

RINGKASAN

Nematoda nonparasit merupakan salah satu komponen agroekosistem. Peran nematoda nonparasit dapat bertindak sebagai bakterivora, fungivora, omnivora, dan predator. Tujuan dari penelitian ini adalah untuk mengetahui keragaman dan kelimpahan nematoda nonparasit pada agroekosistem padi di Banyumas.

Penelitian ini dilaksanakan pada bulan Oktober 2024 sampai Januari 2025. Penelitian ini merupakan penelitian survei dengan metode *Stratified Random Sampling*. Sampel diambil pada pertanaman padi pada tiga strata ketinggian. Variabel yang diamati meliputi genus nematoda, keragaman, dan kelimpahan nematoda. Data dianalisis menggunakan ragam (ANOVA) pada $\alpha = 5\%$, indeks keragaman (H'), kemerataan (E), dan indeks dominasi (D).

Keragaman genus nematoda nonparasit pada tanaman padi di Banyumas, meliputi: *Dorylaimus*, *Eudorylaimus*, *Mononchus*, *Plectus*, *Prismatolaimus*, *Paractinolaimus*, *Seinura*, dan *Tripyla*. Keragaman nematoda nonparasit tertinggi ditemukan di Purwokerto Utara dan terendah di Sumbang. Ketinggian tempat memengaruhi kelimpahan nematoda nonparasit. Kelimpahan nematoda nonparasit tertinggi ditemukan di Kemranjen dan terendah di Cilongok.



SUMMARY

Nonparasitic nematodes are one of the components of agroecosystems. The role of nonparasitic nematodes could be as bacterivores, fungivores, omnivores, and predators. The aim of this study was to determine the diversity and abundance of nonparasitic nematodes in rice agroecosystems in Banyumas.

This research was conducted from October 2024 to January 2025. This research was a survey research using Stratified Random Sampling method. Samples were taken in rice plantations at three altitude levels. The observed variables were nematode genera, diversity, and abundance. Data were analyzed using variance (ANOVA) at $\alpha = 5\%$, diversity index (H'), evenness (E), and dominance index (D).

Genus diversity of nonparasitic nematodes in rice plants in Banyumas, including: Dorylaimus, Eudorylaimus, Mononchus, Plectus, Pristionchus, Paractinolaimus, Seinura, and Tripyla. The highest diversity of nonparasitic nematodes was found in North Purwokerto and the lowest in Sumbang. Altitude affects the abundance of nonparasitic nematodes. The highest abundance of nonparasitic nematodes was found in Kemranjen and the lowest in Cilongok.

