

# **Evaluation of Bio Assay of Dinotefuran 20 SG (Osheen) by Susceptible Test Tube Method against Rice Brown Plant Hopper (BPH) *Nilaparvata lugens* (Stal)**

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**Abstract**—An experiment was conducted to evaluate the Dinotefuran 20 SG (Osheen) insecticide bio assays with brown plant hopper nymphs. 0.4 g osheen (Dinotefuran 20 SG) was mixed in 1 litre water and 9 cm long TNI rice seedlings were dipped in the osheen solution for 10 seconds. The seedlings were removed from the insecticide solution, dried in the shade and kept in the test tubes @ 5 seedlings /test tube with little agar at the bottom of the test tube. Ten third instar nymphs were released in the test tube on the plants and the test tubes were closed with a cotton swab and kept at a room temperature of  $25\pm 1^{\circ}$  C in control treatment. There were 10 replications in case of osheen treatment and 15 replications in control treatment. Observations on the mortality of nymphs were recorded at 24, 48, 72, 96 and 120 hours after release of nymphs. In the case of osheen treated seedlings, 98% mortality was recorded at 24 hours and after that 100% mortality was recorded. In the case of control seedlings, there was no mortality up to 72 hours after release of nymphs. After 96 hours of release, 6.4% mortality was observed and at 120 h after release, the mortality of nymphs reached 55% and most of the plants wilted, dried and died.