STUDIES ON THE KEY INSECT PEST PROBLEMS OF SORGHUM IN UPPER EGYPT

By

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B.Sc. in Plant Protection, Assiut Univ., 1982
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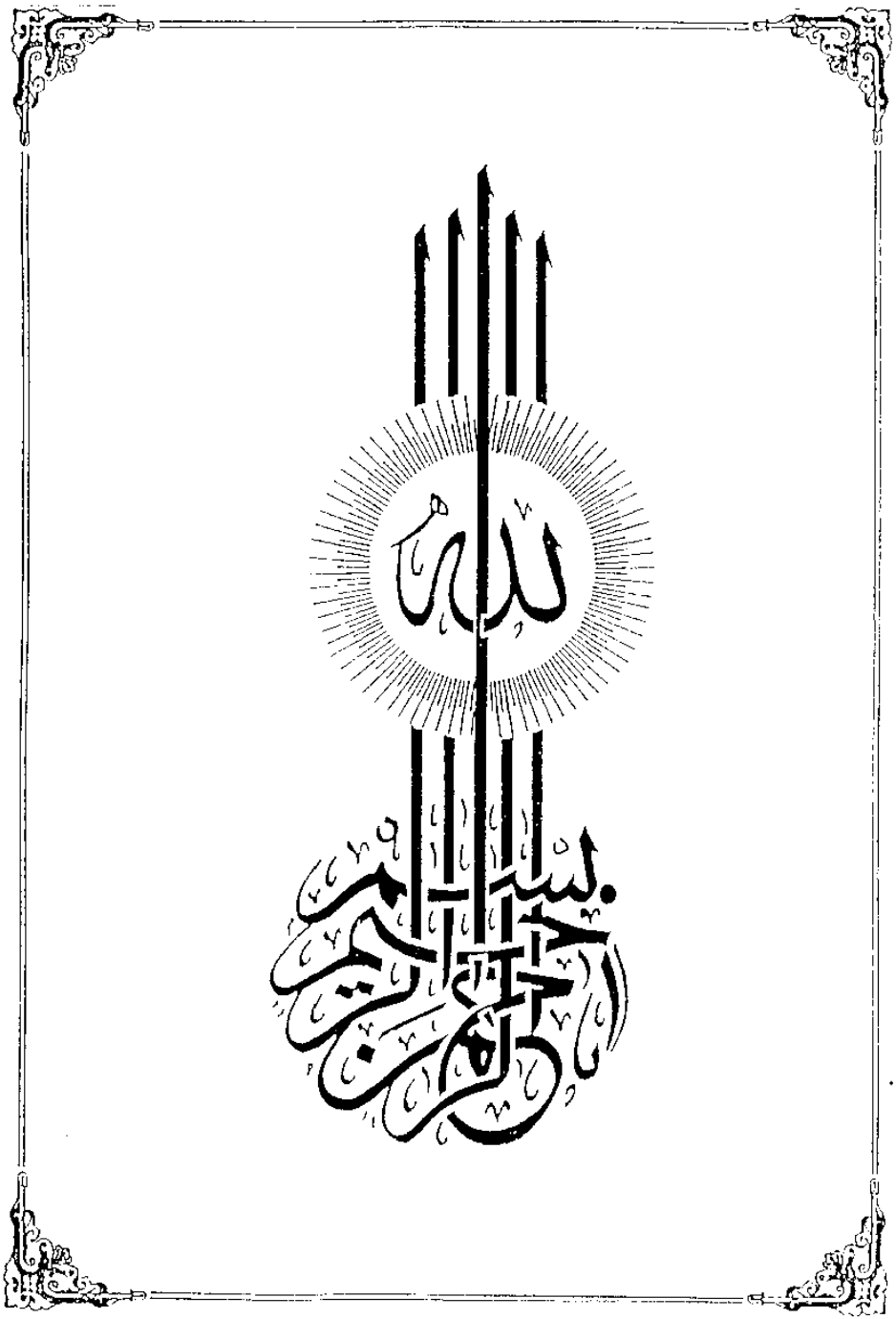

Approval sheet

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ABSTRACT

Sorghum plants in Upper Egypt are usually infested with a variable number of insect pests which reflect a considerable damage to yield.

The most economically important insect pests are the sorghum shootfly, *Atherigona soccata* Rond., pink corn borer, *Sesamia cretica* Led., corn leaf aphid, *Rhopalosiphum maidis* Fitch and greenbug, *Schizaphis graminum* Rond.

Basic informations on the biology and ecology of these insect pests infesting sorghum plants in Upper Egypt are still few and not quite enough, therefore, the present studies were counducted to contribute some to the available knoledge about sorghum insect pests with the endavour of emphazeing selective and effective agricultural control measurements.

The points suggesed were:

1. Surveying of insects species inhabiting sorghum fields in Upper Egypt.
2. The relationship between sowing dates of sorghum and the corresponding levels of infestation with related insect pests.
3. Study of certain biological and ecological aspects of the sorghum shootfly, *Atherigona soccata* Rondani, which was carried out, for the first time in Egypt; into the following main divisions.

I. Biological studies

In this section, three points were studied in details

a. The effect of different constant temperatures on the biological features of the insect stages.
b. Assessment of threshold (zero) of development for each of the different stages.
c. Life tables for *Atherigonsa soccata* Rond.

II. Ecological studies

a. Monitoring the changes in the adult population densities of *Atherigona soccata* Rond. as indicated by fish meal traps.
b. Assessed the approximated number of field generations.
c. The susceptibility of certain sorghum and maize varieties to infestation with *Atherigona soccata* Rond.

Key words: Key insect pests of sorghum in Upper Egypt, Biology, Ecology and susceptability of sorghum and maize varieties.

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