

IDENTIFICATION AND RELATIVE DISTRIBUTION OF PLANT
PARASITIC NEMATODES AT USM, KABACAN, NORTH COTABATO

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the Faculty of the Graduate School
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In Partial Fulfillment
of the Requirements for the Degree
Master of Science in Biology

by
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This thesis entitled "IDENTIFICATION AND RELATIVE DISTRIBUTION OF PLANT-PARASITIC NEMATODES AT USM, KABACAN, NORTH COTABATO," prepared and submitted by Ruth Ellinor L. Cannen in partial fulfillment of the requirements for the degree of MASTER OF SCIENCE IN BIOLOGY has been examined and is recommended for acceptance and approval for ORAL EXAMINATION.

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ABSTRACT

The study on the identification and relative distribution of plant-parasitic nematodes at USM, Kabacan, North Cotabato was conducted from November 1976 to June 1977. The study included three cereal crops - rice, corn, sorghum - and two plantation crops - citrus and coconut.

The findings showed that from the five commodities, nine plant-parasitic nematodes were identified as associated with the commodities. They are the following: Tylenchorhynchus, Criconemoides, Rotylenchus, Helicotylenchus, Tylenchus, Rotylenchulus, Hoplolaimus, Pratylenchus and Paratylenchus.

According to commodities, the following genera were identified: rice - Tylenchorhynchus, Criconemoides, Rotylenchus and Helicotylenchus; corn - Helicotylenchus, Tylenchorhynchus, Rotylenchulus, Hoplolaimus and Criconemoides; sorghum - Pratylenchus, Helicotylenchus, Rotylenchus and Tylenchus; citrus - Criconemoides, Helicotylenchus, Hoplolaimus, Paratylenchus, Pratylenchus and Rotylenchus; and coconut - Pratylenchus, Tylenchus, Helicotylenchus and Rotylenchus.

The study revealed that Pratylenchus has the highest population count of 2,470; followed by Helicotylenchus with 2,012; Tylenchus, 1,653; Rotylenchus, 1,326; Tylenchorhynchus, 840; Criconemoides, 422; Hoplolaimus, 268; Paratylenchus, 205; and Rotylenchulus, 146.

The findings also showed a higher nematode population at the coconut area than the rest of the commodities studied. Apparently, this is due to the old age of coconut plants and poor cultural management.

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