



FARMOUR AF9 on controlling Bacterial panicle blight (BPB) on rice (*Oryza sativa* L.) in Malaysian. The symptoms observed were straw-coloured panicles, discoloured florets with darker basal portion of the glumes. The panicles remained upright due to partially or aborted grain filling. The causal pathogen was confirmed as *Burkholderia glumae* bacteria .



Experiment objective : efficiency of AF9 on controlling Bacterial panicle blight (BPB) on rice.

Experiment design : minimum interruption on farmers working flow.

1 experiment lot , 1.3 aches each.

Location : Kuala Bekah , Pulau Pinang.

Rice variety use : SIRAJ 297 / MR 297

Germination treatment :

Objective : To reduce the bacteria numbers on rice grain.

Germination Method : Rice grain soak in AF9 solution 24 hours for germination. After soaking for 24 hours the rice grain will remove from water and leave in moist bag for germination.



Germinated rice grain

Rice grain will germinate in 48-72 hours. The germinated rice grain will transplant to field.



Soaking 24 hour , 10:1 dilution AF9.



Germination in bags 48-72 hours

Rice grain will germinate in 48-72 hours. The germinated rice grain will transplant to field.



Field treatment :

10:1 and 5:1 dilution of AF9 to be spray by drone.

The drone use by our collaboration farmer are set to spray 10 litres of liquid at 1 lot (1.3 aches).

Spray treatment :

1. before flower bloom 40 - 45 days after planting in field (10:1 dilution)
2. after flowers pollination about 60 days from planting, rice grain will start to forming. (5:1 dilution)



Germinated seeds



Loading seeds into distributor



distributing seeds



Planting plot 14 Nov 2022



20 Nov 2022





27 Nov 2022



2 Dis 2022



11 Dis 2022

19 Dis 2022 drone spray, 10:1 dilution (before flowering)



25 Dec 2022





25 Dec 2022



8 Jan 2023





8 Jan 2023



15 Jan 2023



15 Jan 2023



22 Jan 2023





22 Jan 2023



28 Jan 2023



28 Jan 2023

18 Feb 2023 Drone Spray 5:1 dilution (after flowering)



19 Feb 2023





19 Feb 2023



23 Feb 2023





23 Feb 2023



28 Feb 2023





28 Feb 2023



5 March 2023





5 March 2023

Harvest on 7 March 2023



Harvest





7 March 2023



7 March 2023



Farmour AF9 Test plot , 9g / 253 grain



Control plot, 7g / 253 grain

Conclusion : around 10% increase of raw weight on harvest treated with FARMOUR AF9.