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# PROCEEDINGS

## Abstracts



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## Effect of Expert™ fertilizer on biomass accumulation and panicle formation in Rice (*Oryza sativa* L.)

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Photosynthesis is the very prominent step to accumulate the high starch content in the plant which directly correlates with the ample biomass production in rice (*Oryza sativa* L.) to enhance the potential to translocate the food materials into grains. To start and stimulate this process, micronutrients role is so important. Commercially available expert™ complex fertilizer containing macro and micro nutrients was tested for the biomass production and panicle formation in rice. This pot experiment was carried out in complete randomized design with ten treatments in four times replicated at the Crop farm, Eastern University, Sri Lanka. Expert fertilizer in combination with recommended NKP fertilizer (RCF) was formulated into treatments. After 105 days of seeding, leaf area, fresh and dry weights of leaf, root and tiller were taken. Meanwhile number of tillers and panicles were recorded. All the collected data were subjected to statistical analysis. Plants treated with Expert (split application of total 50 g/m<sup>2</sup>) showed better performances to all parameters over all other treatments. Leaf area as well as fresh weight of leaf, tiller and root showed higher mean values to Expert alone than the control (RCF alone). The dry weights of leaves and roots in Expert (50 g/m<sup>2</sup>) treatment showed highly significant difference with the control. In ( $p < 0.05$ ) differed with most of the tested treatments. Panicle % was 67.37% in the control and 72.39% in the expert fertilizer. As a result, expert complex fertilizer alone could produce better yield over the control.

**Key words:** Tiller, Panicle, leaf weight, Leaf area, rice crop

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