



# FERTIBUZZ

Trial results

**Rice cultivar**  
*(Kinuhikari)*

Drone use is rapidly growing in agriculture. Drones are a smart farming tool that allow farmers to be more efficient, economical, and provide a direct positive impact on the environment.

**FERTIBUZZ is specially designed for ultra-low volume foliar application by drone:**

- Highly concentrated
- Fully soluble
- The lowest salt index compared to other PK products.
- Safe for foliar application at up to 20% concentration in the end solution.





### When

September 2020



### Where

Yokakaichi, Mie,  
Japan



### Crop

Rice cultivar  
(*Kinuhikari*), Early  
ripening variety



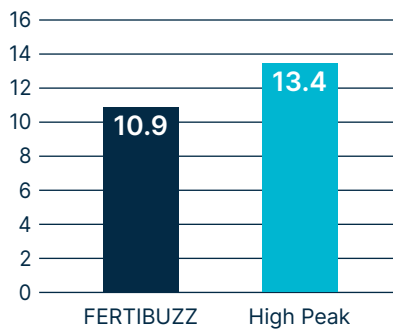
## Objective

To evaluate the feasibility and safety of drone application of ultra-low volume, high concentration FERTIBUZZ foliar fertilizer, and to monitor its effect on rice performance.

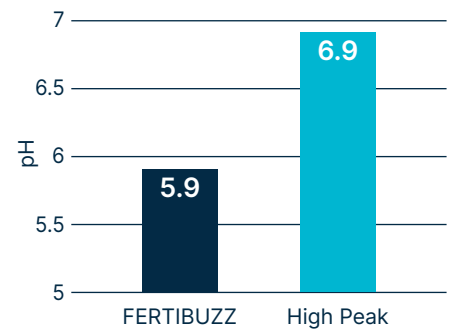
## Treatments

The trial included 3 treatments and 4 repetitions of foliar application by drone. Application was at rice's max tillering and heading development stages. The water temperature at dissolving was 25°C. Spraying was intentionally overlapped during each foliar treatment. This allowed the edges to be used to assess phytotoxic risk (from the double quantity). The yield survey consisted of 5 plants/row.

### Salt index



### Acidity



## Results

Treatment	Fertilizer & Formulation	% WT	Yield component			Grain quality		
			Whole grain (g/m <sup>2</sup> )	Straw (g/m <sup>2</sup> )	Unhulled grain (g/m <sup>2</sup> )	Brown rice (g/m <sup>2</sup> )	Moisture (%)	1,000 kernel weight (gr)
Control	-	-	574	335	240	156	13.1 ab	20.35
T1	FERTIBUZZ 0-45-36 +0.5B +0.2Mn+0.2Zn	20	550	322	228	144	12.8 b	20.04
T2	HighPeak 0-45-45	20	570	329	241	150	14.1 a	20.21
Significance at 0.05 (JMP)			NS	NS	NS	NS	*	NS

- No significant effects on yield parameters were observed.
- Grain moisture was significantly lower in T1 compared to T2 (but not compared to the control). This may indicate earlier maturity following FERTIBUZZ treatment.
- No other differences in grain quality were significant.

## Conclusion

- FERTIBUZZ is ideal as a low volume foliar spray, **with a very low salt index (SI) and optimum acidity**. The results show that both T1 and T2 are safe for ultra-low volume (ULV) application, but FERTIBUZZ is safer to use.
- FERTIBUZZ induced lower grain moisture content with no yield or quality reduction, possibly indicating earlier maturity and an earlier harvest.



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