TINGKAT SERANGAN DAN KEPADATAN POPULASI KUTU PUTIH (*Paracoccus marginatus* Williams and Granara de Willink) PADA TANAMAN PEPAYA DI KABUPATEN PADANG PARIAMAN

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FAKULTAS PERTANIAN

UNIVERSITAS ANDALAS

PADANG

2022

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Abstrak

Pepaya (*Carica papaya* L.) merupakan salah satu komoditas buah yang digemari oleh seluruh lapisan masyarakat. Kutu putih (*Paracoccus marginatus*) merupakan salah satu hama yang mengakibatkan penurunan produksi pepaya di Indonesia termasuk di Kabupaten Padang Pariaman. Penelitian bertujuan untuk mengetahui tingkat serangan dan kepadatan populasi kutu putih pada tanaman pepaya di Kabupaten Padang Pariaman. Penelitian ini merupakan penelitian survei dan penentuan tanaman sampel mengunakan metode acak sistematis. Variabel yang diamati adalah kondisi pertanaman pepaya, morfologi kutu putih, tanaman, daun dan buah terserang *P. marginatus*, keparahan serangan kutu putih *P. marginatus* pada buah dan daun pepaya, kelimpahan kutu putih *P. marginatus* per tanaman pepaya, dan kelimpahan Arthropoda lain. Hasil penelitian menunjukkan bahwa kutu putih terdapat di semua lokasi pengambilan sampel di Kabupaten Padang Pariaman dengan persentase tanaman terserang berkisar dari 80-100%. Persentase daun terserang tertinggi terdapat di Nagari Kapalo Koto, Kecamatan Nan Sabaris sebesar 57.81%, sedangkan persentase buah terserang tertinggi terdapat di Nagari Koto Dalam, Kecamatan Padang Sago sebesar 71.91%. Persentase daun dan buah terserang terendah terdapat di Nagari Sicincin, Kecamatan 2X11 Enam Lingkung sebesar 10.45% dan 13.21%. Sedangkan intensitas serangan pada daun terendah didapatkan pada Nagari Batang Sariak, Kecamatan Batang Anai sebesar 25,9% dan untuk buah terendah terdapat pada Nagari Sicincin, Kecamatan 2 X 11 Enam Lingkung sebesar 30%. Kepadatan populasi tertinggi terdapat di Nagari Kapalo Koto, Kecamatan Nan Sabaris sebesar 188,3 ekor/daun, sedangkan yang terendah didapatkan di Nagari Batang Sariak, Kecamatan Batang Anai sebesar 5,6 ekor/daun. Untuk kepadatan populasi tertinggi di buah terdapat di Nagari Kampuang Tangah, Kecamatan Lubuk Alung sebesar 52,9 ekor/buah, sedangkan yang terendah didapatkan di Nagari Sicincin, Kecamatan 2X11 Enam Lingkung sebesar 11,1 ekor/buah. Beberapa jenis Arthropoda yang didapatkan terdiri dari kelompok semut, kumbang, dan laba-laba. Jenis Arthropoda yang paling banyak ditemukan adalah semut. Di Kecamatan 2 X 11 Enam Lingkung Nagari Sicincin jumlah semut ditemukan sebanyak 117 ekor, sedangkan daerah yang paling sedikit semut yang ditemukan adalah Kecamatan Padang Sago Nagari Batu Kalang yaitu 54 ekor.

Kata kunci : Kutu putih (*Paracoccus Marginatus*), Pepaya, indentifikasi, persentase, intensitas.

RATE OF ATTACK AND POPULATION DENSITY OF WHITEFLY (*Paracoccus marginatus* Williams and Granara de Willink) ON PAPAYA PLANTS IN PADANG PARIAMAN REGENCY

Abstract

Papaya (*Carica papaya* L.) is one of the fruit commodities favored by all levels of society. The mealybug (*Paracoccus marginatus*) is one of the pests that causes a decrease in papaya production in Indonesia, including in Padang Pariaman Regency. The aim of the study was to determine the attack rate and population density of mealybugs on papaya plants in Padang Pariaman Regency. This research is a survey research and the determination of plant samples using a systematic random method. Variables observed were papaya cropping conditions, morphology mealybug, plants, leaves, and fruit attacked by *P. marginatus*, severity of *P. marginatus* attackon papaya fruit and leaves, abundance of P. Marginatus mealybug per papaya plant, and abondance of other artropods. The results showed that mealybugs were present in all sampling locations in Padang Pariaman Regency with the percentage of infected plants ranging from 80-100%. The highest percentage of infected leaves was in Nagari Kapalo Koto, Nan Sabaris District, at 57.81%. While the highest percentage of infected fruit was in Nagari Koto Dalam, Padang Sago District, at 71.91%. The lowest percentage of infected leaves and fruit was found in Nagari Sicincin, 2 X 11 Enam Lingkung District at 10.45% and 13.21%, respectively. While the lowest intensity of attack on leaves was found in Nagari Batang Sariak, Batang Anai District, at 25.9% and the lowest fruit was found in Nagari Sicincin, 2 X 11 Enam Lingkung District, 30% for fruit. The highest population density was found in Nagari Kapalo Koto, Nan Sabaris District, at 188.3 individuals/leaf. While the lowest was found in Nagari Batang Sariak, Batang Anai District, at 5.6 individuals/leaf. For the highest population density in fruit, it was found in Nagari Kampuang Tangah, Lubuk Alung District, of 52.9 individuals/fruit. While the lowest was found in Nagari Sicincin, 2 X 11 Enam Lingkung District, of 11.1 individuals/fruit. Several types of arthropods were obtained, consisting of groups of ants, beetles, and spiders. The most common types of arthropods found are ants. In Nagari Sicincin, 2 X 11 Enam Lingkung District, the number of ants found was 117 individuals, while the area with the fewest ants found was in Nagari Batu Kalang, Padang Sago District, which was 54 individuals.

Keywords: Mealybug (*Paracoccus marginatus*), Papaya, identification, percentage, intensity.