50 F + 50H1	318.9	419.4	278.4	338.9 >
7. 50 F + 50H2	438.5	472.3	401.2	437.7 *>

C.D. @ 5% e = 72.9

MHARS

S.E. 7/9

1992 KHARIFF

MHARS - ARASAVALLI - F1

YIELD COMPONENTS

UNFILLED GRAIN No. / Hill

<u>Treatment</u>	<u>R1</u>	<u>R2</u>	<u>R3</u>	<u>A.V.</u>
1. CNL	68.9	50.1	50.3	56.4
2. 50 F	31.0	45.3	54.6	43.6
3. 100 F	40.9	33.5	46.4	40.3
4. 100 H1	108.7	72.5	54.6	78.6
5. 100 H2	77.2	51.8	62.8	63.9
6. 50 F + 50H1	60.2	40.6	61.2	54.0 >
7. 50 F + 50H2	41.7	73.8	36.3	50.6 >

C.D. @ 5% e = 16.7

Experiment on Rice

Homoeo Nutrients

Vs

Chemical Fertilizers

1. Year	-	1992 KHARIFF
2. Design	-	R.B.D.
3. No.of Replications	-	3
4. Net plot size	-	12 Sq.m
5. Cultivar variety	-	MTU 7029
6. Location	-	MHARS - ARASAVALLI - F2
7. Soil	-	SANDY LOAM

Treatments

1. No manure (C N L)
2. Chemical fertilizers 100% (100F)
3. Chemical fertilizers 50% (50F)
4. Homoeo nutrients (100 H)
5. 50% Chemical fertilizers
+
50% Homoeo nutrients | (50F + 50H)

MHARS - ARS - F2

S.E. 8/2

1992 KHARIFF

YIELDS per Sq.m in gms.

<u>Treatment</u>	<u>R1</u>	<u>R2</u>	<u>R3</u>	<u>A.V.</u>	<u>MT. Ha.</u>
1. CNL	325	335	345	335	3.35
2. 50 F	345	390	280	338	3.38
3. 100 F	320	470	405	398	3.98 *
4. 100 H 1	380	315	405	367	3.67 >
5. 50 F+50H 1	370	455	365	397	3.97 *>
C.D. @ 5% e = 56.53					0.565

S.E.8/3

1992 KHARIFF**MHARS - ARASAVALLI - F2****YIELD COMPONENTS****SUMMARY**

<u>Treatment</u>	<u>P.H.</u> cm.	<u>P.L.</u> cm.	<u>E.T.</u> No./Hill	<u>I.E.T.</u> No./Hill	<u>F.G.</u> No./Hill	<u>U.F.G.</u> No./Hill	<u>GM</u> No./H.	<u>Yield</u> mt/ha.
CNL	83.1	16.8	4.0	3.1	288.0	50.3	0.0	3.35
50 F	87.5*	18.2*	4.4	5.1	343.1	35.7	1.0	3.38
100 F	96.4*	18.4*	4.3	6.0	341.6	60.2	0.7	3.98*
100 H1	86.7*	17.3>	5.4*@	2.9@	407.9*>	58.0>	0.53	3.67>
50F+50H1	82.2*	18.1*>	4.8>	3.0@	395.0*>	46.9@	0.0@	3.97*>
C.D. @5%	1.29	1.28	1.01	0.44	81.6	20.7	--	0.565

S.E. 8/4

1992 KHARIFF**MHARS - ARASAVILLI - F2****YIELD COMPONENTS****PLANT HEIGHT cm.**

<u>Treatment</u>	<u>R1</u>	<u>R2</u>	<u>R3</u>	<u>A.V.</u>
1. CNL	84.0	85.4	79.8	83.1
2. 50 F	87.3	88.1	87.2	87.5 *
3. 100 F	90.4	101.0	97.8	96.4 *
4. 100 H1	89.1	84.5	86.5	86.7 *
5. 50 F + 50H1	73.6	86.3	86.7	82.2 *
C.D. @ 5% e = 1.29				

MHARS**1992 KHARIF****MHARS - ARASAVALLI - F2****YIELD COMPONENTS****PANICLE LENGTH cm.**

<u>Treatment</u>	<u>R1</u>	<u>R2</u>	<u>R3</u>	<u>A.V.</u>
1. CNL	16.5	17.9	16.1	16.8
2. 50 F	17.8	17.9	18.9	18.2
3. 100 F	15.9	20.6	18.6	18.4 *
4. 100 H 1	17.9	17.8	16.3	17.3 >
5. 50 F + 50 H 1	16.9	18.7	18.8	18.1 *>

C.D. @ 5% e = 1.28

1992 KHARIF**MHARS - ARS - F2****YIELD COMPONENTS****INEFFECTIVE TILLERS No. / Hill**

<u>Treatment</u>	<u>R1</u>	<u>R2</u>	<u>R3</u>	<u>A.V.</u>
1. CNL	2.5	3.8	2.9	3.1
2. 50 F	4.7	5.6	4.9	5.1
3. 100 F	6.4	5.9	5.7	6.0
4. 100 H 1	3.2	2.9	2.7	2.9 @
5. 50 F + 50H 1	3.3	3.2	2.5	3.0 @

C.D. @ 5% e = 0.44

MHARS

S.E. 8/7

1992 KHARIFF

MHARS - ARASAVILLI - F2 YIELD COMPONENTS

EFFECTIVE TILLERS No. / Hill

<u>Treatment</u>	<u>R1</u>	<u>R2</u>	<u>R3</u>	<u>A.V.</u>
1. CNL	3.7	3.1	5.4	4.0
2. 50 F	4.9	5.1	3.1	4.4
3. 100 F	4.2	4.4	4.4	4.3
4. 100 H1	6.3	4.6	5.2	5.4 * @
5. 50 F + 50 H 1	5.2	5.1	4.0	4.8 >

C.D. @ 5% e = 1.01

1992 KHARIFF

S.E. 8/8

MHARS - ARASAVILLI - F2 YIELD COMPONENTS

FILLED GRAINS No. / Hill

<u>Treatment</u>	<u>R1</u>	<u>R2</u>	<u>R3</u>	<u>A.V.</u>
1. CNL	338.9	254.4	270.8	288.0
2. 50 F	376.1	444.1	209.2	343.1
3. 100 F	268.8	447.6	308.4	341.6
4. 100 H 1	437.3	383.2	403.2	408.0 *>
5. 50 F + 50H 1	326.5	464.3	394.4	395.0 *>

C.D. @ 5% e = 81.6

MHARS**1992 KHARIF****MHARS - ARASAVALLI - F2****YIELD COMPONENTS****UNFILLED GRAINS No. / Hill**

<u>Treatment</u>	<u>R1</u>	<u>R2</u>	<u>R3</u>	<u>A.V.</u>
1. CNL	49.9	32.6	69.0	50.3
2. 50 F	60.3	33.2	13.4	35.7
3. 100 F	48.0	86.8	45.7	60.2
4. 100 H 1	73.5	47.2	53.3	58.0 >
5. 50 F + 50 H 1	54.8	46.0	39.8	46.9 @

C.D. @ 5% e = 20.7

MHARS
ARASAVILLI - FIELD NO.3

S.E. 9/1

Experiment on Rice

Homoeo Nutrients
Vs
Chemical Fertilizers

1. Year	-	1992 KHARIFF
2. Design	-	R.B.D.
3. No.of Replications	-	3
4. Net plot size	-	12 Sq.m
5. Cultivar variety	-	MTU 7029
6. Location	-	MHARS - ARS - F3
7. Soil	-	SANDY LOAM

Treatments

1. No manure (C N L)
2. Chemical fertilizers 100% (100F)
3. Chemical fertilizers 50% (50F)
4. Homoeo nutrients (100 H)
5. 50% Chemical fertilizers | (50F + 50H)
+
50% Homoeo nutrients |

1992 KHARIFF

S.E. 9/2

ARS F3

YIELD - gms. / Sq.m

<u>Treatment</u>	<u>R1</u>	<u>R2</u>	<u>R3</u>	<u>A.V.</u>	<u>MT./Ha.</u>
1. CNL	270	315	345	310	3.10
2. 50 F	440	325	420	395	3.95 #
3. 100 F	255	320	365	313	3.13
4. 100 H 1	275	385	385	348	3.48 >
5. 100 H 2	380	360	440	393	3.93 @#
6. 50 F + 50 H 1	365	390	405	387	3.87 @#
7. 50 F + 50 H 2	510	355	430	432	4.32 @#
C.D. @ 5% e = 52.3					0.52
@ 1% e = 73.3					0.73

MHARS

S.E. 9/3

1992 KHARIFF

MHARS - ARASAVILLI - F3

YIELD COMPONENTS

SUMMARY

<u>Treatment</u>	<u>P.H.</u> <u>cm.</u>	<u>P.L.</u> <u>cm.</u>	<u>E.T.</u> <u>No./Hill</u>	<u>I.E.T.</u> <u>No./Hill</u>	<u>F.G.</u> <u>No./Hill</u>	<u>U.F.G.</u> <u>No./Hill</u>	<u>GM</u>	<u>S.H.</u>	<u>1000</u> <u>gr/wt</u> <u>(gms.)</u>
CNL	77.7	17.1	4.6	3.1	352.7	7.7	0.9	0.43	3.10
50 F	93.0*	19.3*	4.5	6.5	402.2	56.7	0.7	1.7	3.95#
100 F	93.6*	19.5*	5.3	7.2	495.3*	49.2	1.3	0.93	3.13
100 H1	82.4	18.2*	5.0>	3.4 @	414.5*	73.4	0.67@	0.2@	3.49>
100 H2	82.2	17.4	5.2>	3.2 @	398.0	66.4	0.73@	0.13@	3.93#@
50F+50H1	89.8*	19.1*>	5.2>	4.0 @	493.0*>	62.5	0.9 >	0.4>	5.20#@
50F+50H2	88.4*	19.3*>	4.9>	4.2 @	442.0*>	43.6 >	0.9>	0.27@	4.32#@
C.D. @5%e= 5.5	1.13	0.72	0.78	60.3	3.2	0.47	0.64	0.52	0.73

@1% -- 0.73

1992 KHARIFF

S.E. 9/4

MHARS - ARASAVILLI - F3

YIELD COMPONENTS

PLANT HEIGHT cm.

<u>Treatment</u>	<u>R1</u>	<u>R2</u>	<u>R3</u>	<u>A.V.</u>
1. CNL	62.2	86.1	84.0	77.7
2. 50 F	94.2	94.1	90.8	93.0 *
3. 100 F	90.9	98.0	98.0	95.6 *
4. 100 H1	81.2	83.3	82.7	82.4
5. 100 H2	84.5	79.6	82.5	82.2
6. 50 F + 50H1	87.9	90.9	89.5	89.8 *
7. 50 F + 50H2	90.2	88.9	87.4	88.4 *

C.D. @ 5% e = 5.5

MHARS

S.E. 9/5

1992 KHARIFF

MHARS - ARSAVILLI - F3

YIELD COMPONENTS

PANICLE LENGTH cm.

