

**DIVERSITAS DAN POTENSI STATUS SERANGGA PADA
TANAMAN KURMA (*Phoenix dactylifera* L.) :
SPESIES INTRODUKSI DI INDONESIA**

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INTISARI

Tanaman kurma (*Phoenix dactylifera* L.) secara alami merupakan tanaman yang tumbuh di wilayah kering seperti Timur Tengah. Namun pada dekade terakhir, kurma mulai banyak diintroduksi di Indonesia sebagai tanaman hias dan usaha perkebunan terutama di Pulau Jawa. Penelitian ini bertujuan untuk mempelajari diversitas serangga yang ditemukan di pohon kurma dan mempelajari interaksi antara dua kelompok organisme tersebut serta memprediksi potensi status serangga bagi pohon kurma. Identifikasi jenis serangga dilakukan berdasarkan ciri morfologi. Interaksi antara serangga dan pohon kurma dipelajari dengan cara melihat gejala kerusakan yang diakibatkan oleh serangga meliputi bagian daun, batang, dan bunga atau buah. Parameter interaksi digunakan untuk memprediksi potensi peran penting serangga bagi pohon kurma. Sampel serangga diperoleh dengan cara koleksi langsung (*hand collect*), teknik jaring, *pit fall trap*, dan *light trap* di Kebun Pembibitan Kurma Madinah, Sleman-DI Yogyakarta, Kebun Kurma Nusantara, Kediri-Jawa Timur, dan Duta Wista Kebun Kurma, Pasuruan-Jawa Timur. Berdasarkan hasil perhitungan indeks keanekaragaman spesies Shannon-Wiener (H') tertinggi adalah pada musim penghujan di lokasi Kediri dengan nilai $H' = 2,234$. Nilai Shannon-Evenness (E) tertinggi terdapat pada musim kemarau di lokasi Sleman dengan nilai $E = 1,317$. Nilai Dominansi Simpson's (D) tertinggi terdapat pada musim penghujan di lokasi Sleman dengan nilai $D = 0,346$. Adapun spesies-spesies serangga yang berinteraksi dengan tanaman kurma adalah *Elymnias hypermnestra*, *Valanga nigricornis*, *Javeta pallida*, *Oryctes rhinoceros*, dan *Ropalidia fasciata*. Empat spesies yang disebut di awal berpotensi sebagai serangga hama, sedangkan *R. fasciata* memiliki potensi berstatus sebagai pengendali hama bersama *Ammophila sabulosa*, *Chalybion bengalense*, *Chalybion spinolae*, dan *Camponotus javaensis*. Serangga yang memiliki potensi sebagai polinator adalah *Apis cerana* dan *Xylocopa infusa*. Sedangkan *Macrotermes gilvus* berpotensi sebagai dekomposer.

Kata Kunci : keanekaragaman serangga, Interaksi, Kurma, Spesies introduksi,

**DIVERSITY AND POTENTIAL STATUS OF INSECT
IN DATE PALM PLANTS (*Phoenix dactylifera* L.) :
INTRODUCE SPECIES IN INDONESIA**

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ABSTRACT

Date palms (*Phoenix dactylifera* L.) originally grow in arid regions such as the Middle East. But in the last decade, dates began to be widely introduced in Indonesia as an ornamental plant and plantation business, especially in Java. This research aims to study the diversity of insects found in date palm trees and study the interactions between the two groups of organisms, as well as to provide predictions of the potential status of insects for date palms. Identification of insect species was carried out by morphological characters. Interaction between insects and date palms was studied by looking at the symptoms of damage caused by insects including the leaves, stems, and flowers or fruit. Diversity parameters were used to predict the potential important role of insects for date palms. Insect samples were obtained by direct collection (hand collect), sweep net, pit fall traps, and light traps in Kebun Pembibitan Kurma Madinah, Sleman-Special Region Yogyakarta, Kebun Kurma Nusantara, Kediri-East Java, and Duta Wista Kebun Kurma, Pasuruan- East Java. Based on the calculation of the Shannon-Wiener (H') species diversity index, the highest was in the rainy season at the Kediri location with a value of $H' = 2.234$. The highest Shannon-Evenness (E) value was found in the dry season at the Sleman location with an E value of 1.317. The highest value of Simpson's dominance (D) was in the rainy season in the Sleman location with a value of $D = 0.346$. The insect species interacting with date palms were *Elymnias hypermnestra*, *Valanga nigricornis*, *Javeta pallida*, *Oryctes rhinoceros*, and *Ropalidia fasciata*. Four species were mentioned as potential pest insects, while *R. fasciata* had the potential to control pests with *Ammophila sabulosa*, *Chalybion bengalense*, *Chalybion spinolae*, and *Camponotus javaensis*. Insects that have potential as pollinators were *Apis cerana* and *Xylocopa infusa*. While *Macrotermes gilvus* had the potential as a decomposer.

Key Words : Insect diversity, Interaction, Date palm, Introduce species