

**B-51 The effect of straw mulch on suppression of weed groups, and grain yield of Bg. 300 under dry sowing conditions**

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The effect of different levels of straw mulch on suppression of different weed groups, and the grain yield of rice cultivar Bg. 300 was studied under dry sowing conditions (at the RARC, Makandura, during Maha 1993/94 and Yala 1994 seasons). Experiment was planned and conducted according to a Randomized Complete Block Design.

When compared to the control weed dry weight of sedges in straw level of 2, 3 and 4 t/ha was reduced by 57, 29 and 19% respectively in Maha 1993/94 while in Yala 1994 only the straw level of 3 t and 4 t/ha showed reduction of sedges dry weight by 38 and 75% respectively. When compared to the control the weed dry weight of grasses in Maha 1993/94 was reduced by 57 and 83% by straw level of 3 and 4 t/ha respectively while in Yala 1994, straw level of 2, 3 and 4 t/ha reduced the grass dry weight by 64, 72 and 70% respectively. However the dry weight of broad leaves showed 18% reduction in straw level of 2 t/ha in Maha 1993/94 and 17% by both straw levels of 2 and 4 t/ha in Yala 1994. The grain yields of 1.71, 1.88, 2.10, 2.49 and 2.15 t/ha were given by straw level of 0, 2, 3, 4 t/ha and weed-free treatment respectively in Maha 1993/94 while in Yala 1994 grain yields of 0.94, 1.40, 1.09, 1.71 and 1.72 t/ha were recorded in the straw level of 0, 2, 3, 4 t/ha and weed-free treatment respectively.

The highest straw levels of 3 and 4 t/ha were better in suppressing grasses in both seasons. However, the suppression of sedges is variable, while the broad leaves were not considerably affected by any of the straw levels. The grain yield of Bg. 300 was significantly increased by the highest straw level (4 t/ha).