

AGRONOMIC FIELD OBSERVATIONS RELATING TO  
MITE DEVELOPMENT ON CORN IN SOUTHWEST KANSAS

by

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B. S., Kansas State University, 1965

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A MASTER'S REPORT

submitted in partial fulfillment of the

requirements for the degree

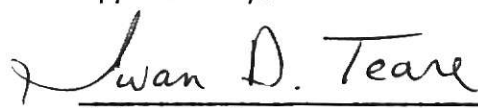
MASTER OF SCIENCE

Department of Agronomy

KANSAS STATE UNIVERSITY  
Manhattan, Kansas

1975

Approved by:

  
Major Professor

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1975  
R33  
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Document

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## INTRODUCTION

One of the most complexing problems to corn growers in Southwest Kansas is the seasonal invasion of spider mites into irrigated field corn. Three species have been identified and related to damage on field corn in the area. The three species of spider mites include the Banks grass mite, Oligonychus pratensis (Banks); twospotted spider mite, Tetranychus urticae Koch and the carmine spider mite, Tetranychus cinnabarinus (Boisduval). Of the three species the Banks grass mite and the twospotted spider mite are the most predominant with the carmine spider mite only recently identified and related to damage on corn.

The severity of the problem has caused alarm among the growers in the Southwest Kansas area. Lack of knowledge of the physiology of corn as it relates to mite development and the intricate biological potential of the three species of spider mite poses a complicated control situation. These obstacles have prevented adequate determination of needed preventive control measures and the evaluation of economic thresholds of infestations which may be tolerated before chemical treatment is applied on corn fields. Continuous infestations during the growing season, particularly in the later maturity stages of corn, have aroused a demand for information that will allow growers to apply chemical or biological control measures to fields for maximum production.

Occurrence of spider mite damage on corn has progressively increased in counties which have extensive irrigated corn acreage.