

## RESPONSE OF RICE TO SEEDLING RATE AND FERTILIZER LEVELS IN THE BATTICALOA AND AMPARA DISTRICT

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farmers in Batticaloa and Ampara districts use high seed rates between 200-260 kg/ha contrary to the 100 kg/ha recommended by the Department of Agriculture, to ensure high yields and control of weeds.

Experiments were conducted at Ampara district under wetland condition, Batticaloa under dryland condition, with 5 seed rates, 3 inorganic fertilizers and 2 varieties (H<sub>4</sub> and Bg 94-1) to investigate this.

Yield decreased with increasing seed rates above 200 kg/ha at Ampara and 100 kg/ha at Batticaloa.

Panicle number/m<sup>2</sup> increased with increasing seed rate upto 200 kg/ha. At 200 kg/ha seed rate panicle number is almost the same as the plant number/m<sup>2</sup> indicating that it is only the main culms which produces the panicles. Beyond 200 kg/ha seed rate panicle number attain an almost constant figure irrespective of seed rate and fertilizer levels indicating that even some of the tillers do not produce panicles.

Increase in number of panicles progressively reduced the grain/panicle. The % filled grain decreases with increasing seed rate in both varieties, but is higher in Bg 94-1 than in H<sub>4</sub>. 1000 grain weight is not affected by densities and fertilizer level. Grain : straw ratio and grain yield increased upto 200 kg/ha seed rate and decreased thereafter.