<u>Treatment</u>	<u>R1</u>	<u>R2</u>	<u>R3</u>	<u>A.V.</u>
1. CNL	14.9	18.7	17.8	17.1
2. 50 F	19.4	19.7	18.7	19.3 *
3. 100 F	19.5	19.1	19.8	19.5 *
4. 100 H1	17.3	19.1	18.2	18.2
5. 100 H2	18.3	17.0	17.0	17.4
6. 50 F + 50H1	19.5	18.0	19.9	19.1 *>
7. 50 F + 50H2	19.6	20.1	18.2	19.3 *>

C.D. @ 5% e = 1.13

1992 KHARIFF

S.E. 9/6

MHARS - ARSAVILLI - F3

YIELD COMPONENTS

EFFECTIVE TILLERS No./ Hill

<u>Treatment</u>	<u>R1</u>	<u>R2</u>	<u>R3</u>	<u>A.V.</u>
1. CNL	4.0	4.3	5.4	4.6
2. 50 F	4.3	4.4	4.7	4.5
3. 100 F	6.1	5.2	4.7	5.3
4. 100 H1	4.3	6.1	4.7	5.0 >
5. 100 H2	4.8	5.3	5.5	5.2 >
6. 50 F + 50H1	5.2	6.2	4.2	5.2 >
7. 50 F + 50H2	4.4	4.8	5.5	4.9 >

C.D. @ 5% e = 0.72

MHARS

S.E. 9/7

1992 KHARIFF

MHARS - ARSAVILLI - F3 YIELD COMPONENTS INEFFECTIVE TILLERS No. / Hill

<u>Treatment</u>	<u>R1</u>	<u>R2</u>	<u>R3</u>	<u>A.V.</u>
1. CNL	3.1	3.0	3.1	3.1
2. 50 F	4.9	6.5	8.0	6.5
3. 100 F	7.6	5.9	8.1	7.2
4. 100 H1	3.5	3.7	3.2	3.4 @
5. 100 H2	2.8	3.5	3.4	3.2 @
6. 50 F + 50H1	3.6	3.8	4.5	4.0 @
7. 50 F + 50H2	3.6	3.6	5.5	4.2 @

C.D. @ 5% e = 0.78

1992 KHARIFF

S.E. 9/8

MHARS - ARSAVILLI - F3 YIELD COMPONENTS FILLED GRAINS No. / Hill

<u>Treatment</u>	<u>R1</u>	<u>R2</u>	<u>R3</u>	<u>A.V.</u>
1. CNL	255.8	390.0	412.3	352.7
2. 50 F	367.2	464.9	375.2	402.2
3. 100 F	449.1	525.5	511.4	495.3 *
4. 100 H1	298.1	548.7	396.8	414.5 *
5. 100 H2	431.7	333.7	488.6	398.0
6. 50 F + 50H1	474.6	527.5	476.6	493.0 *>
7. 50 F + 50H2	413.1	475.2	437.7	442.0 *>

C.D. @ 5% e = 60.3

MHARS

S.E. 9/9

1992 KHARIF

MHARS - ARSAVILLI - F3 YIELD COMPONENTS

UNFILLED GRAINS No. / Hill

<u>Treatment</u>	<u>R1</u>	<u>R2</u>	<u>R3</u>	<u>A.V.</u>
1. CNL	35.2	40.5	67.8	47.7
2. 50 F	74.6	50.8	44.6	56.7
3. 100 F	39.3	66.8	41.4	49.2
4. 100 H1	58.3	75.0	87.1	73.4
5. 100 H2	75.3	46.2	77.7	66.4
6. 50 F + 50H1	62.4	66.1	59.1	62.5
7. 50 F + 50H2	44.4	41.0	45.3	43.6 *@

C.D. @ 5% e = 3.2

MASTER HOMOEEO AGRICULTURAL RESEARCH STATION.ARASAVALLI

Experiment on Rice

S.E. 10/1

Homoeo Nutrients
Vs
Chemical Fertilizers
Field No.4

1. Year	-	1992
2. Design	-	R.B.D.
3. No.of Replications	-	3
4. Net plot size	-	12 Sq.m
5. Cultivar variety	-	MTU 7029
6. Location	-	MHARS - ARS - F4
7. Soil	-	SANDY - LOAM

Treatments

1. No manure (C N L)
2. Chemical fertilizers 100% (100F)
3. Chemical fertilizers 50% (50F)
4. Homoeo nutrients (100 H)
5. 50% Chemical fertilizers |
+
50% Homoeo nutrients | (50F + 50H)

MHARS - ARASAVILLI - F4

S.E. 10/2

1992 KHARIFF - YIELDS gms. / Sq.m

<u>Treatment</u>	<u>R1</u>	<u>R2</u>	<u>R3</u>	<u>A.V.</u>	<u>MT./Ha.</u>
1. CNL	340	325	295	320	3.20
2. 50 F	295	310	405	337	3.37
3. 100 F	310	325	350	328	3.28
4. 100 H 1	430	340	335	368	3.68 *>
5. 100 H 2	425	295	335	352	3.52 >
6. 50 F+50H 1	335	405	370	370	3.70 *>
7. 50 F+50H 2	380	350	370	367	3.67 >
C.D. @ 5% e = 48.0					0.48

MHARS

S.E. 10/3

1992 KHARIF

MHARS - ARASAVALLI - F4

YIELD COMPONENTS

SUMMARY

<u>Treatment</u>	<u>P.H.</u> <u>Cm.</u>	<u>P.L.</u> <u>Cm.</u>	<u>E.T.</u> <u>No./Hill</u>	<u>I.E.T.</u> <u>No./Hill</u>	<u>F.G.</u> <u>No./Hill</u>	<u>U.F.G.</u> <u>No./Hill</u>	<u>GM</u>	<u>Yield</u> <u>gr/sqm</u>
CNL	77.6	15.7	5.5	3.9	311.9	40.5	0.00	3.20
50 F	84.3 *	17.2 *	5.2	4.2	341.1	54.9	0.00	3.37
100 F	90.4 *	17.6 *	5.1	5.7	384.8 *	39.9	0.4	3.28
100 H1	86.9 *>	17.6 *>	4.4	3.9 @	341.8 >	46.0 >	0.4	3.68 *
100 H2	82.6 *	16.9 *>	5.2 >	2.7 *@	339.5 >	57.8 >	0.4	3.52
50F+50H1	82.7 *	16.8 *>	5.6 @	3.5 @	394.6 *>	59.9 >	0.0 *	3.70 *
50F+50H2	83.6 *	16.7 *>	5.3 >	3.0 *@	259.5	67.2	1.3	367
C.D. @5%	3.7	0.9	0.34	0.56	59.4	25.8	--	0.48

S.E. 10/4

1992 KHARIF

MHARS - ARS - F4

YIELD COMPONENTS

PLANT HEIGHT cm.

<u>Treatment</u>	<u>R1</u>	<u>R2</u>	<u>R3</u>	<u>A.V.</u>
1. CNL	76.1	80.0	76.6	77.6
2. 50 F	92.1	84.8	86.1	84.3 *
3. 100 F	89.2	92.4	89.5	90.4 *
4. 100 H1	86.3	85.3	89.1	86.9 *>
5. 100 H2	82.6	82.2	83.1	82.6 *
6. 50 F + 50H1	85.2	87.3	75.7	82.7 *
7. 50 F + 50H2	73.3	78.9	88.7	83.6 *

C.D. @ 5% e = 3.7

MHARS

S.E. 10/5

1992 KHARIFF

MHARS - ARS - F4 YIELD COMPONENTS PANICLE LENGTH cm.

<u>Treatment</u>	<u>R1</u>	<u>R2</u>	<u>R3</u>	<u>A.V.</u>
1. CNL	16.3	15.1	15.7	15.7
2. 50 F	16.7	16.8	18.2	17.2 *
3. 100 F	17.1	18.2	17.5	17.6 *
4. 100 H1	17.5	17.6	17.6	17.6 *>
5. 100 H2	17.5	15.4	17.8	16.9 *>
6. 50 F + 50H1	16.6	16.4	17.5	16.8 *>
7. 50 F + 50H2	14.8	17.5	17.7	16.7 *>

C.D. @ 5% e = 0.90

1992 KHARIFF

S.E. 10/6

MHARS - ARS - F4 YIELD COMPONENTS EFFECTIVE TILLERS / No. / Hill

<u>Treatment</u>	<u>R1</u>	<u>R2</u>	<u>R3</u>	<u>A.V.</u>
1. CNL	6.2	5.4	4.8	5.5
2. 50 F	5.1	5.2	5.2	5.2
3. 100 F	5.5	4.8	4.9	5.1
4. 100 H1	5.7	4.3	3.2	4.4
5. 100 H2	5.7	5.4	4.5	5.2 >
6. 50 F + 50H1	6.0	6.0	4.9	5.6 @
7. 50 F + 50H2	6.0	4.2	5.6	5.3 >

C.D. @ 5% e = 0.34

MHARS

S.E. 10/7

1992 KHARIFF

MHARS - ARS - F4

YIELD COMPONENTS

IN EFFECTIVE TILLERS No. / Hill

<u>Treatment</u>	<u>R1</u>	<u>R2</u>	<u>R3</u>	<u>A.V.</u>
1. CNL	5.2	3.0	3.6	3.9
2. 50 F	4.0	3.9	4.7	4.2
3. 100 F	5.0	4.3	7.7	5.7
4. 100 H1	4.2	3.5	3.9	3.9 @
5. 100 H2	3.4	2.2	2.5	2.7 *@
6. 50 F + 50H1	4.6	3.2	2.6	3.5 @
7. 50 F + 50H2	3.8	1.6	3.6	3.0 *@

C.D. @ 5% e = 0.56

1992 KHARIFF

S.E. 10/8

MHARS - ARS - F4

YIELD COMPONENTS

FILLED GRAINS No. / Hill

<u>Treatment</u>	<u>R1</u>	<u>R2</u>	<u>R3</u>	<u>A.V.</u>
1. CNL	388.1	212.0	335.7	311.9
2. 50 F	321.9	331.6	370.7	341.4
3. 100 F	369.9	389.2	395.3	384.8 *
4. 100 H1	360.5	346.4	318.6	341.8 >
5. 100 H2	354.5	355.3	308.7	339.5 >
6. 50 F + 50H1	425.4	449.0	309.5	394.6 *>
7. 50 F + 50H2	242.9	263.8	371.9	259.5

C.D. @ 5% e = 59.4

1992 KHARIFF

S.E. 10/9

MHARS - ARS - F4
YIELD COMPONENTS

UNFILLED GRAINS No. / Hill

<u>Treatment</u>	<u>R1</u>	<u>R2</u>	<u>R3</u>	<u>A.V.</u>
1. CNL	41.2	40.8	39.6	40.5
2. 50 F	40.3	47.8	76.7	54.9
3. 100 F	26.7	46.7	45.3	39.9
4. 100 H1	88.8	39.2	10.1	46.0 >
5. 100 H2	90.0	50.7	32.7	57.8 >
6. 50 F + 50H1	42.0	51.4	86.4	59.9 >
7. 50 F + 50H2	73.2	40.8	87.7	67.2

C.D. @ 5% e = 25.8

MASTER HOMOEEO AGRICULTURAL RESEARCH STATION.ARASAVALLI

Experiment on Rice

S.E. 11/1

Homoeo Nutrients

Vs

Chemical Fertilizers

Field No.5

1. Year	-	1992 KHARIFF
2. Design	-	R.B.D.
3. No.of Replications	-	3
4. Net plot size	-	12 Sq.m
5. Cultivar variety	-	MTU 7029
6. Location	-	MHARS - ARS - F5
7. Soil	-	SANDY - LOAM

Treatments

1. No manure (C N L)
2. Chemical fertilizers 100% (100F)
3. Chemical fertilizers 50% (50F)
4. Homoeo nutrients (100 H)
5.
$$\begin{array}{l} 50\% \text{ Chemical fertilizers} \\ + \\ 50\% \text{ Homoeo nutrients} \end{array} \left| \begin{array}{l} \\ \\ \end{array} \right. (50F + 50H)$$

MHARS
1992 KHARIFF
MHARS - ARS - F5
YIELD gms / Sq.m

S.E. 11/2

<u>Treatment</u>	<u>R1</u>	<u>R2</u>	<u>R3</u>	<u>A.V.</u>	<u>MT. / Ha.</u>
1. CNL	370	395	350	372	3.72
2. 50 F	425	420	360	402	4.02
3. 100 F	355	480	305	380	3.80
4. 100 H 1	415	470	380	422	4.22 *@
5. 100 H 2	375	420	355	393	3.93 >
6. 100 H 3	415	445	425	428	4.28 *@
7. 50 F + 50H 2	325	345	425	365	3.65 >
8. 50 F + 50H 3	485	410	345	403	4.03 >
9. 50 F + 50 H	470	435	360	422	4.22 *@
10. Comp. 2 T	400	350	280	343	3.43 >
11. 1T.Comp+50H1	280	350	270	300	3.00

