

**BIO-EFFICACY EVALUATION OF HERBICIDE RDH  
625 AT DIFFERENT APPLICATION WINDOWS IN  
PADDY CULTIVATION**

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## ABSTRACT

In the most rice eco-systems, the yield gap is significantly high due to number of factors including management factors. Weed management is an important management practice in paddy cultivation as the weeds reduce the yield ranging from 20% to 40%. Chemical method is the widely used for weed management. Bispyribac sodium 40g/l + Metamifop 100g/l SE (RDH 625) is a new pre-mixed herbicide with excellent efficacy on wide range of weeds when applied at early to mid-post emergence stage. RDH 625 is recommended for application 10 to 14 days after sowing at the rate of 625 ml/ha. As this is recommended for narrow application window, there is a great tendency for farmers to deviate from recommended window. This study was done to evaluate the bio-efficacy of RDH 625 on grasses, sedges, broadleaved weeds in same recommended dosage when it is applied after recommended application windows. The experiment was carried out in three farmer fields in Kurunegala district with three treatments. Three different application windows were used as the three treatments and they were application of recommended dosage of the herbicide at 12, 15 and 18 days after sowing. A pre count of weeds, a subsequent weed count at 7, 14 and 35 days after application and weed samples at 35 days after application were taken from treated plots for analysis. According to the statistical analysis on the weed counts and on the dry weight of weeds, RDH 625 can be recommended for Sedge dominating paddy fields at the rate of 625 ml/ha during 12 to 18 days after sowing and for grass dominating paddy fields at the rate of 625 ml/ha during 12 to 15 days after sowing. RDH 625 can be recommended to paddy fields with high population of broadleaves at the rate of 625 ml/ha at 15 days after sowing.

**Key Words:** Paddy cultivation, Weed management, Bispyribac sodium, Metamifop, weed competition