

## ASSESSMENT OF RICE LOSS CAUSED BY RICE STEM BORER

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### Summary

The rice stem borer, *Chilo suppressalis* Walk., is one of the most serious pests of rice throughout Asia. In rice producing countries, especially in Japan, different methods of assessing losses have been proposed (TORIL, 1967; ISHIKURA, 1967 and PATHAK, 1967), but no precise method of assessing losses has yet been established.

The present publication deals with the assessment of rice loss caused by rice stem borer.

### Statistical methods:

The data collected for the present study comes from the various field trial plots on the effectiveness of some pesticides against rice stem borer carried out at Mazandaran province during the years 1974 and 1975.

Correlation and regression analysis were made on the collected data with grain yield as dependant and percentage of "dead heart" and larvae as independant variables.

The regression formula on the basis of the actual yield itself as well as the percentage of yield reduction were then calculated.

### Results

When data for a series of experiment using the Amol and Musa-Tarom varieties were analyzed, statistically, a significant correlation was recorded between the percentage of dead heart and yield loss (Fig. 1) and between the percentage of larvae in the stem and yield loss (Fig. 2). In terms of yield reduction it became apparant that for every percentage increase in dead heart and larvae there was a coresponding 1.26 and 1.21 percent loss in yield respectively.

### References

- ISHIKURA, H. 1967. The major Insect Pests of the Rice Plant. John Hopkins Press. pp. 251 - 264  
PATHAK, M. D. 1967. The major Insect Pests of the Rice Plant. John Hopkins Press. pp. 335 - 349  
TORIL, T. 1967. The major Insect Pests of the Rice Plant. John Hopkins Press pp. 127 - 167

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