C.D. @ 5% e = 40.1

1992 KHARIFF
MHARS - ARASAVILLI - F5
YIELD COMPONENTS

S.E. 11/3

SUMMARY

<u>Treatment</u>	<u>P.H.</u> <u>Cm.</u>	<u>P.L.</u> <u>Cm.</u>	<u>E.T.</u> <u>No./Hill</u>	<u>I.E.T.</u> <u>No./Hill</u>	<u>F.G.</u> <u>No./Hill</u>	<u>U.F.G.</u> <u>No./Hill</u>	<u>GM</u>	<u>1000</u> <u>Gr.Wt.</u>	<u>Yield</u> <u>Mt./Ha.</u>
CNL	84.7	17.3	4.3	4.1	318	29.4	0.00	25.6	3.72
50 F	89.0	18.2	5.0 *	4.7	422.3	46.2	0.00	30.6	4.02
100 F	96.1 *	19.6 *	4.8	8.9	462.5*	38.5	0.00	32.2	3.80
100 H1	90.3 *	18.9*>	5.0 *>	4.3 @	469.8*>	52.3	0.00	29.4	4.22 *@
100 H2	88.3	17.5	5.5 *@	4.9 @	384.5 >	38.0 >	0.3	31.2 *>	3.93 >
100 H3	91.9*>	19.3*>	5.2 *>	4.2 @	403.0 >	49.5	0.27	34.8 *@	4.28 *@
50F+50H1	92.1*>	18.4*	4.9 >	5.7 @	433.4 *>	57.2	0.00	25.4	3.65 >
50F+50H2	95.8*>	19.1*>	4.4 >	5.8 @	405.1 >	46.7 >	0.00	37.0 *@	4.03 >
50F+50H3	91.3*>	16.9	5.2 *>	6.3 @	416.2 *>	50.5	0.00	33.0 *>	4.22 *@
C.D. @1%	4.9	1.02	0.65	1.24	91.3	10.5	0.00	2.3	0.40

MHARS

S.E. 11/4

1992 KHARIFF**MHARS - ARS - F5**
YIELD COMPONENTS**PLANT HEIGHT cm.**

<u>Treatment</u>	<u>R1</u>	<u>R2</u>	<u>R3</u>	<u>A.V.</u>
1. CNL	80.8	85.4	87.9	84.7
2. 50 F	93.1	82.7	91.1	89.0
3. 100 F	100.1	101.9	86.3	96.1 *
4. 100 H1	96.6	88.8	85.5	90.3 *
5. 100 H2	88.6	88.3	88.0	88.3
6. 100 H3	93.4	91.2	91.1	91.9 *>
7. 50 F + 50H1	90.5	92.1	93.6	92.1 *>
8. 50 F + 50H2	93.1	91.5	102.8	95.8 *>
9. 50 F + 50 H3	90.2	93.9	89.9	91.3 *>

C.D. @ 5% e = 4.9

1992 KHARIFF

S.E. 11/5

MHARS - ARS - F5
YIELD COMPONENTS**PANICLE LENGTH cm.**

<u>Treatment</u>	<u>R1</u>	<u>R2</u>	<u>R3</u>	<u>A.V.</u>
1. CNL	15.7	17.6	18.5	17.3
2. 50 F	17.5	19.6	17.5	18.2
3. 100 F	18.2	20.5	20.1	19.6 *
4. 100 H1	20.2	18.8	17.7	18.9 *>
5. 100 H2	15.6	18.3	18.5	17.5
6. 100 H3	19.5	19.8	18.5	19.3 *>
7. 50 F + 50H1	18.4	17.9	18.9	18.4 *
8. 50 F + 50 H2	18.8	19.6	18.8	19.1 *>
9. 50 F + 50 H3	17.0	17.3	16.3	16.9

C.D. @ 5% e = 1.02

MHARS

S.E. 11/6

1992 KHARIFF**MHARS - ARS - F5****YIELD COMPONENTS****EFFECTIVE TILLERS No. / Hill**

<u>Treatment</u>	<u>R1</u>	<u>R2</u>	<u>R3</u>	<u>A.V.</u>
1. CNL	4.4	3.4	5.2	4.3
2. 50 F	5.2	4.6	5.3	5.0 *
3. 100 F	4.6	4.7	5.0	4.8
4. 100 H1	5.5	4.2	5.2	5.0 *>
5. 100 H2	6.7	5.0	4.7	5.5 *@
6. 100 H3	6.3	4.7	4.7	5.2 *>
7. 50 F + 50H1	4.7	5.5	4.4	4.9 >
8. 50 F + 50H2	5.1	4.4	3.6	4.4 >
9. 50 F + 50 H3	5.1	5.1	5.3	5.2 *>

C.D. @ 5% e = 0.65

1992 KHARIFF

S.E. 11/7

MHARS - ARS - F5**YIELD COMPONENTS****IN EFFECTIVE TILLERS No. / Hill**

<u>Treatment</u>	<u>R1</u>	<u>R2</u>	<u>R3</u>	<u>A.V.</u>
1. CNL	3.7	3.7	4.9	4.1
2. 50 F	5.3	5.1	3.6	4.7
3. 100 F	10.3	7.9	8.1	8.9
4. 100 H1	4.3	3.4	5.3	4.3 @
5. 100 H2	6.4	4.8	3.6	4.9 @
6. 100 H3	4.8	8.1	4.7	4.2 @
7. 50 F + 50H1	7.0	4.8	5.8	5.7 @
8. 50 F + 50 H2	4.7	4.7	8.1	5.8 @
9. 50 F + 50 H3	6.3	7.5	5.2	6.3 @

C.D. @ 5% e = 1.24

MHARS

S.E. 11/8

1992 KHARIFF**MHARS - ARS - F5****YIELD COMPONENTS****FILLED GRAINS No. / Hill**

<u>Treatment</u>	<u>R1</u>	<u>R2</u>	<u>R3</u>	<u>A.V.</u>
1. CNL	332.5	294.3	327.1	318
2. 50 F	492.2	445.2	329.4	422.3
3. 100 F	366.9	482.0	540.4	462.5 *
4. 100 H1	651.0	380.3	378.0	469.8 *>
5. 100 H2	348.9	408.5	395.2	384.5 >
6. 100 H3	413.0	439.6	356.5	403.0 >
7. 50 F + 50H1	480.5	404.4	415.3	433.4 *>
8. 50 F + 50H2	486.8	395.4	333.1	405.1 >
9. 50 F + 50 H3	377.4	467.8	403.3	416.2 *>

C.D. @ 5% e = 91.3

1992 KHARIFF

S.E. 11/9

MHARS - ARS - F5**YIELD COMPONENTS****UN FILLED GRAINS No. / Hill**

<u>Treatment</u>	<u>R1</u>	<u>R2</u>	<u>R3</u>	<u>A.V.</u>
1. CNL	35.7	31.8	20.7	29.4
2. 50 F	59.2	53.0	25.9	46.2
3. 100 F	32.7	43.1	48.5	38.5
4. 100 H1	66.7	42.7	47.5	52.3
5. 100 H2	31.1	43.5	39.4	38 >
6. 100 H3	43.8	43.3	61.3	49.5
7. 50 F + 50H1	72.0	44.4	53.1	57.2
8. 50 F + 50 H2	55.1	43.6	41.5	46.7
9. 50 F + 50 H3	52.7	41.7	57.2	50.5

C.D. @ 5% e = 10.5

MHARS
1992 KHARIF

S.E. 11/10

MHARS - ARS F5
YIELD COMPONENTS
1000 GRAIN WEIGHT gm.

<u>Treatment</u>	<u>R1</u>	<u>R2</u>	<u>R3</u>	<u>A.V.</u>
1. CNL	24.6	24.4	28.1	25.6
2. 50 F	31.0	29.6	31.4	30.6 *
3. 100 F	27.8	33.8	34.8	32.2 *
4. 100 H1	29.4	29.4	29.6	29.4 *
5. 100 H2	32.6	27.4	33.4	31.2 *>
6. 100 H3	29.6	34.6	40.4	34.8 *@
7. 50 F + 50H1	29.2	20.2	27.0	25.4
8. 50 F + 50H2	32.4	36.0	42.6	37.0 *@
9. 50 F + 50 H3	29.8	33.0	36.4	33.0 *>

C.D. @ 5% e = 2.3

**MASTER HOMOEOPATHIC AGRICULTURAL RESEARCH STATION.
ARASAVALLI**

S.E. 12/1

Experiment on Rice

Homoeo Nutrients

Vs

Chemical Fertilizers

Average of 5 Fields

1. Year	-	1992 KHARIFF
2. Design	-	R.B.D.
3. No.of Replications	-	3
4. Net plot size	-	12 Sq.m
5. Cultivar variety	-	MTU 7029
6. Location	-	MHARS / ARASAVILLI Average of 5 fields
7. Soil	-	Sandy Loam

Treatments

1. No manure (C N L)
2. Chemical fertilizers 50% (50F)
3. Chemical fertilizers 100% (100F)
4. Homoeo nutrients - 1(100 H1)
5. 100% Homoeo nutrients-2 (100 H2)
6. 100% Homoeo nutrients-3 (100 H3)
7. 50% Chemical Fertilizers + 50% Homoeo nutrients -1 (50F + 50H1)
8. 50% Chemical Fertilizers + 50% Homoeo nutrients -2 (50F + 50H2)
9. 50% Chemical Fertilizers + 50% Homoeo nutrients -3 (50F + 50H3)

MHARS

S.E. 12/2

1992 KHARIFF**MHARS - ARASAVILLI - AVERAGE OF 5 FIELDS****YIELD Sq.m in gms.**

<u>Treatment</u>	<u>R1</u>	<u>R2</u>	<u>R3</u>	<u>A.V.</u>	<u>M.T. / Ha.</u>
1. CNL	324	325	322	324	3.24
2. 50 F	375	359	360	365	3.65 #
3. 100 F	312	390	364	355	3.55 *
4. 100 H1	380	360	440	393	3.93 #
5. 100 H2	375	420	355	383	3.83 #
6. 100 H3	415	470	380	422	4.22 #
7. 50 F + 50H1	390	355	430	392	3.92 #
8. 50 F + 50 H2	455	410	345	403	4.03 #
9. 50 F + 50 H3	470	430	360	420	4.20 #
C.D. @ 5% e = 26.8					0.268
@ 1% e = 37					0.37

S.E. 12/3

MHARS - ARASAVALLI**1992 KHARIFF****AVERAGE OF 5 FIELDS****YIELD COMPONENTS****SUMMARY**

<u>Treatment</u>	<u>P.H.</u> <u>Cm.</u>	<u>P.L.</u> <u>Cm.</u>	<u>E.T.</u> <u>No./Hill</u>	<u>I.E.T</u> <u>No./Hill</u>	<u>F.G.</u> <u>No./Hill</u>	<u>U.F.G.</u> <u>No./Hill</u>	<u>Yield</u> <u>Ha./gm.</u>
CNL	80.8	16.6	4.5	3.3	312	44.9	3.24
50 F	88.5	18.2	4.8	6.0	379	36.1	3.65 #
100 F	95.3	18.9	4.8	6.2	420	45.6	3.55 *
100 H1	82.2	17.4	5.2	3.2	398	66.4	3.93 #
100 H2	90.3	18.9	5.0	4.3	470	52.3	3.83 #
100 H3	91.9	19.3	5.2	4.2	403	49.5	4.22 #
50F+50H1	88.8	19.3	4.9	4.2	442	43.8	3.92 #
50F+50H2	83.6	16.7	5.3	3.0	293	67.2	4.03 #
50F + 50H3	91.3	16.9	5.2	6.3	416	50.5	4.20 #
C.D. @5%							0.27
@1%							0.37

Experiment on Rice

Homoeo Nutrients

Vs

Chemical Fertilizers

1. Year	-	1992 KHARIFF
2. Design	-	R.B.D.
3. No.of Replications	-	3
4. Net plot size	-	12 Sq.m
5. Cultivar variety	-	MTU 7029
6. Location	-	MHARS / KAJIPETA
7. Soil	-	Loamy

Treatments

1. No manure (C N L)
2. 50% of recommended Chemical Fertilizers - 50 F
3. 100% of recommended Chemical Fertilizers - 100 F
4. Homoeo nutrients (100 H)
5. 50% Chemical Fert.
+
50% Homoeo nutrients (50 F + 50 H)
6. Compost (NADEP) - Comp
7. Compost + 50% Homoeo - Compost + 50 H
8. Organic fertilizers - OF

**MHARS
KHAJIPETA**

S.E. 13/2

1992 KHARIFF

YIELDS gms. / Sq.m.

