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DATE: 36.07.2012

To.

Dr. Arup Ghosh,

Scientist,

Waste land Research Discipline,

Central Salt and Marine Chemicals Research Institute,

Gijubhai Badheka Marg,

Bhavnagar-364 002

Sub.: One year report of "Effect of Seaweed sap on soil fertility, growth

and yield of rice (Oryza sativa L.)" summer-2012 reg....

Ref.: Asso. Res. Sci., Vyara letter No. RRRS/T-2/1148/2417/2012,

Dated: 25/07/2012

With reference to above cited subject & letter, I am sending here with one year report of "Effect of Seaweed sap on soil fertility, growth and yield of rice (Oryza sativa L.) " summer-2012 for your information and needful action. The receipt of the same may kindly acknowledged.

Thanking you,

Encl: A/a

Director of Research & Dean P.G. Studies

Copy to:

1. Research scientist, Regional Rice Research Station, NAU, Vyara for information.

Table 3: Effect of seaweed sap on yield attribute of rice.

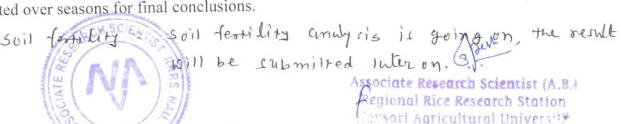
Treatment	Grain yield (kg/ha)	Percent increase over control treatment i.e. T ₉	Fodder yield (kg/ha)
T ₁ : 2.5 % K-sap + RDF	5970.209	18.15	6349.44
T ₂ : 5 % K-sap + RDF	5983.897	18.42	6350.08
T ₃ : 10 % K-sap + RDF	6484.702	28.33	6376.81
T ₄ :15 % K-sap + RDF	6393.559	26.53	6370.37
T ₅ : 2.5 % G-sap + RDF	6349.597	25.66	6331.08
T ₆ : 5 % G-sap + RDF	6356.039	25.78	6320.29
T ₇ : 10 % G-sap + RDF	6291.787	24.51	6300.81
T ₈ : 15 % G-sap + RDF	6328.019	25.23	6347.02
T_9 : Water spray + RDF	5053.140	0.00	5906.60
T ₁₀ : 7.5 % K-sap + 50% RDF	4333.494	-14.24	4520.13
S.Em.±	367.58		315.07
C.D. at 5 %	1092.17		936.18
C.V. %	10.69		8.92

Grain yield results of rice experiment showed significant differences with the use of Seaweed sap+100% RDF over control treatment (i.e. water spray+100% RDF). Grain yield ranged from 4333.494 kg/ha (T_{10} : 7.5 % K-sap + 50% RDF) to 6484.702 kg/ha (T_{3} : 10 % K-sap + RDF). The treatment T_{3} i.e. 10 % K-sap + RDF yielded significantly higher grain yield (6484.702 kg/ha) which was at par with the other treatments like T_{4} , T_{6} , T_{5} , T_{8} , T_{7} , T_{2} and T_{1} (Table:3). T_{10} : 7.5 % K-sap + 50% RDF yielded 4333.49kg/ha.

The treatments T_1 : 2.5 % K-sap + RDF and T_5 : 2.5 % G-sap + RDF gave 18.15% and 25.33% more grain yield over control treatment (T_9 : Water spray + RDF), respectively. The treatment T_5 : 2.5 % G-sap + RDF gives an increase in 25.33 % grain yield of rice over control which is much more economic than the treatment T_3 : 10 % K-sap + RDF which gave the significantly higher grain yield with 28% difference with control.

Considering the grain yield results of one season experiment, it can be easily concluded that the low concentration of G-sap is as effective as high concentration.

The treatment T_3 i.e. 10 % K-sap + RDF also showed the significantly higher results in terms of fodder yield of rice crop with at par results from the other treatments like T_4 , T_2 , T_1 , T_8 , T_5 , T_6 and T_9 . These are results of one season experiment and needs to be tested over seasons for final conclusions.



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