

# Response of Rice (*Oryza sativa* L.) to Top Dressing of Phosphorus Through Complex Fertilizers

M Srujana, K Mosha, G Subbaiah and P Prasuna Rani

Department of Agronomy, Agricultural College, Bapatla 522 101, Andhra Pradesh

## ABSTRACT

A field experiment was conducted to study the effect of top dressing of phosphorus through complex fertilizers on rice during *kharif* 2009 on clayey soil at Agricultural College Farm, Bapatla. The experiment consisted of nine treatments *viz.*, application of 60 kg P<sub>2</sub>O<sub>5</sub> ha<sup>-1</sup> as basal through SSP (T<sub>1</sub>), DAP (T<sub>2</sub>) and 20:20:0 (T<sub>3</sub>), two equal splits (½ as basal + ½ at maximum tillering stage) through DAP (T<sub>4</sub>) and 20:20:0 (T<sub>5</sub>), two equal splits (½ as basal + ½ at Panicle initiation (PI) stage) through DAP (T<sub>6</sub>) and 20:20:0 (T<sub>7</sub>), three equal splits (1/3 as basal + 1/3 at maximum tillering + 1/3 at PI stages) through DAP (T<sub>8</sub>) and 20:20:0 (T<sub>9</sub>). The results revealed that there was a significant increase in effective tillers m<sup>-2</sup>, filled grains panicle<sup>-1</sup>, grain yield and phosphorus uptake with two splits of P<sub>2</sub>O<sub>5</sub> half as basal and half at maximum tillering stage either through DAP or 20:20:0. No significant variation was recorded with regard to growth, total grains panicle<sup>-1</sup> and test weight due to sources of P at different times of application.

**Key Words:** Complex fertilizers, Rice, Top dressing.