

POPULATION DYNAMICS OF THE SIX MOST DOMINANT SPECIES
OF NEMATODES IN A TROPICAL SANDY BEACH

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In Partial Fulfillment
of the Requirement for the Degree
Master of Science in Biology

by

Paciencia C. Sia

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This thesis entitled "POPULATION DYNAMICS OF THE SIX MOST DOMINANT SPECIES OF NEMATODES IN A TROPICAL SANDY BEACH" prepared and submitted by Paciencia C. Sia in partial fulfillment of the requirements for the degree of M. S. Biology has been examined and is recommended for acceptance and approval for ORAL EXAMINATION.

Thesis Committee

Jesus V. Juario
JESUS V. JUARIO, Ph. D.
Adviser

Airlin S. Espina
AIRLIN S. ESPINA, M.S.
Member

Exuperancio A. Montecillo
EXUPERANCIO A. MONTECILLO, M.S.
Member

PANEL OF EXAMINERS

Approved by the Committee on Oral Examination with a grade of Pass.

Jesus V. Juario
JESUS V. JUARIO, Ph. D.
Adviser

Alicia J. Tan
ALICIA J. TAN, Ph. D.
Chairman

Airlin S. Espina
AIRLIN S. ESPINA, M. S.
Member

Exuperancio A. Montecillo
EXUPERANCIO A. MONTECILLO, M.S.
Member

Araceli G. Almase
ARACELI G. ALMASE, Ph. D.
Representative
DEC, Region VII, Central Visayas
Cebu City

Accepted and approved in partial fulfillment of the requirements for the degree of M.S. Biology.

Comprehensive Examinations passed May 5, 12, 1976

Alicia J. Tan
ALICIA J. TAN, Ph. D.
Dean, Graduate School

November 26, 1977

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ABSTRACT

An investigation on the population dynamics of the six most dominant species of nematodes in the tropical sandy beach of Sulpa Island, Cebu was conducted from August 1975 to January 1976. Monthly density of the total nematode fauna ranged from 304 to 555 individuals 10 cm^{-2} and the monthly dry-weight biomass from 136 to $248 \mu\text{g } 10 \text{ cm}^{-2}$. The age structure of the total nematode fauna was stable throughout the study period.

The six most dominant species were: Microslaimus sp, Richtersia sp, Terschellingia sp, Chromadora sp 1, Chromadora sp 2, and Theristus setosus. The total population of all the six dominant species represents 23% of the total nematode density and 5% of the dry-weight biomass. The rank and percentage dominance of each of the dominant species varied from month to month. The low dominance of each of the six species indicates a high dominance diversity and high species diversity. Adults and very small juveniles of each of the dominant species were present in almost every sample which indicates that breeding is continuous in all months. Selective deposit feeders, non-selective deposit feeders and epigrowth feeders were represented by the dominant species. Although predators and omnivores were not represented, it is very probable that they were present in view of the heterogeneity of the substrate.

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