PEST SURVEILLANCE AND INTEGRATED PEST MANAGEMENT, POLONNARUWA DISTRICT - SRI LANKA.

A.B. Abeyasinhe
(S.M.O. - P.P.), Polonnaruwa.

Polonnaruwa is one of the major Rice growing districts in Sri Lanka. About 30,000 hectares are cultivated under irrigated Rice twice a year. During the latter part of Nineteen Seventies it was observed that large amounts of Insecticides were used indiscriminately causing accidental death of humans and livestock. The fresh water fish populations in Tanks and waterways were reduced. Beneficial predators and Parasites of Rice Insect Pests were almost absent causing many epidemic out-breaks of Rice pests.

The idea of Pest Surveillance and Integrated Pest Management (IPM) was introduced to the Farmers during the Second season of 1981. Agricultural Village Level Extension Workers(KVS) were given a Basic Training on Pest Surveillance and IPM in Rice. Observation Plots (OP) for Pest Surveillance and IPM were established in 1982. One OP (0.4) ha was selected to represent 60-80 ha of farmers fields. Units of observation are 25 hills of rice plants selected at random in the OP. Each KVS area had 4-5 OPs. Pest counts are taken once every week by the KVS in the presence of the Farmer. At the latter stages, the farmers themselves helped the K.V.S to take the counts. If the Pest numbers are above the ETL* and no Predators/Parasites are present insecticidal treatment was recommended by the K.V.S. Insect Pest counts are tabulated in a form and sent to the Agricultural Instructor (AI) of the area. The AI collect the forms sent by all his K.V.SS (6-8) and send them to the Subject Matter Officer, Plant Protection (S.M.O., P.P.) located at the District Agricultural Office. S.M.O., P.P. compile the data for the entire district and advice both A.I. and K.V.S. when they find it difficult to take a decision on Pest Management.

Before Pest Surveilllance and IPM in 1981, normally 7 applications of Pesticides were done to a single Rice Crop. This was reduced to only one

ETL* - Economic threshold level - ETL*

application during the first season in 1983. The value of the sales of Pesticides in the district before 1981 was Rs.6.7 million per season and now it is reduced to Rs.3.7 million per season. Now many Farmers consult the K.V.S., A.I. or the S.M.O., P.P. before applying insecticides to their Rice crops. It is hopeful that ill-effects of indiscriminate Pesticide use could be reduced to a minimum in the near future.

At present the weak area in IPM is the identification of Predators and Parasites of Rice Pests by the Farmers. Education and much publicity is needed in this Subject. Coloured Pictures of Predators and Parasites of Rice Insect Pests will be a very useful item in the Training of Farmers and Field Staff in the IPM of Rice Pests.

XXXXXXXXXXXXXXXXXX

Abstract From P-15.

Procedure

Required quantities of seeds are washed with running water to remove the dust and other seed protectants adhering to them, followed by soaking in water for desired periods (Table 1). In villagers, earthenware pots can be used for this purpose. During this process, the toxic compounds are released in water. After soaking for recommended time, the water is drained off and the seeds are washed again with fresh running water. The seeds are then spread on a coarse cloth or paper in sunlight for an hour to remove the moisture from the seeds. The prevent the loss of growth stimulating compounds that are released from the seeds, it is advisable to strictly adhere to the time schedule provided in Table 1, which has been arived at by careful experiments done in the laboratory.

Continued P - 51