<u>Treatment</u>	<u>R1</u>	<u>R2</u>	<u>R3</u>	<u>A.V.</u>	<u>M.T. / Ha.</u>
1. CNL	395	340	475	403	4.03
2. 50 F	475	450	480	468	4.68 *
3. 100 F	580	415	435	477	4.77 *
4. 100 H 1	285	425	360	357	3.57
5. 100 H 2	390	360	330	360	3.60
6. 100 H 3	395	435	325	385	3.85
7. 100 H 4	435	390	415	413	4.13
8. 100 H 5	420	310	355	362	3.62
9. 50 F + 50 H 3	415	475	375	422	4.22
10. 50 F + 50 H 4	545	545	435	508	5.08 *>
11. Compost 2T	465	380	295	380	3.80
12. Compost + 50 H1	425	400	355	393	3.93
13. Org. Fert.1 GN	450	460	510	473	4.73 *>
14. Org. Fert.2 SFC	570	530	485	528	5.28 *@
15. Org. Fert.3 GN+SFC	555	485	380	473	4.73 *>
C.D. @ 5% e = 41.24					0.41

1992 KHARIFF

S.E. 13/3

**MHARS - KJP
YIELD COMPONENTS
SUMMARY**

<u>Treatment</u>	<u>P.H.</u> cm.	<u>P.L.</u> cm.	<u>E.T.</u> No./Hill	<u>I.E.T.</u> No./Hill	<u>F.G.</u> No./Hill	<u>U.F.G.</u> No./Hill	<u>Yield/ S.qm.</u>	<u>MT/ Ha.</u>
CNL	83.1	16.5	6.3	2.1	291.5	55.2	403	4.03
50 F	94.2 *	16.4	7.6	2.2	374.4 *	70.4	468	4.68 *
100 F	92.8 *	16.5	8.3 *	2.6	361.7 *	54.5	477	4.77 *
100 H3	89.2 *	15.9 >	7.3	2.2 >	316.7 *	55.6 >	385	3.85
100 H4	88.4 *	17.1 >	7.5	1.8	350.4 *>	70.7	413	4.13
50F+50H3	88.4 *	16.0 >	8.3 *	2.3 >	322.1 *	69.5 >	422	4.22
50F+50H4	90.9 *>	16.9 >	7.0	2.2 >	346.0 *>	68.3 >	508	5.08 *>
C.D.@ 5% =	3.27	0.96	0.58	0.72	21.2	15.3	41	0.41

MHARS

S.E. 13/4

1992 KHARIFF

MHARS - KJP YIELD COMPONENTS PLANT HEIGHT cm.

<u>Treatment</u>	<u>R1</u>	<u>R2</u>	<u>R3</u>	<u>A.V.</u>
1. CNL	82.6	78.9	87.9	83.1
2. 50 F	97.4	92.4	92.8	94.2 *
3. 100 F	91.5	93.3	93.5	92.8 *
4. 100 H 3	87.3	92.7	87.6	89.2 *
5. 100 H 4	79.1	93.4	92.71	88.4 *
6. 50 F + 50H 3	88.6	90.6	88.9	88.4 *
7. 50 F + 50H 4	90.8	92.2	89.7	90.9 *>

C.D. @ 5% e = 3.27

1992 KHARIFF

S.E. 13/5

MHARS - KJP YIELD COMPONENTS PANICLE LENGTH cm.

<u>Treatment</u>	<u>R1</u>	<u>R2</u>	<u>R3</u>	<u>A.V.</u>
1. CNL	16.3	17.0	16.1	16.5
2. 50 F	15.4	17.2	16.5	16.4
3. 100 F	17.0	16.2	16.3	16.5
4. 100 H3	14.6	15.7	17.5	15.9 >
5. 100 H4	16.9	17.5	16.9	17.1 >
6. 50 F + 50H3	15.8	17.3	15.0	16.0 >
7. 50 F + 50H4	17.9	17.2	15.5	16.9 >

C.D. @ 5% e = 0.96

**MHARS
KHAJIPETA**

S.E. 13/6

1992 KHARIFF

**MHARS - KJP
YIELD COMPONENTS
EFFECTIVE TILLERS**

<u>Treatment</u>	<u>R1</u>	<u>R2</u>	<u>R3</u>	<u>A.V.</u>
1. CNL	5.4	6.2	7.2	6.3
2. 50 F	7.9	6.7	8.3	7.6 *
3. 100 F	8.3	7.6	8.9	8.3 *
4. 100 H 3	8.1	8.4	5.3	7.3 *
5. 100 H 4	7.3	7.9	7.8	7.5 *
6. 50 F + 50H 3	9.1	6.9	8.9	8.3 *>
7. 50 F + 50H 4	5.7	7.1	8.1	7.0 *

C.D. @ 5% e = 0.58

1992 KHARIFF

S.E. 13/7

**MHARS - KJP
YIELD COMPONENTS
INEFFECTIVE TILLERS No. / Hill**

<u>Treatment</u>	<u>R1</u>	<u>R2</u>	<u>R3</u>	<u>A.V.</u>
1. CNL	1.9	2.4	1.9	2.1
2. 50 F	2.3	2.0	2.3	2.2
3. 100 F	2.9	2.2	2.8	2.6
4. 100 H 3	2.2	2.1	2.2	2.2 >
5. 100 H 4	1.8	1.8	1.7	1.8
6. 50 F + 50H 3	1.7	2.6	2.5	2.3 >
7. 50 F + 50H 4	2.2	2.3	2.1	2.2 >

C.D. @ 5% e = 0.72

MHARS - KHAJIPETA

S.E. 13/8

1992 KHARIFF

MHARS - KJP

YIELD COMPONENTS

FILLED GRAINS No. / Hill

<u>Treatment</u>	<u>R1</u>	<u>R2</u>	<u>R3</u>	<u>A.V.</u>
1. CNL	247.8	290.3	336.5	291.5
2. 50 F	443.9	342.8	336.5	374.4 *
3. 100 F	336.4	394.8	353.9	361.7 *
4. 100 H 3	353.7	353.0	242.5	316.4 *
5. 100 H 4	347.9	371.4	331.8	350.4 *>
6. 50 F + 50H 3	348.4	319.0	258.9	322.1 *
7. 50 F + 50H 4	352.1	371.8	314.1	346.0 *>

C.D. @ 5% e = 21.2

1992 KHARIFF

S.E. 13/9

MHARS - KJP

YIELD COMPONENTS

UNFILLED GRAINS

<u>Treatment</u>	<u>R1</u>	<u>R2</u>	<u>R3</u>	<u>A.V.</u>
1. CNL	38.3	64.5	62.7	55.2
2. 50 F	76.2	72.2	62.7	70.4
3. 100 F	76.1	59.0	118.4	54.5
4. 100 H 3	54.9	54.3	57.7	55.6 >
5. 100 H 4	47.6	79.4	85.1	70.7
6. 50 F + 50H 3	74.5	71.8	62.2	69.5 >
7. 50 F + 50H 4	54.2	77.7	73.0	68.3 >

C.D. @ 5% e = 15.3

**MASTER HOMOEIO AGRICULTURAL RESEARCH STATION.
KHAJIPETA**

S.E. 14/1

Experiment on Rice

Homoeo Nutrients
Vs
Chemical Fertilizers

1. Year	-	1993 KHARIFF
2. Design	-	R.B.D.
3. No.of Replications	-	3
4. Net plot size	-	5 Sq.m
5. Cultivar variety	-	MTU 7029
6. Location	-	MHARS / KHAJIPETA
7. Soil	-	Loamy

Treatments

1. No manure (C N L)
2. Chemical fertilizers 50% (50F)
3. Chemical fertilizers 100% (100F)
4. Homoeo nutrients (100 H1)
5. Homoeo nutrients-2 (100 H2)
6. Homoeo nutrients-3 (100 H3)
7. Homoeo nutrients-4 (100 H4)
8. Homoeo nutrients-5 (100 H5)
9. Homoeo nutrients-6 (100 H6)
10. Homoeo nutrients-7 (100 H7)
11. to 15. 50% Homoeo nutrients
+
50% Chemical Fertilizers | (50F + 50H1)
12. N.G. Compost @ 1 Tonne / acre (comp.1T)
13. -do- 2T / (comp.2T)
14. Sunflower Oil Cake + Gingelly Oil Cake + Groundnut Oil Cake
(Oil Cakes)

MHARS

S.E. 14/2

1993 KHARIFF**YIELDS in Kg. / 5 sqm.**

<u>Treatment</u>	<u>R1</u>	<u>R2</u>	<u>R3</u>	<u>A.V.</u>	<u>Mt. / Ha.</u>
1. CNL	2.70	2.75	2.58	2.68	5.36
2. 50 F	3.35	3.20	2.80	3.12	6.24 *
3. 100 F	3.00	2.95	3.15	3.03	6.06 *
4. 100 H1	3.30	2.77	3.27	3.11	6.22 *>
5. 100 H2	2.95	3.02	2.80	2.92	5.84 *>
6. 100 H3	2.78	3.08	2.65	2.84	5.68 *
7. 100 H4	2.93	2.82	2.80	2.85	5.70 *
8. 100 H5	2.48	2.73	2.80	2.67	5.34
9. 100 H6	2.78	2.53	2.95	2.75	5.50
10. 100 H7	2.87	2.88	2.48	2.74	5.48
11. 50 F + 50 H1	2.97	2.72	2.48	2.72	5.44
12. 50 F + 50 H2	3.68	2.90	2.70	3.09	6.18 *>
13. 50 F + 50 H3	3.30	2.73	3.02	3.02	6.04 *>
14. 50 F + 50 H4	3.05	3.00	2.85	2.97	5.94 *>
15. 50 F + 50 H5	3.72	3.63	2.82	3.39	6.78 *@
16. COMP - 1.T	2.90	2.80	3.30	3.00	6.00 *>
17. COMP - 2.T	3.11	3.30	2.71	3.04	6.08 *>
18. Oil Cakes 200 Kg./ A.C.	3.65	2.71	3.13	3.16	6.32 *>

C.D.@ 5% e = 0.30

**MASTER HOMOEEO AGRICULTURAL RESEARCH STATION.
KHAJIPETA**

S.E. 14A/1

Experiment on Rice

Homoeo Nutrients

Vs

Chemical Fertilizers

FACTORIAL

- | | | |
|-----------------------|---|-------------------|
| 1. Year | - | 1993 KHARIFF |
| 2. Design | - | FACTORIAL R.B.D. |
| 3. No.of Replications | - | 3 |
| 4. Net plot size | - | 5 Sq.m |
| 5. Cultivar variety | - | MTU 7029 |
| 6. Location | - | MHARS / KHAJIPETA |
| 7. Soil | - | Loamy |

Treatments

- | | | |
|--------------------|---|---------------------------------------|
| 1. 0 + 100 H1 | - | 100% of Homoeo Nutrients -1 |
| 2. 0 + 100 H2 | - | 100% of Homoeo Nutrients -2 |
| 3. 0 + 50 H1 | - | 50% of Homoeo Nutrients -1 |
| 4. 0 + 50 H2 | - | 50% of Homoeo Nutrients -2 |
| 5. 50 N + 100 H1 | - | 50% Nitrogen + 100% Homoeo - 1 |
| 6. 50 N + 100 H2 | - | 50% Nitrogen + 100% Homoeo - 2 |
| 7. 50 N + 50 H1 | - | 50% Nitrogen + 50% Homoeo - 1 |
| 8. 50 N + 50 H2 | - | 50% Nitrogen + 50% Homoeo - 2 |
| 9. 50 F + 100 H1 | - | 50% Chemical Fert. + 100% Homoeo - 1 |
| 10. 50 F + 100 H2 | - | 50% Chemical Fert. + 100% Homoeo - 2 |
| 11. 50 F + 50 H1 | - | 50% Chemical Fert. + 50% Homoeo - 1 |
| 12. 50 F + 50 H2 | - | 50% Chemical Fert. + 50% Homoeo - 2 |
| 13. 100 F + 100 H1 | - | 100% Chemical Fert. + 100% Homoeo - 1 |
| 14. 100 F + 100 H2 | - | 100% Chemical Fert. + 100% Homoeo - 2 |
| 15. 100 F + 50 H1 | - | 100% Chemical Fert. + 50% Homoeo - 1 |
| 16. 100 F + 50 H2 | - | 100% Chemical Fert. + 50% Homoeo - 2 |

MHARS

S.E. 14A/2

1993 KHARIFF

YIELD 5 Sq.m in Kg.

