

THE CORN BLOTCH LEAFMINER, AGROMYZA PARVICORNIS LOEW^{1/}
(DIPTERA: AGROMYZIDAE)

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INTRODUCTION: THE CORN BLOTCH LEAFMINER, AGROMYZA PARVICORNIS LOEW, WAS FIRST DESCRIBED IN 1869 BY H. LOEW IN GERMANY. HIS DESCRIPTION WAS BASED ON MALE (♂) AND FEMALE (♀) SPECIMENS RECEIVED FROM WASHINGTON, D. C. THIS LEAFMINER WAS LATER REPORTED ON CORN, ZEa MAYS L., IN 1881. THE FIRST SPECIMENS REPORTED FROM GAINESVILLE, FLORIDA WERE MADE BY G. W. DEKLE IN 1959.

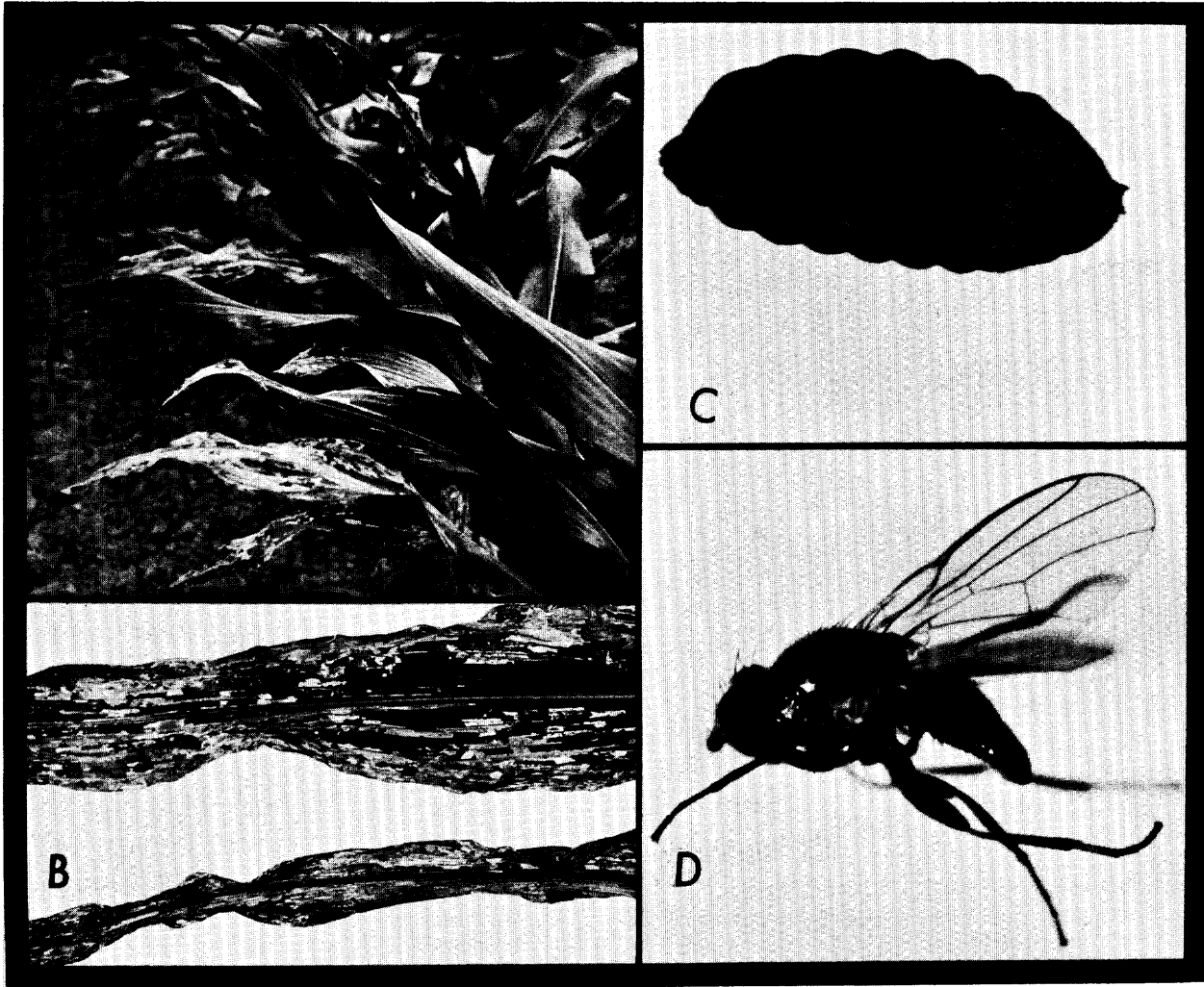


FIG. 1. CORN BLOTCH LEAFMINER: A. INFESTED FIELD CORN; B. BLOTCH MINES ON CORN LEAVES; C. PUPA REMOVED FROM LEAF (x16); D. ADULT CORN BLOTCH LEAFMINER (♀) (x15).

DESCRIPTION: THE ADULT IS A SMALL, SHINY BLACK, CLEAR-WINGED FLY ABOUT 3 MM IN LENGTH. THE WING LENGTHS ARE FROM 2.5 MM IN MALE (♂) TO 3.1 MM IN FEMALE (♀) (FIG. 1, D). THE AREA BETWEEN THE EYES IS BROWN. THE PUPA IS LIGHT TO DARK BROWN AND ABOUT 4 MM IN LENGTH (FIG. 1, C).

LEAF DAMAGE: A FEEDING LARVA PRODUCES A LINEAR MINE AND PUPATES WITHIN THE MINE. THE MERGENCE OF TWO OR MORE LINEAR MINES PRODUCES THE SINGLE BROAD BLOTCH MINE (FIG. 1, B).

HOST: THE ONLY KNOWN HOST PLANT FOR A. PARVICORNIS IS CORN AS DETERMINED FROM CURRENT LITERATURE.

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DISTRIBUTION: FRICK (1959) REPORTED A. PARVICORNIS WIDESPREAD IN THE UNITED STATES. SPENCER AND STEGMAIER (IN PRESS) REPORT A. PARVICORNIS FROM FLORIDA, WASHINGTON D. C., BRITISH COLUMBIA, ONTARIO, AND SOUTH AMERICA.

ECONOMIC IMPORTANCE: THE LARVA OF A. PARVICORNIS IS A PEST OF CORN. IN 1924, S. W. FROST REGARDED THIS LEAFMINER AS AN INJURIOUS INSECT TO CORN IN NORTH AMERICA. HEAVY INFESTATIONS WERE ENCOUNTERED ATTACKING FIELD CORN IN ALACHUA AND BAKER COUNTIES, FLORIDA IN MAY 1970 AND AGAIN IN 1971 BY J. R. STRAYER, ENTOMOLOGIST, INSTITUTE FOOD AND AGRICULTURAL SCIENCES, GAINESVILLE, FLORIDA. THE POPULATION OF A. PARVICORNIS WAS SO HIGH IN MACCLENNY, FLORIDA DURING MAY 1972 THAT EXPERIMENTAL CONTROL MEASURES WERE APPLIED.

CONTROL: CONTROL INFORMATION IS VERY LIMITED FOR THIS PEST. IF CONTROL APPEARS TO BE NECESSARY, CONTACT YOUR COUNTY EXTENSION DIRECTOR.

LITERATURE CITED:

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