

# STUDIES ON THE BIOLOGICAL CONTROL OF PANICUM REPENS BY MEANS OF FODDER LEGUMES—1ST YEAR RESULTS

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*Panicum repens* (L) Beauv. Couch grass (English), Etorā (Sinh.), Injiapul (Tamil) is a pernicious rhizomatous weed, which is either controlled by spraying herbicides (Somaratne and Manipura, 1974) or manually. Both methods are expensive. The advantage of successfully eradicating *P. repens* is that the land could be used for more profitable purposes.

The forgotten smother crop principle was tested as a cheaper alternative method in a waterlogged ravine in the upcountry wet zone.

A field with *P. repens* as the dominant species was manually defoliated divided into 30 plots and a basal fertilizer mixture minus nitrogen was evenly applied. Five fodder legumes were used in a randomized block design with six replicates. The legume seeds were sown at the rate of five Kg/ha in the field without cultivation (zero tillage) in July, 1978. The legume seeds germinated satisfactorily and seedlings were well nodulated except in two blocks that were badly waterlogged.

After six months *Desmodium uncinatum* grew to a height of one metre, completely suppressing the growth of *P. repens*. The other four legumes did not cover *P. repens* completely.

The legumes in all the plots were harvested regularly leaving a stubble of about 20 cm. At the end of the first year the rhizomes of *P. repens* still persisted and more time had to be allowed for complete eradication through depletion of its carbohydrate reserves (See Jayawardena, 1978).

Besides being able to smother a pernicious weed like *P. repens*, *D. uncinatum* had the added advantage of providing good quality fodder.

## References :

1. Jayawardena, A. B. P. (1978) Annual report Pasture and Fodder Crops Division. Veterinary Research Institute, Peradeniya.
2. Somaratne, A. & Manipura, W. B. (1974). The control of *Panicum repens* (L) Beauv. Tea Quarterly 144 Parts 2 & 3, 86 Tea Research Institute of Sri Lanka.