FACTORIAL RBD

<u>Treatment</u>	<u>R1</u>	<u>R2</u>	<u>R3</u>	<u>R.4</u>	<u>A.V.</u>
1. 0 + 100 H1	3.13	2.40	2.63	2.85	2.75
2. 0 + 100 H2	3.12	2.65	2.47	2.65	2.72
3. 0 + 50 H1	2.64	2.60	2.35	2.88	2.61
4. 0 + 50 H2	3.30	2.80	2.57	2.45	2.69
5. 50 N + 100 H1	3.00	3.20	2.70	3.42	3.08
6. 50 N + 100 H2	2.52	3.03	2.67	2.60	2.71
7. 50 N + 50 H1	2.82	3.13	2.58	2.80	2.83
8. 50 N + 50 H2	3.23	3.30	2.88	2.65	3.02
9. 50 F + 100 H1	3.17	2.63	3.25	2.81	2.96
10. 50 F + 100 H2	2.95	3.30	3.01	2.85	3.03
11. 50 F + 50 H1	2.95	2.58	3.12	3.12	2.94
12. 50 F + 50 H2	3.07	2.83	3.33	3.30	3.13
13. 100 F + 100 H1	3.05	2.92	3.58	3.25	3.20
14. 100 F + 100 H2	2.80	2.98	2.58	2.95	2.83
15. 100 F + 50 H1	3.15	2.97	3.30	3.08	3.13
16. 100 F + 50 H2	3.40	2.90	3.05	3.15	3.13

C.D.@ 5% e = 0.1819

**MASTER HOMOEOPATHIC AGRICULTURAL RESEARCH STATION.
KAJIPETA**

S.E. 15/1

Experiment on Rice

Homoeo Nutrients

Vs

Chemical Fertilizers

1. Year	-	1993-94 RABI
2. Design	-	R.B.D.
3. No.of Replications	-	3
4. Net plot size	-	5 Sq.m
5. Cultivar variety	-	I.R.64
6. Location	-	MHARS / KAJIPETA
7. Soil	-	Loamy

Treatments

1. No manure (C N L)
2. Chemical fertilizers 50% (50F)
3. Chemical fertilizers 100% (100F)
4. Homoeo nutrients (100 H1)
5. Homoeo nutrients (100 H2)
6. 50% Chemical Fert. + 50% Homoeo nutrients | (50 F + 50 H1)
7. 50% Chemical Fertilizers + 50% HOMoeo Nutrients | (50 F + 50 H2)

1993-94 RABI
MHARS - KJP
YIELDS 5 Sq.m. Kg.

S.E. 15/2

<u>Treatment</u>	<u>R1</u>	<u>R2</u>	<u>R3</u>	<u>A.V.</u>	<u>MT. / Ha.</u>
1. CNL	1.94	1.45	1.45	1.61	3.22
2. 50 F	1.89	1.81	1.60	1.77	3.54
3. 100 F	2.39	1.56	1.80	1.92	3.84 *
4. 100 H1	2.29	1.26	1.70	1.75	3.50 *>
5. 100 H2	2.24	1.35	1.95	1.85	3.70 *>
6. 50 F + 50H1	2.30	1.36	1.75	1.80	3.60 *>
7. 50 F + 50H2	1.82	1.35	1.55	1.57	3.14
C.D. @ 5% e = 0.23					0.46

MHARS
1993-94 RABI
MHARS - KJP
YIELD COMPONENTS
SUMMARY

S.E. 15/3

<u>Treatment</u>	<u>P.H.</u> <u>Cm.</u>	<u>P.L.</u> <u>Cm.</u>	<u>E.T.</u> <u>No./ Hill</u>	<u>I.E.T.</u> <u>No./Hill</u>	<u>F.G.</u> <u>No./Hill</u>	<u>U.F.G.</u> <u>No./Hill</u>	<u>No.OF</u> <u>SPICK</u>	<u>1000</u> <u>GR.WT.</u>	<u>G.M.</u>	<u>W.E.</u>	<u>YIELD</u> <u>MT/Ha.</u>
CNL	71.1	17.7	8.83	1.9	64.8	16.6	5.8	24.3	0.2	0.07	3.22
50 F	71.7	18.2	8.80	1.77	85.4 *	25.8	6.4 *	26 *	0.0	0.33	3.54
100 F	73.7 *	18.8	7.53	1.73	67.3	13.8	6.3 *	25.7 *	0.17	0.17	3.84 *
100 H1	73.4 *>	18.8 >	7.9 @	1.57 >	75.8 >	16.6 >	6.3 *>	25.7 *	0.20	0.03	3.50 >
100 H2	74.2*>	18.5 >	8.1 @	1.53 >	93.3 *@	15.9 >	6.2 *>	26 *	0.37	0.07	3.70 *>
50F+50H1	74.9 *@	18.6 >	6.9 >	1.43 >	81.6 >	17.1 >	6.5 *@	25	0.10	0.10	3.60 *>
50F+50H2	70.0	18.2 >	7.5 >	1.63 >	64.2 >	17.6 >	6.2 *>	25.7 *	0.07	0.03	3.14
C.D.@5*	1.18	2.66	1.44	0.64	18.7	5.74	0.13	0.76	--	--	0.46

1993-94 RABI

S.E. 15/4

MHARS - KJP
YIELD COMPONENTS
PLANT HEIGHT cm.

<u>Treatment</u>	<u>R1</u>	<u>R2</u>	<u>R3</u>	<u>A.V.</u>
1. CNL	78.6	69.1	65.2	71.1
2. 50 F	79.6	73.2	62.2	71.7
3. 100 F	82.2	69.6	69.2	73.7*
4. 100 H1	77.1	71.8	71.4	73.4*>
5. 100 H2	78.8	70.9	72.9	74.2*>
6. 50 F + 50H1	77.1	68.9	78.6	74.9*@
7. 50 F + 50H2	80.9	64.9	64.3	70.0

C.D. @ 5% e = 1.18

MHARS

S.E. 15/5

1993-94 RABI

MHARS - KJP
YIELD COMPONENTS
PANICLE LENGTH cm.

<u>Treatment</u>	<u>R1</u>	<u>R2</u>	<u>R3</u>	<u>A.V.</u>
1. CNL	18.9	17.7	16.6	17.7
2. 50 F	19.2	17.8	17.5	18.2
3. 100 F	19.3	18.8	18.4	18.8
4. 100 H1	18.8	18.6	19.0	18.8 >
5. 100 H2	18.6	18.1	18.8	18.5 >
6. 50 F + 50H1	19.1	18.6	18.0	18.6 >
7. 50 F + 50H2	18.7	17.9	18.1	18.2 >

C.D. @ 5% e = 2.66

1993-94 RABI

S.E. 15/6

MHARS - KJP
YIELD COMPONENTS
EFFECTIVE TILLERS No./Hill

<u>Treatment</u>	<u>R1</u>	<u>R2</u>	<u>R3</u>	<u>A.V.</u>
1. CNL	11.8	7.9	6.8	8.83
2. 50 F	12.1	8.6	5.7	8.80
3. 100 F	9.4	6.1	7.1	7.53
4. 100 H1	9.3	8.2	6.2	7.9 @
5. 100 H2	12.0	5.4	6.8	8.1 @
6. 50 F + 50H1	6.8	7.4	6.6	6.9 >
7. 50 F + 50H2	6.8	7.8	7.8	7.5 >

C.D. @ 5% e = 1.44

MHARS

S.E. 15/7

1993-94 RABI
MHARS - KJP
YIELD COMPONENTS
INEFFECTIVE TILLERS Hill / No.

<u>Treatment</u>	<u>R1</u>	<u>R2</u>	<u>R3</u>	<u>A.V.</u>
1. CNL	2.2	1.9	1.7	1.90
2. 50 F	1.5	2.6	1.2	1.77
3. 100 F	2.6	1.1	1.5	1.73
4. 100 H1	2.1	1.4	1.2	1.57 >
5. 100 H2	1.7	1.2	1.7	1.53 >
6. 50 F + 50H1	1.3	2.0	1.0	1.43 >
7. 50 F + 50H2	2.1	1.7	1.1	1.63 >

C.D. @ 5% e = 0.64

1993-94 RABI

S.E. 15/8

MHARS - KJP
YIELD COMPONENTS
FILLED GRAINS / PANICLE - No.

<u>Treatment</u>	<u>R1</u>	<u>R2</u>	<u>R3</u>	<u>A.V.</u>
1. CNL	112.7	49.4	32.3	64.8
2. 50 F	131.5	84.3	40.5	85.4 *
3. 100 F	109.0	41.5	51.3	67.3
4. 100 H1	101.2	60.4	65.8	75.8 >
5. 100 H2	155.7	46.7	77.2	93.3 *@
6. 50 F + 50H1	59.0	102.7	83.2	81.6 >
7. 50 F + 50H2	55.0	73.5	64.0	64.2 >

C.D. @ 5% e = 18.7

MHARS

S.E. 15/9

1993-94 RABI
MHARS - KJP
YIELD COMPONENTS
UNFILLED GRAINS / PANICLE - No.

