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PRE-EMERGENT WEED CONTROL IN DRY SOWN RICE

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Chemicals recommended for weed control in rice in Sri Lanka are of the post-emergent type. In rain-fed rice farming, post-emergent chemical weed control is not popular among farmers because they do not want to risk the danger of moisture stress by draining out the water in the rice fields. On the other hand, rice fields are sometimes too dry or there is too much of rain when the critical period of weedicide application is due.

Pre-emergent weedicides are applied after sowing but before germination. Essentially, the availability of moisture for satisfactory germination of rice coincides with the pre-emergent weedicide application. Therefore, none of the above constraints become operative unless there are too heavy rains that would wash off the chemicals. Besides, application of chemicals on a vegetation free ground is far more convenient and labour saving.

Preliminary investigations were carried out at the Makandura Research Centre, Katupotha Cropping System Project and in farmers' fields in *Maha* 1981-82 and in *Yala* 1982 with the objective of testing various pre-emergent chemicals at different concentrations. Satisfactory weed control was obtained with the following treatments : Machete (Butachlor 60%) 2.0 l/ha, Rilof-H (Piperophos + 2.4D IPE) 2.0 l/ha, Goal (Oxyflurofen 24%) 0.5 l/ha, Dual (Metolochlor 50%) 2.0 l/ha, Ronstar (Oxadiazon 25%) 5.0 l/ha and Galex (Metolochlor 50% + Metabromur on 50%) 3.0 l/ha.

Phytotoxic effects have not been observed with the treatments indicated above.