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no. millet / RARI / 2016 / 317 dt 12/2/16

The
GM Agriculture
Ritika Research labs Pvt. Ltd.
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Sub: Testing report of bounty (Ritika Research lab pvt. Ltd., Mumbai) on bajra
Ref. No.: F4 (28)/ DOR/ SKNAU/2015/952 dated 22.06.2015

Sir, As per the reference cited above, kindly find enclosed herewith the report of the trial conducted at AICRP on pearl millet improvement project, RARI, Durgapura on Bounty (a product of Ritika Research lab Pvt. Ltd., (Mumbai) during kharif 2015. Kindly acknowledge the receipt of the same.

Thanking you

Yours faithfully

(Sunita Gupta)

Copy submitted to
The Incharge, AICRP on pearl millet improvemet project, RARI, Durgapura, Jaipur for
information.
The Director RARI, SKN Agriculture university, Jobner.

Testing of Bounty on Bajra crop

1. Title of the project : Testing of Bounty on Bajra crop
2. Objective : 1. To evaluate the effect of Bounty on physiological development of bajra crop
2. To evaluate yield potential of bajra crop treated with bounty under field condition.
3. Name and address of the Research Institute : All India Co- ordinate Research Project on Pearl Millet, Rajasthan Agriculture Research Institute, SKN Agriculture University, JOBNER
4. Name of Scientist : Dr. (Mrs.) Sunita Gupta
Professor, Plant Physiology
5. Name and address of Sponsor : M/s Ritika Research Labs Pvt. Ltd., Mumbai
6. Test Period : Kharif 2015
7. Details of Experiment :
 - a. No. of Treatments : Seven
 - b. Treatment details :

Treat .No.	Treatment details
T1	Regular cultural practices
T2	RCP+ Foliar Application 1
T3	RCP+ Foliar Application 2
T4	RCP+ Foliar Application 1+ Foliar Application 2
T5	RCP+ Seed Treatment+ Foliar Application 1
T6	RCP+ Seed Treatment+ Foliar Application 2
T7	RCP+ Seed Treatment+ Foliar Application 1+ Foliar Application 2

- c. Experimental design : Randomized block design
- d. No. of replications : Four
- e. Plot size : 5x2 m²

8. Crop details

- a. Crop : Bajra
- b. Variety : RHB-173
- c. Date of sowing : 4.07.2015
- d. Spacing : 50 x10 cm.

9. Methodology

- a. Time of application : 3-4 leaf stage and before flowering
- b. Method of application :

1) Seed treatment :

Seed treatment was done in a shaded area. For seed treatment, the seeds were soaked in a working seed treatment solution for 40-45 seconds in plastic bucket to have the seeds well smeared with solution. Then seeds are removed and dry in shade and planted within 2 days.

2) Foliar application:

First make the working solution according to required area. The first foliar application was done when the plants have 3-4 full leaves. The second foliar spray was done before flowering stage.

10. Observations

- 1. Plant height at harvest
- 2. No. of effective tiller /plant
- 3. Ear length
- 4. Ear head weight Kg/ha
- 5. Dry matter Kg/ha
- 6. Days to 50% flowering
- 7. Biological yield Kg/ha
- 8. Grain yield Kg/ha
- 9. HI
- 10. Test weight

Results:

Experiment was conducted to study the effect of Bounty on Bajra on yield and yield attributing characters was conducted during kharif 2015. The observations on growth, yield and yield attributing characters were taken which have been depicted in Table 1, 2 &3. Among different treatments, maximum plant height (169cm.), effective tiller per plant (1.75), ear length (32.05cm.), ear head weight (3550 kg/ha), dry matter (6250 kg/ha), biological yield (9175 kg/ha) and test weight were recorded with treatment No.7 (RCP + ST + FA1 + FA2). In this treatment grain yield was also increased significantly (2550 kg/ha) over control. Comparison of various treatment showed that the variation in grain yield was statistically at par among T5 (2325 kg/ha) , T6 (2525 kg/ha) and T7 (2550 kg/ha).

Overall our result indicated that the treatment T7 (RCP + Seed treatment + Foliar application 1 + Foliar application 2) was found best for getting maximum grain yield of pearl millet in our conditions as compare to rest of the treatments.

Table: 1 Effect of Bounty application on yield and yield attributes

Treatment	Plant height at harvest cm	Effective tiller/plant	Days to 50% flowering	Ear length cm
Regular culture practices	158.33	1.00	54.75	25.16
RCP+ Foliar application 1	162.58	1.25	54.50	27.12
RCP+ Foliar application2	165.67	1.41	54.25	27.33
RCP + FA1+ FA2	165	1.41	54	27.75
RCP +Seed treatment +FA1	165.75	1.50	53.50	27.83
RCP + Seed treatment +FA2	166	1.58	53.25	29.66
RCP+ Seed treatment +FA1+FA2	169	1.75	53.25	32.05
CD at 5%	8.51	0.39	NS	3.77

Table: 2 Effect of Bounty application on yield and yield attributes

Treatment	Ear head wt. Kg/ha	Dry matter Kg/ha	Grain yield Kg/ha	Biological yield Kg/ha
Regular culture practices	3025	5425	1975	7400
RCP+ Foliar application 1	3250	5787.50	2175	7962
RCP+ Foliar application2	3275	6000	2275	8025
RCP + FA1+ FA2	3450	6075	2300	8375
RCP +Seed treatment +FA1	3475	6175	2325	8500
RCP + Seed treatment +FA2	3525	6225	2525	8750
RCP+ Seed treatment +FA1+FA2	3550	6250	2550	9175
CD at 5%	253.54	602.81	342.70	745.89

Table: 3 Effect of Bounty applications on yield and yield attribute

Treatment	Harvest index	Test weight
Regular culture practices	26.67	9.80
RCP+ Foliar application 1	27.27	10.29
RCP+ Foliar application2	28.39	10.44
RCP + FA1+ FA2	27.29	10.57
RCP +Seed treatment +FA1	27.36	11.79
RCP + Seed treatment +FA2	28.85	11.96
RCP+ Seed treatment +FA1+FA2	27.81	12.01
CD at 5%	NS	1.16



A view of application of Bounty on Bajra crop