<u>Treatment</u>	<u>R1</u>	<u>R2</u>	<u>R3</u>	<u>A.V.</u>
1. CNL	14.0	22.3	13.5	16.6
2. 50 F	43.3	21.2	12.9	25.8
3. 100 F	15.8	7.9	17.9	13.8
4. 100 H1	18.6	21.3	9.9	16.6 >
5. 100 H2	24.2	5.6	17.9	15.9 >
6. 50 F + 50H1	16.4	18.2	16.6	17.1 >
7. 50 F + 50H2	17.6	19.9	15.3	17.6 >

C.D. @ 5% e = 5.74

1993-94 RABI

S.E. 15/10

MHARS - KJP**YIELD COMPONENTS****NO.OF SPICKELETS / PANICLE - No.**

<u>Treatment</u>	<u>R1</u>	<u>R2</u>	<u>R3</u>	<u>A.V.</u>
1. CNL	6.3	5.9	5.3	5.8
2. 50 F	7.2	6.3	5.8	6.4 *
3. 100 F	6.3	6.4	6.1	6.3 *
4. 100 H1	6.3	6.1	6.4	6.3 *>
5. 100 H2	6.1	6.1	6.3	6.2 *>
6. 50 F + 50H1	6.3	7.0	6.1	6.5 *@
7. 50 F + 50H2	5.7	6.6	6.2	6.2 *>

C.D. @ 5% e = 0.13

MHARS

S.E. 15/11

1993-94 RABI**MHARS - KJP****YIELD COMPONENTS****GALL MIDGE**

<u>Treatment</u>	<u>R1</u>	<u>R2</u>	<u>R3</u>	<u>A.V.</u>
1. CNL	0.3	0.0	0.3	0.20
2. 50 F	0.0	0.0	0.0	0.00
3. 100 F	0.3	0.1	0.1	0.17
4. 100 H1	0.2	0.2	0.2	0.20 >
5. 100 H2	0.2	0.5	0.4	0.37 >
6. 50 F + 50H1	0.2	0.1	0.0	0.10 >
7. 50 F + 50H2	0.2	0.0	0.0	0.07 >

C.D. @ 5% e = 0.72

MHARS - ARASAVALLI

S.E. 16/1

Experiment on Rice

Homoeo Nutrients

Vs

Chemical Fertilizers

1. Year	-	1994 KHARIFF
2. Design	-	R.B.D.
3. No.of Replications	-	3
4. Net plot size	-	5 SQM
5. Cultivar variety	-	BPT 5204
6. Location	-	MHARS ARASAVILLI
7. Soil	-	Sandy Loam

Treatments

1. No manure (C N L)
 2. Chemical fertilizers 50% (50F)
 3. Chemical fertilizers 100% (100F)
 4. 100% Homoeo nutrients (100 H1)
 5. 100% Homoeo nutrients (100 H2)
 6. 50% Chemical Fert.
+
50% Homoeo nutrients
- (50 F + 50 H)

MHARS - ARASAVALLI

S.E. 16/2

1994 KHARIFF**YIELD / Sq.m - Gms.**

<u>Treatment</u>	<u>R1</u>	<u>R2</u>	<u>R3</u>	<u>A.V.</u>	<u>M.T./Ha.</u>
1. CNL	315	215	275	268	2.68
2. 50 F	370	350	335	352	3.52 *
3. 100 F	320	405	380	368	3.68 *
4. 100 H1	325	450	390	388	3.88 *>
5. 100 H2	340	370	450	387	3.87 *>
6. 50 F + 50H1	330	395	355	360	3.60 *>
7. 50 F + 50H2	370	345	360	358	3.58 *>
C.D. @ 5% e = 45.5					0.455

MHARS - ARASAVALLI
1994 KHARIF
YIELD COMPONENTS
SUMMARY

<u>Treatment</u>	<u>P.H.</u> <u>Cm.</u>	<u>P.L.</u> <u>Cm.</u>	<u>E.T.</u> <u>No./Hill</u>	<u>I.E.T.</u> <u>No./Hill</u>	<u>YIELD</u> <u>Mt./Ha.</u>
1. CNL	80.8	16.1	4.1	2.2	2.68
2. 50 F	88.3	18.0	4.7	3.7	3.52
3. 100 F	98.3 *	19.6 *	4.4	3.4	3.68 *
4. 100 H1	88.5	18.2>	5.1 >	3.2 >	3.88 *>
5. 100 H2	87.1	17.6>	5.4*>	2.9 >	3.87 *>
6. 50 F + 50H1	86.9	17.0	4.7>	4.4	3.60 *>
7. 50 F + 50H2	89.2*	18.3*>	5.0>	4.2>	3.58*>
C.D. @ 5% e =	8.21	2.13	1.27	0.91	0.455

S.E. 16/4

1994 KHARIF
MHARS / ARASAVILLI
YIELD COMPONENTS
PLANT HEIGHT in cm.

<u>Treatment</u>	<u>R1</u>	<u>R2</u>	<u>R3</u>	<u>A.V.</u>
1. CNL	83.3	74.3	84.7	80.8
2. 50 F	91.6	87.5	86.8	88.3
3. 100 F	97.5	95.8	101.5	98.3 *
4. 100 H1	85.9	93.6	86.0	88.5
5. 100 H2	86.9	88.0	86.3	87.1
6. 50 F + 50H1	89.0	86.5	85.3	86.9
7. 50 F + 50H2	88.1	91.2	87.8	89.2 *

C.D. @ 5% e = 8.21

MHARS

S.E. 16/5

1994 KHARIF
MHARS / ARASAVILLI
YIELD COMPONENTS
PANICLE LENGTH in cm.

<u>Treatment</u>	<u>R1</u>	<u>R2</u>	<u>R3</u>	<u>A.V.</u>
1. CNL	15.6	16.6	16.2	16.1
2. 50 F	18.1	18.1	17.8	18.0
3. 100 F	19.8	19.6	19.4	19.6*
4. 100 H1	18.1	18.0	18.4	18.2 >
5. 100 H2	18.0	15.9	18.0	17.6 >
6. 50 F + 50H1	16.9	17.3	16.8	17.0
7. 50 F + 50H2	18.8	18.1	18.1	18.3 *>

C.D. @ 5% e = 2.13

S.E. 16/6

1994-95 KHARIFF
MHARS / ARASAVILLI
YIELD COMPONENTS
EFFECTIVE TILLERS No. / Hill

<u>Treatment</u>	<u>R1</u>	<u>R2</u>	<u>R3</u>	<u>A.V.</u>
1. CNL	4.0	3.6	4.6	4.1
2. 50 F	4.0	5.1	5.0	4.7
3. 100 F	5.1	3.5	4.5	4.4
4. 100 H1	5.9	4.2	5.3	5.1 >
5. 100 H2	6.1	4.2	5.9	5.4 * >
6. 50 F + 50H1	4.6	4.8	4.7	4.7 >
7. 50 F + 50H2	5.0	5.6	4.4	5.0 >

C.D. @ 5% e = 1.27

S.E. 16/7

MHARS
1994 KHARIFF
MHARS - ARASAVILLI
YIELD COMPONENTS
IN EFFECTIVE TILLERS No. / Hill

<u>Treatment</u>	<u>R1</u>	<u>R2</u>	<u>R3</u>	<u>A.V.</u>
1. CNL	2.0	2.1	2.5	2.2
2. 50 F	3.1	4.1	4.0	3.7
3. 100 F	3.1	3.0	4.1	3.4
4. 100 H1	2.4	2.5	4.7	3.2 >
5. 100 H2	3.0	2.4	3.4	2.9 >
6. 50 F + 50H1	3.2	5.6	4.4	4.4
7. 50 F + 50H2	4.3	4.2	4.2	4.2 >

C.D. @ 5% e = 0.91

**MASTER HOMOEEO AGRICULTURAL RESEARCH STATION.
ARASAVALLI**

Experiment on Rice

S.E. 17/1

Homoeo Nutrients
Vs
Chemical Fertilizers

1. Year	-	1994 KHARIFF
2. Design	-	R.B.D.
3. No.of Replications	-	4
4. Net plot size	-	5 Sq.m
5. Cultivar variety	-	BPT 5204
6. Location	-	MHARS / KHAJIPETA
7. Soil	-	LOAM

Treatments

1. No manure (C N L)
2. Chemical fertilizers 50% (50F)
3. Chemical fertilizers 100% (100F)
4. Homoeo nutrients (100 H1)
5. Homoeo nutrients (100 H2)
6. Homoeo nutrients (100 H3)
7. Homoeo nutrients (100 H4)
8. Homoeo nutrients (100 H5)
9. Homoeo nutrients (100 H6)
10. 50% Chemical Fert. + 50 % Homoeo Nutrients - 50 F + 50 H1
11. 50% Chemical Fert. + 50 % Homoeo Nutrients - 50 F + 50 H2
12. 50% Chemical Fert. + 50 % Homoeo Nutrients - 50 F + 50 H3
13. 50% Chemical Fert. + 50 % Homoeo Nutrients - 50 F + 50 H4
14. N-G Compost 2 Tonnes/acre (Comp. 2T)
15. N-G Compost 1.5 T / acre (comp 1.5 T)
16. N-G Compost 1.T / acre (comp 1T)
17. N-G Compost 0.5 T + Sunflower cake Compost 0.5 T + SFC 150 Kg)
18. Sunflower Oil cake 200 Kg (SFC 200 Kg.)

MHARS KHAJIPETA

S.E. 17/2

1994 KHARIFF**YIELDS / 5 Sq.m. in Kg.**

<u>Treatment</u>	<u>R1</u>	<u>R2</u>	<u>R3</u>	<u>R.4</u>	<u>A.V.</u>	<u>MT./Ha.</u>
1. CNL	2.045	2.080	2.270	2.270	2.170	4.34
2. 50 F	2.325	2.275	2.005	2.725	2.33	4.66 *
3. 100 F	2.015	2.685	2.360	2.485	2.386	4.77 *
4. 100 H1	2.220	2.155	1.725	2.400	2.12	4.24
5. 100 H2	2.255	1.380	2.220	2.495	2.09	4.18
6. 100 H3	2.345	2.995	2.155	2.360	2.46	4.92 *>
7. 100 H4	1.810	2.195	2.200	2.765	2.24	4.48
8. 100 H5	1.965	2.280	2.405	2.355	2.25	4.50
9. 100 H6	1.835	2.350	2.165	2.315	2.17	4.34
10. 50 F + 50 H1	2.160	2.830	2.585	2.480	2.51	5.02 *@
11. 50 F + 50 H2	2.155	2.640	2.560	2.580	2.48	4.968 *@
12. 50 F + 50 H3	2.120	2.340	2.530	2.390	2.34	4.68 *>
13. 50 F + 50 H4	1.980	2.565	2.350	2.680	2.39	4.78 *>
14. Comp 2T	1.810	1.820	2.520	2.415	2.17	4.34
15. Comp 1.5 T	1.865	1.965	2.240	2.255	2.08	4.16
16. Comp 1 T	1.580	1.895	2.215	2.340	2.01	4.02
17. Compost+SFC 150Kg	1.515	2.015	2.370	2.480	2.09	4.18
18. SFC 200 Kg.	1.870	2.495	2.040	3.130	2.38	4.76 *>
19. All cakes 200 Kg.	2.045	2.610	1.810	2.065	2.13	4.26

C.D.@ 5% e = 0.189

MHARS KHAJIPETA

S.E. 17/3

1994 KHARIFF**YIELD COMPONENTS****SUMMARY**

<u>Treatment</u>	<u>P.L.</u> Cm.	<u>No.of</u> Spicklets	<u>E.T.</u> No./Hill	<u>F.G.</u> No./Hill	<u>U.F.G.</u> No./Hill	<u>YIELD</u> MT./Ha.
1. CNL	17.5	9.3	4.0	85.1	2.6	4.34
2. 50 F	17.6	9.2	3.7	80.2	1.6	4.66 *
3. 100 F	17.7	9.1	3.6	77.1	2.6	4.77 *
4. 100 H1	17.5 >	8.8 >	3.9 @	85.9 @	2.9 >	4.24
5. 100 H2	17.0 >	9.8 >	3.8 >	83.9 >	1.3 >	4.18
6. 100 H3	17.6 >	9.2 >	4.2 @	77.8 >	1.7 >	4.92 *>
7. 50 F + 50 H1	17.8 >	9.0 >	4.4 @	84.2 >	1.9 >	5.02 *@
8. 50 F + 50 H2	17.7 >	9.3 >	4.1 @	89.3 @	1.1 *@	4.968 *@
9. 50 F + 50 H3	17.1 >	8.9 >	4.2 @	80.6 >	1.3 >	4.68 *>
C.D. @ 5% e=	0.62	0.62	0.3	7.9	1.4	0.189

