

## "EFFICACY EVALUATION OF WBG SOIL CONDITIONER / ENHANCER FOR LOWLAND RICE"

By ADORACION TORRES-GUY

University of Philippines Los Baños Researcher & FPA Accredited Researcher with accreditation No. 075 (Plant Nutrition)

1. The different treatments influenced significantly the plant height of lowland rice both at 30 DAT and at harvest. Rice treated with ½ recommended rate of inorganic fertilizer + full recommended rate of WBG soil conditioner showed significantly higher plants.

2. In the case of tiller count, recommended rate of WBG increase significantly the number of tillers of lowland rice but the increment was higher in combination with inorganic fertilizers were influenced significantly by the treatments.

3. Panicle count follows the same trend where treatment with full recommended rate of inorganic fertilizers and WBG soil conditioner showed the highest number of panicles, 69% over the control.

**Table 1.** Summary of field data gathered for testing the efficiency of the WBG as Soil Conditioner for lowland rice production.

Treatments	Plant Height (cm)		Tiller Count (no./m <sup>2</sup> )		Panicle Count (no./m <sup>2</sup> )	Straw Yield (ton/ha)	Grain Yield (ton/ha)
	30 DAT	at harvest	30 DAT	at harvest			
1	44.4c	74.3e	240.7e	267.3d	276.7d	2.3c	2.4d
2	55.9a	108.0b	385.0b	453.0b	437.0b	5.0a	4.9b
3	50.7b	92.0d	319.7c	355.0c	357.7c	3.4b	3.8c
4	55.7a	110.0a	382.0b	454.7b	440.0b	5.1a	5.4a
5	49.8b	94.5c	309.7d	345.3c	358.3c	3.3b	3.7c
6	55.4a	110.2a	413.7a	473.3a	467.7a	5.5a	5.8a

Note: Means within a column followed by the same letters are not significantly different at 5% level of significance.

4. As reflected in the summary table, the recommended rate of inorganic fertilizers + recommended rate of WBG showed increase in the straw yield significantly over the control however, the increment due to WBG soil conditioner alone was comparable only with the increment due to ½ recommended rates of inorganic fertilizers.

5. By combining ½ recommended rates of inorganic fertilizers with recommended rates of WBG soil conditioner/enhancer, a significantly much higher grain yield (142%) was obtained indicating a positive interaction between the two treatments. Hence, to improve the performance of WBG organic soil enhancer/fertilizer, it would be preferable to apply it in combination with full recommended rates of inorganic fertilizers. However, it is recommended to apply WBG soil conditioner in combination with ½ recommended rate of inorganic fertilizer to minimize cost since there was no significant difference between the treatments of WBG + RRIF and WBG + ½ RRIF.



### Winwinzone Phils. Inc.

Rooms 504 & 505, 5th Floor, Galleria Corporate Center,  
EDSA Corner Ortigas Avenue, Quezon City 1110, Philippines  
Tel: +632 5709889 Fax: +632 4709887

### What is WBG Soil Conditioner?

WBG is soil conditioner which can restore farm life. It enhances plant nutrient uptake, resistance to drought, and promote germination and enhance the activity of beneficial bacteria in soil. WBG provides a good buffer to the survival of plants that live in harsh chemical environment of the soil.

### How to Use?

Recommend Application

#### 1. Soil Application

- Please refer to the recommended dosage below.
- Can be mixed with other soil amendments like peat, sand or compost and also can be mixed with Urea, NPK fertilizer, DAP or herbicides. When Applied with Urea, we recommend adding 1kg WBG into 15kg Urea for better effect.

#### 2. Foliar application or irrigation

Use a concentration of not more than 0.1% (1kg/1000L) of water. It can also be mixed with foliar fertilizers and pesticides.

### "EFFICACY EVALUATION OF WBG AS ORGANIC FERTILIZER FOR LETTUCE"

By ADORACION TORRES-GUY University of Philippines Los Baños Researcher & FPA Accredited Researcher with accreditation No. 075 (Plant Nutrition).

- Further improvement (83%) in plant height was obtained when WBG was applied together with RRIF over the control.
- As for the number of plant leaves, same pattern was observed. However, the influence of the WBG + ½ RRIF on the number of leaves of lettuce is not significantly different from that of the combination of WBG + RRIF, with 54% higher over the control.
- An increment in marketable yield of 143% over the control was obtained upon combining WBG with RRIF indicating a highly significant positive interaction between the two treatments.

**Table 1.** Summary of field data gathered for testing the efficiency of the WBG Organic Fertilizer for lettuce production.

Treatments	Plant height (cm)	Number of leaves (no./plant)	Marketable yield (tons/ha)
1	6.3 e	6.7 d	2.1 d
2	8.1 c	9.0 ba	4.2 b
3	7.7 dc	8.3 cb	3.3 c
4	9.4 b	9.3 ba	4.4 b
5	6.5 de	7.3 dc	3.4 c
6	11.5 a	10.3 a	5.1 a

Note: Means followed by a common letter are not significantly different at 5% of significance.

Treatments as prescribed by FPA

T1 – Control

T2 – Recommended Rate of Inorganic Fertilizer (RRIF) based on soil analysis

T3 – ½ Recommended Rate of Inorganic Fertilizer (1/2 RRIF)

T4 – ½ Recommended Rate of Inorganic Fertilizer (1/2 RRIF) + Recommended Rate of New Product (WBG)

T5 – Recommended Rate of New Product (WBG)

T6 – Recommended Rate of Inorganic Fertilizer

+ Recommended Rate of New Product (WBG)

### Dosage for foliar spray or irrigation

Crop	Dosage	Application	Effect
Fruit trees	0.05% - 0.1% solution, pH: 7.5 - 8; 8kg/ha	Apply it before blossom and repeat application 3-5 times in growing season.	<ol style="list-style-type: none"> <li>Enhances the photosynthesis, increases the yield and improve the crops' quality.</li> <li>Prevents drought and promotes disease resistance to the crops.</li> <li>Increases soil fertility and optimizes its structure, enhances the utilization of other nutrient fertilizers.</li> </ol>
Vegetable: Tomato Eggplant Potato etc.	0.05% - 0.07% solution, pH: 7.5 - 8; 5kg/ha	Apply it by foliar spray after transplantation, then apply it every 7-10 days from bud burst to fruiting period by boom spray or fertigation.	
Rice Wheat Grain	0.05% - 0.07% solution, pH: 7.5 - 8; 10kg/ha	Apply it by drench seedlings and foliar spray at tillering, anthesis and filling stage.	
Flowers Lawn Herbage	0.05% - 0.07% solution, pH: 7.5 - 8; 5kg/ha	Apply it by fertigation one day prior to transplantation. Then apply it every 7-10 days by foliar spray.	
Cotton Oil Crops	0.05% - 0.07% solution, pH: 7.5 - 8; 5kg/ha	Apply it by boom spray, aerial spray or fertigation from seeding stage to budding stage	

