

Abstract No: ASRS 28

**PROBLEM CAUSED BY WEED RICE AND SOLUTION FOR
ITS MANAGEMENT IN THE COASTAL VILLAGES OF AMPARA
DISTRICT**

A.N. Ahmed^{1,*} and Y.B. Iqbal²

¹*Department of Biological Sciences, South Eastern University of Sri Lanka*

²*Rice Research Station, Sammanthurai*

*nahmed@yahoo.com

Weedy rice is causing several hardships to the rice in farmers Ampara district specially in the coastal areas since 1992 particularly in direct seeded rice. Though the farmers practiced traditional techniques to control it, their efforts were unsuccessful. By infesting rice fields, weedy rice increases production costs and reduces farmer's income by decreasing yield. In addition, also infestations reduce the value of the harvested crop by staining the rice grain with undesirable pericarp colour. Rice yield losses due to weedy rice depend on the amount of infestation. Because of similar physiological and morphological traits between weedy rice and cultivated rice, selective herbicide to control weedy rice is a challenging and increasing problem for a farmers. An on farm survey was undertaken at the farmer's fields at the coastal areas of Ampara district in 2014 to assess the weedy rice infestation and percentage of weedy rice at six locations (Addalaichenai, Akkaraipattu, Ninthavur, Sammanthurai, Thirukkuvil, Pottuvil and Palamunai).

An another survey was also conducted to find out the grain yield of rice in seven sample farmer's plots on the basis of severity of weedy rice infestation on their field in Yala 2014 and Maha 2014/2015. Field observations and monitoring were conducted for the collection of data and recording the agronomic practices undertaken by the farmers from land preparation to harvesting. A quadrat (1 M²) was used for sampling. Data on infestation percentage, density of weedy rice, weedy rice percentage and grain fields were recorded.

Results revealed that the farmers used same varieties (BG 94 -1) and applied different agronomic practices, which resulted in variable intensities of weedy rice infestations and production of variable rice grain fields. The weedy rice infestations were high in Addalaichenai (57%) Akkaraipatty (49%) Pottuvil (32%) and Sammanthurai (35%) were compared to other locations Ninthavur (17%) Thirukkuvil (19%) and Palamunai(28%). The population of weedy rice in the rice crop of the cultivations fields varies for 165 to 57.4 and this density per square meter varied from 7 to 10 the grain fields of sample farmers also different the farmers FA 1 and FA 3 obtained higher field, in Yala 2014 and Maha 2014 /2015. The farmers FA 6 and FA 7 obtained lower yields in Yala2014 and Maha 2014/2015 respectively.

Key words: *Weedy Rice Herbicides - direct seeding*

* Corresponding Author