MHARS

S.E. 17/4

1994 KHARIFF**MHARS - KJP****YIELD COMPONENTS****NO. OF SPIKELETS / TILLER (No.)**

<u>Treatment</u>	<u>R1</u>	<u>R2</u>	<u>R3</u>	<u>R.4</u>	<u>A.V.</u>
1. CNL	9.7	9.4	9.6	8.5	9.3
2. 50 F	9.3	8.1	9.4	10.0	9.2
3. 100 F	9.5	9.4	9.0	9.6	9.1
4. 100 H1	8.9	8.9	8.5	8.9	8.8 >
5. 100 H2	8.9	7.6	9.4	9.2	9.8 >
6. 100 H3	9.4	8.5	9.8	9.0	9.2 >
7. 50 F + 50 H1	8.6	8.9	9.6	8.1	9.0 >
8. 50 F + 50 H2	9.3	8.9	10.1	9.1	9.3 >
9. 50 F + 50 H3	8.5	9.6	8.3	9.2	8.9 >

C.D.@ 5% e = 0.63

1994 KHARIFF

S.E. 17/5

MHARS - KJP**YIELD COMPONENTS****PANICLE - LENGTH - Cm.**

<u>Treatment</u>	<u>R1</u>	<u>R2</u>	<u>R3</u>	<u>R.4</u>	<u>A.V.</u>
1. CNL	17.9	16.9	18.6	16.8	17.5
2. 50 F	17.7	17.2	18.1	19.3	17.6
3. 100 F	18.5	16.6	18.2	17.4	17.7
4. 100 H1	17.4	17.3	18.0	17.3	17.5 >
5. 100 H2	16.9	15.6	17.9	17.7	17.0 >
6. 100 H3	17.3	16.2	18.9	16.6	17.6 >
7. 50 F + 50 H1	17.1	16.9	18.4	17.7	17.8 >
8. 50 F + 50 H2	17.9	17.2	18.7	17.2	17.7 >
9. 50 F + 50 H3	17.3	16.8	16.7	17.7	17.1 >

C.D.@ 5% e = 0.62

MHARS

S.E. 17/6

1994 KHARIFF**MHARS - KJP****YIELD COMPONENTS****EFFECTIVE TILLERS No./Hill**

<u>Treatment</u>	<u>R1</u>	<u>R2</u>	<u>R3</u>	<u>R.4</u>	<u>A.V.</u>
1. CNL	3.3	4.7	4.0	4.0	4.0
2. 50 F	3.6	3.4	4.0	4.0	3.7
3. 100 F	3.4	4.2	3.0	3.8	3.6
4. 100 H1	3.8	3.9	3.6	4.2	3.9 @
5. 100 H2	3.0	3.7	3.9	4.6	3.8 >
6. 100 H3	4.4	4.7	3.3	4.3	4.2 @
7. 50 F + 50 H1	4.5	4.8	4.2	3.5	4.2 @
8. 50 F + 50 H2	4.2	4.0	3.7	4.6	4.1 @
9. 50 F + 50 H3	4.6	4.8	3.7	3.7	4.2 @

C.D.@ 5% e = 0.3

1994 KHARIFF

S.E. 17/7

MHARS - KJP**YIELD COMPONENTS****FILLED GRAINS PER PANICLE (No.)**

<u>Treatment</u>	<u>R1</u>	<u>R2</u>	<u>R3</u>	<u>R.4</u>	<u>A.V.</u>
1. CNL	87.2	78.0	98.8	75.6	85.1
2. 50 F	81.6	62.7	82.2	94.3	80.2
3. 100 F	86.6	76.0	86.1	59.9	77.1
4. 100 H1	88.7	81.6	88.5	84.8	85.9 @
5. 100 H2	97.7	61.8	92.5	83.7	83.9 >
6. 100 H3	80.8	70.6	84.9	74.9	77.8 >
7. 50 F + 50 H1	80.8	78.8	93.8	83.4	84.2 >
8. 50 F + 50 H2	90.3	73.6	104.1	89.5	89.3 @
9. 50 F + 50 H3	98.5	73.6	68.8	81.5	80.6 >

C.D.@ 5% e = 7.9

1994 KHARIFF

S.E. 17/8

MHARS - KJP**YIELD COMPONENTS****UN FILLED GRAINS / PANICLE (No.)**

<u>Treatment</u>	<u>R1</u>	<u>R2</u>	<u>R3</u>	<u>R.4</u>	<u>A.V.</u>
1. CNL	3.5	3.2	2.1	1.5	2.6
2. 50 F	1.9	0.8	1.3	2.5	1.6
3. 100 F	3.4	1.5	2.8	2.9	2.6
4. 100 H1	1.6	4.5	3.8	1.7	2.9 >
5. 100 H2	1.7	1.6	0.8	1.1	1.3 >
6. 100 H3	4.0	0.4	1.4	1.1	1.7 >
7. 50 F + 50 H1	1.1	1.6	3.9	0.9	1.9 >
8. 50 F + 50 H2	1.4	0.8	0.7	2.2	1.1 *@
9. 50 F + 50 H3	1.2	2.4	1.0	0.8	1.3 >

C.D.@ 5% e = 1.4

MHARS

S.E. 17/9

1994 KHARIFF**MHARS - KJP****YIELD COMPONENTS****PANICLE LENGTH - Cm.**

<u>Treatment</u>	<u>R1</u>	<u>R2</u>	<u>R3</u>	<u>R.4</u>	<u>A.V.</u>
1. CNL	17.9	16.9	18.6	16.8	17.5
2. 50 F	17.7	15.2	18.1	19.3	17.6
3. 100 F	18.5	16.6	18.2	17.4	17.7
4. 100 H1	17.4	17.3	18.0	17.3	17.5 >
5. 100 H2	16.9	15.6	17.9	17.7	17.0 >
6. 100 H3	17.3	16.2	18.9	16.6	17.6 >
7. 50 F + 50 H1	17.1	16.9	18.4	17.7	17.8 >
8. 50 F + 50 H2	17.9	17.2	18.7	17.2	17.7 >
9. 50 F + 50 H3	17.3	16.8	16.7	17.7	17.1 >

C.D.@ 5% e-

0.62

**MASTER HOMOEOPATHIC AGRICULTURAL RESEARCH STATION.
ARASAVALLI**

Experiment on Rice

S.E. 18/1

Homoeo Nutrients
Vs
Chemical Fertilizers

1. Year	-	1994-95 RABI
2. Design	-	R.B.D.
3. No.of Replications	-	3
4. Net plot size	-	6 Sq.m
5. Cultivar variety	-	MTU 1001
6. Location	-	MHARS / ARASAVILLI
7. Soil	-	Sandy Loam

Treatments

1. No manure (C N L)
2. Chemical fertilizers 50% (50F)
3. Chemical fertilizers 100% (100F)
4. Homoeo nutrients (100 H1)
5. Homoeo nutrients (100 H2)
6. Homoeo nutrients (100 H3)
7. Homoeo nutrients (100 H4)
8. Homoeo nutrients (100 H5)
9. 50% Chemical Fert. + 50 % Homoeo Nutrients - 50 F + 50 H1
10. 50% Chemical Fert. + 50 % Homoeo Nutrients - 50 F + 50 H2
11. 50% Chemical Fert. + 50 % Homoeo Nutrients - 50 F + 50 H3
12. 50% Chemical Fert. + 50 % Homoeo Nutrients - 50 F + 50 H4
13. 50% Chemical Fert. + 50 % Homoeo Nutrients - 50 F + 50 H5
14. (Compost 1T + SFC)-1 Tonne of N-G Compost + Sunflower Oil-Cake
15. (Compost 2T) - NG Compost 2 T
16. 100% Chemical Fert. + 50% Homoeo nutrients - (100 F + 50 H1)

**MASTER HOMOEOPATHIC AGRICULTURAL RESEARCH STATION.
ARASAVALLI**

S.E. 18/2

1994-95 RABI

YIELD / 6 Sq.m. in Kg.

<u>Treatment</u>	<u>R1</u>	<u>R2</u>	<u>R3</u>	<u>A.V.</u>	<u>M.T./Ha.</u>
1. CNL	3.2	1.1	0.9	1.7	2.83
2. 50 F	2.7	3.7	2.6	3.0 *	5.00
3. 100 F	3.2	2.7	3.1	3.0 *	5.00
4. 100 H1	2.9	2.6	2.9	2.8 *>	4.67
5. 100 H2	2.9	2.2	2.5	2.5 >	4.16
6. 100 H3	2.7	2.5	3.5	2.9 *>	4.83
7. 100 H4	2.4	2.3	2.4	2.4 >	4.00
8. 100 H5	3.2	2.5	3.0	2.9 *>	4.83
9. 50 F + 50 H1	3.4	3.1	3.5	3.3 *>	5.50
10. 50 F + 50 H2	3.2	2.4	2.9	2.8 *>	4.67
11. 50 F + 50 H3	3.9	2.3	2.3	2.8 *>	4.67
12. 50 F + 50 H4	3.4	2.7	3.1	3.1 *>	5.16
13. 50 F + 50 H5	2.7	3.5	2.7	3.0 *>	5.00
14. COMP 1T+SFC	2.1	3.0	1.5	2.2 >	3.67
15. COMP 2T	2.3	2.5	2.3	2.4 >	4.00
16. 100 F + 50 H1	2.2	3.7	3.6	3.5 *>	5.83

C.D.@ 5% e = 0.882

MASTER HOMOEEO AGRICULTURAL RESEARCH STATION, KHAJIPETA

Experiment on Rice

S.E. 19/1

Homoeo Nutrients

Vs

Chemical Fertilizers

1. Year	-	1994-95 RABI
2. Design	-	R.B.D.
3. No.of Replications	-	3
4. Net plot size	-	5 Sq.m.
5. Cultivar variety	-	IR 64
6. Location	-	MHARS / KHAJIPETA
7. Soil	-	LOAMY

Treatments

1. No manure (C N L)
2. Chemical fertilizers 100% (100F)
3. Chemical fertilizers 50% (50F)
4. Homoeo nutrients (100 H)
5. 50% Chemical fert
+
50% Homoeo nutrients | (50F + 50H)

1994-95 RABI - YIELDS / 5 Sq.m in Kg.

S.E. 19/2

<u>Treatment</u>	<u>R1</u>	<u>R2</u>	<u>R3</u>	<u>A.V.</u>	MT/Ha.
1. CNL	1.73	1.73	2.44	1.63	3.26
2. 50 F	2.11	1.76	1.35	1.74	3.48
3. 100 F	2.67	1.45	2.21	2.11*	4.22
4. 100 H	1.72	1.62	2.40	1.91	3.82
5. 100 H	2.15	1.25	2.52	1.97*>	3.94
6. 100 H	1.91	1.46	2.16	1.84	3.68
7. 100 H	2.11	2.03	2.23	2.12 *>	4.24
8. 50 F + 50H	2.28	1.44	1.70	1.81	3.62
9. 50 F + 50H	1.71	1.94	1.25	1.63	3.26
10. 50 F + 50H	2.47	1.75	1.36	1.86	3.72
11. 50 F + 50H	2.32	1.49	1.64	1.82	3.64

C.D. @ 5% e = 0.187

**MASTER HOMOEEO AGRICULTURAL RESEARCH STATION.
KHAJIPETA**

S.E. 20/1

Experiment on Rice

Homoeo Nutrients

Vs

Chemical Fertilizers

1. Year	-	1995 KHARIFF
2. Design	-	R.B.D.
3. No.of Replications	-	4
4. Net plot size	-	6 Sq.m
5. Cultivar variety	-	BPT 5204
6. Location	-	MHARS / KHAJIPETA
7. Soil	-	Loamy

Treatments

1. No manure (C N L)
2. Chemical fertilizers 50% (50F)
3. Chemical fertilizers 100% (100F)
4. Homoeo nutrients (100 H1)
5. Homoeo nutrients (100 H2)
6. Homoeo nutrients (100 H3)
7. Homoeo nutrients (100 H4)
8. Homoeo nutrients (100 H5)
9. Homoeo nutrients (100 H6)
10. Homoeo nutrients (100 H7)
11. 50 % Chemical Fert. + 50 % Homoeo 1 - (50 F + 50 H1)
12. 50 % Chemical Fert. + 50 % Homoeo 2 - (50 F + 50 H2)
13. 50 % Chemical Fert. + 50 % Homoeo 3 - (50 F + 50 H3)
14. 50 % Chemical Fert. + 50 % Homoeo 4 - (50 F + 50 H4)
15. 50 % Chemical Fert. + 50 % Homoeo 5 - (50 F + 50 H5)
16. 1.5 T. N.G. Compost
17. 2 T. N.G. Compost

MHARS

S.E. 20/2

1995 KHARIFF

YIELDS (PER 6Sq.m in Kg.)

