USE OF *GLIRICIDIA MACULATA* AS A GREEN MANURE IN RICE (*ORYZA SATIVA*)

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Fertilizers play a major role in determining rice yiel However, majority of the farmers in Sri Lanka can not afford t recommended rates of chemical fertilizers due to their high cos specially after the total removal of fertilizer subsidy scheme 1990. Therefore, it is very important to substitute atleast part of it with less expensive materials such as green manure.

This experiment was conducted in 1986 maha, at the Ramanath paddy field, University of Peradeniya, to study the effect *Gliricidia maculata* as a source of green manure. The ri variety BG 276-5 was transplanted and treatments consisted o *Gliricidia maculata* leaves (4.5 t/ha) + basal fertilizer + TD *Gliricidia maculata* leaves (4.5 t/ha) + basal fertilizer, green - manure + basal fertilizer and control where on recommended rates of inorganic fertilizers were applied. Le area index, dry matter content, plant height and tiller number fortnight intervals and yield components were measured.

The results showed that panicle number was increas significantly and the highest grain yield (6.13 t/ha) w recorded by the Gliricidia 4.5 t/ha + basal fertilizer + T treatment and this was 33% yield increment over the contro However, thousand grain weight, filled grain number per panic were not affected by the treatments.

This indicates that application of *Gliricidia maculata* as a gre manure can satisfactorily substitute part of expensive inorgan fertilizer in lowland rice culture.