<u>Treatment</u>	<u>R1</u>	<u>R2</u>	<u>R3</u>	<u>R.4</u>	<u>A.V.</u>	<u>MT/Ha.</u>
1. CNL	2.985	2.325	2.575	3.230	2.773	4.62
2. 50 F	3.475	3.025	3.175	2.925	3.150 *	5.25
3. 100 F	3.230	3.555	3.255	3.330	3.342 *	5.57
4. 100 H1	2.035	2.925	2.825	3.265	2.762	4.60
5. 100 H2	3.425	3.525	3.525	3.160	3.359 *	5.60
6. 100 H3	2.975	3.065	2.475	3.625	3.035	5.06
7. 100 H4	3.025	3.475	3.265	3.175	3.235 *>	5.39
8. 100 H5	2.475	3.030	3.015	3.025	2.886	4.81
9. 100 H6	2.275	3.235	2.075	3.025	3.130 *>	5.22
10 100 H7	2.875	3.065	3.185	2.880	3.001	5.00
11. 50 F + 50 H1	3.345	3.105	3.370	3.150	3.242 *>	5.40
12. 50 F + 50 H2	3.515	2.440	3.275	2.975	3.051 *	5.08
13. 50 F + 50 H3	2.615	3.180	3.025	2.335	2.786	4.64
14. 50 F + 50 H4	2.865	2.605	3.115	3.365	2.987	4.98
15. 50 F + 50 H5	3.680	2.685	2.775	3.075	3.054 *	5.09
16. 1.5T-NG.Comp	3.135	3.030	3.150	3.225	3.135 *>	5.22
17. 2 T-NG Comp.	3.440	3.020	3.205	2.975	3.160 *>	5.27

C.D. @ 5% e = 0.272

**MASTER HOMOEOPATHIC AGRICULTURAL RESEARCH STATION.
KHAJIPETA**

S.E. 21/1

Experiment on Rice

Homoeo Nutrients

Vs

Chemical Fertilizers

1. Year	-	1996 KHARIFF
2. Design	-	R.B.D.
3. No.of Replications	-	3
4. Net plot size	-	5 Sq.m
5. Cultivar variety	-	BPT 5204
6. Location	-	KHAJIPETA
7. Soil	-	Loamy

Treatments

1. No manure (C N L)
2. Chemical fertilizers 50% (50F)
3. Chemical fertilizers 100% (100F)
4. Homoeo nutrients (100 H1)
5. Homoeo nutrients (100 H2)
6. 50% Homoeo 50 H1
7. 50% Homoeo 50 H2
8. Bio Fert. AZS, AZB, PB
9. 50% Homoeo 1 + Bio Fert.
10. 50% Chemical Fertilizer + Bio Fertilizers
11. N.G. Compost - 2 T
12. N.G. Compost - 2T + Bio Fertilizers
13. N.G. Compost - 1.5
14. N.G. Compost - 1.5 T + Bio Fertilizers
15. N.G. Compost - 1.T
16. N.G. Compost - 1.T + Bio Fertilizers

**MASTER HOMOEOPATHIC AGRICULTURAL RESEARCH STATION.
KHAJIPETA**

S.E. 21/2

1996 KHARIF

YIELDS / 5 Sq.m in gms.

<u>Treatment</u>	<u>R1</u>	<u>R2</u>	<u>R3</u>	<u>A.V.</u>	<u>MT. / Ha.</u>
1. CNL	1550	1715	1660	1642	3.28
2. 50 F	1790	1685	1660	1712	3.42
3. 100 F	1660	2130	2740	2013 *	4.03
4. 100 H1	1715	1740	1745	1733	3.47
5. 100 H2	1700	1690	2050	1813 *	3.63
6. 50 H1	2045	1900	1850	1932 *>	3.87
7. 50 H2	1885	1560	1660	1702	3.40
8. AZS + PB	1650	1700	1640	1663	3.33
9. 50 H1 + AZS + PB	1660	1945	1705	1770	3.54
10. AZB + PB	1810	1550	1690	1683	3.37
11. 50 F + 50 H1	2160	1990	2100	2083 *>	4.17
12. AZS + AZB	1750	1750	1650	1712	3.42
13. 50 F + AZS+AZB	2130	1850	1985	1988 *>	3.98
14. Comp. 2 T	1350	1850	1690	1797 *	3.59
15. Comp. 2T+ AZS+PB	1820	1875	1690	1795 *	3.59
16. Comp 1.5 T	1650	1600	1550	1600	3.20
17. ,, + AZS + PB	1750	1600	1500	1616	3.23
18. ,, + 1 T	1720	1645	1630	1665	3.33
19. ,, ,, + AZS + PB	1890	1550	1650	1697	3.39

C.D.@ 5% e = 112

**MASTER HOMOEOPATHIC AGRICULTURAL RESEARCH STATION.
KHAJIPETA**

S.E. 22/1

Experiment on Rice

Homoeo Nutrients

Vs

Chemical Fertilizers

1. Year	-	1997 Khariff
2. Design	-	R.B.D.
3. No.of Replications	-	3
4. Net plot size	-	5 Sq.m
5. Cultivar variety	-	BPT 5204
6. Location	-	MHARS / KHAJIPETA
7. Soil	-	Loamy

Treatments

1. No manure (C N L)
2. Chemical fertilizers 100% (100F)
3. Chemical fertilizers 50% (50F)
4. Homoeo nutrients (100 H1)
5. Homoeo nutrients (100 H2)
6. Homoeo nutrients (100 H3)
7. Homoeo nutrients (100 H4)
8. Homoeo nutrients (100 H5)
9. 50% Chemical fert
+
50% Homoeo nutrients | (50F + 50H)
10. 50% Chemical fert
+
50% Homoeo nutrients | (50F + 50H2)
11. 50 F + BIO-Fert.(Azospirillum + Phosphobacterim)
12. 50% Homoeo + Green manure + Blue Green Algae + N.G.Compost + Bio Fert
13. BIO Fert. (Azospirillum + Phosphobacterim)
14. 50% Homoeo + BIO F
15. 50% N.G. Comp.+ B.G.A. + BIO.F

MHARS

S.E. 22/2

1997 KHARIFF

YIELDS / 5 Sq.m in Kgms.

<u>Treatment</u>	<u>R1</u>	<u>R2</u>	<u>R3</u>	<u>A.V.</u>	<u>MT / Ha.</u>
1. CNL	1850	1960	1720	1843	3.69
2. 50 F	1850	2100	1980	1977	3.95
3. 100 F	1920	1810	1860	1863	3.73
4. 100 H1	1950	2060	2450	2153 *@	4.31
5. 100 H2	1920	1720	1650	1763 >	3.53
6. 100 H3	1650	1725	1900	1758 >	3.52
7. 100 H4	1725	1750	2250	1908 >	3.82
8. 100 H5	2085	1950	2070	2035 >	4.07
9. 50 F + 50 H1	1890	1870	2020	1930 >	3.86
10. 50 F + 50 H2	1880	1670	1800	1783 >	3.57
11. 50 F + AZS,PB	1800	2200	2350	2117 *	4.31
12. 50 H+GM+BGH +NGC+AZS+PB	1920	1900	2240	2020 >	4.04
13. AZS + PB	1750	2125	1870	1915 >	3.83
14. 50 H + AZS + PB	1885	1750	2170	1935 >	3.87
15. 50 H + NGC + BGA + AZS + PB	2040	1950	1750	1913 >	3.83

C.D.@ 5% e = 257

MHARS
BULK YIELDS
YEAR 1992 KHARIFF

B.1

KHAJIPETA

<u>Field No.</u>	<u>No.of Hills / Sq.m</u>	<u>Yield/ Sq.m</u>
1.	33	460
2.	35	415
3.	36	360
4.	43	510
5.	39	420
6.	39	375
7. A	42	405
7. B	56	350
8. A	36	485
8. B	43	565
9. A	38	46
9. B1	42	365
9. B2	52	395
9. B3	46	545
10.	43	545
11. A	52	445
11. B	43	370
12. A	49	390
12. B	56	490
13.	41	410
15.	33	505
16.	43	350
17.	45	380
18.	49	355
19. SFC	47	435
19. CF	44	440

MHARS
BULK YIELDS
YEAR 1993 KHARIFF

B.2

KHAJIPETA - MTU 7029

<u>Field No.</u>	<u>Treatment</u>	<u>No.of Hills / Sq.m</u>	<u>Yield/Sq.m.</u>	
6.	Homoeo	34	475	
7. A	Homoeo	50	480	
7. B	Homoeo	40	492	
10.	Homoeo	44	510	
11. A	Homoeo	38	510	
11. B	Homoeo	32	430	
12. A	Homoeo	37	400	Phalguna R.P.-17
12. B	Homoeo	40	460	
13.	Sunflower Cake	42	550	
15.	Homoeo	43	500	
16.	Homoeo	34	397	
17.	Homoeo	33	500	
18.	Homoeo	33	330	Phalguna
19.	C.F.	44	530	Phalguna

MHARS
BULK YIELDS
YEAR 1994 KHARIFF

B.3

ARASAVALLI - BPT 5204

AVERAGE OF 5 X 1 Sq.m.

<u>Field No.</u>	<u>Treatment</u>	<u>No.of Hills / Sq.m</u>	<u>Yield MT./Ha.</u>
3	100 H	32	4.05
6	100 F	43	3.85
7	100 H	47	5.75
8	100 F	37	3.95

KHAJIPETA - MTU 7029

7. A	100 H	55	3.45
7. B	100 H	48	4.05
11. A	100 H	35	3.05
11. B	100 H	55	3.60
12. A	100 H	40	4.20
13	ORG - F	47	3.85
15	100 H	44	3.85
16	Nadep Comp.	36	4.55
17	100 H	49	4.55
18	Integrated Organic Farming.	42	4.55

MHARS
BULK YIELDS
YEAR 1996 KHARIFF

B.4

KHAJIPETA - BPT - 5204

AVERAGE OF 5 X 1 Sq.m.

<u>Field No.</u>	<u>Treatment</u>	<u>No.of Hills / Sq.m</u>	<u>Yield</u> <u>MT/Ha.</u>
1	H+Bio F	43	4.4
11 A	100 H	48	6.3
12 A	50 F + 50 H + Bio F.	51	5.05
17	100 H	55	4.25
18	100 F	41	4.50
19	100 H	49	5.05

HYBRID - APCR 2

13	100 F	41	4.18
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MHARS
BULK YIELDS
YEAR 1997 KHARIFF

B.5

KHAJIPETA - BPT - 5204

AVERAGE OF 5 X 1 Sq.m.

<u>Field No.</u>	<u>Treatment</u>	<u>No.of Hills / Sq.m</u>	<u>Yield MT/Ha.</u>
11 A	Org. F.	45	7.00
12 A	100 H	40	6.84
13 (DRRH-1-HYB)	100 H	30	4.98
14	100 H	36	5.08
15	Organic - F	50	9.70
16	-do-	45	9.85
17	100 H	43	7.50
18	100 F	48	7.35
19	Organic - F + 50 F + 100 H	40	10.50