INTISARI

SEBARAN HAMA KUTU PUTIH SINGKONG *Phenacoccus manihoti* DAN EKSPLORASI PARASITOID DI PROVINSI JAWA TENGAH DAN DAERAH ISTIMEWA YOGYAKARTA

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Provinsi Jawa Tengah dan Daerah Istimewa Yogyakarta termasuk penghasil singkong nasional urutan ke dua dan ke enam. Produksi singkong nasional terancam oleh hama eksotik jenis Kutu Putih Singkong (*Phenacoccus manihoti*) yang masuk ke Indonesia tahun 2010. Penelitian bertujuan untuk (1) mengetahui sebaran geografis dan pola distribusi spasial *P. manihoti* (2) mengetahui keberadaan parasitoid *P. manihoti* di Provinsi Jawa Tengah dan Daerah Istimewa Yogyakarta, (3) mengetahui persepsi petani singkong terhadap hama kutu *P. manihoti*. Metode transek diterapkan untuk menentukan 51 titik pengamatan pada setiap jarak antar titik enam km diawali dari Desa Pasir Kecamatan Ayah Kabupaten Kebumen Provinsi Jawa Tengah menelusuri jalan provinsi dan berakhir di Desa Glinggang Kecamatan Pracimantoro Kabupaten Wonogiri. Apabila pada suatu titik pengamatan tidak tersedia tanaman singkong, pengamatan dilanjutkan kearah samping kanan atau kiri sekitar satu km. Metode purposive sampling diterapkan untuk pengambilan 30 sampel pada setiap titik pengamatan. Unit sampel adalah pucuk singkong sekitar 30 cm yang terserang. Pucuk singkong sampel berikut kutu *P. manihoti* dipelihara di laboratorium. Jumlah kutu dan parasitoid yang muncul dihitung. Responden sebanyak 120 orang diambil dengan metode bola es. Hasil penelitian menunjukkan bahwa sebaran geografis kutu *P. manihoti* di Provinsi Jawa Tengah ditemukan di Kabupaten Banyumas, kabupaten Kebumen, Kabupaten Purworejo dan Kabupaten Wonogiri sedangkan di Provinsi Daerah Istimewa Yogyakarta di Kabupaten Gunungkidul Pola sebaran spasial kutu *P. manihoti* di kebun singkong mengikuti pola mengelompok; Indeks Morisita terstandar (Ip) sebesar 0,01 dan Indeks pengelompokan (Mc) berkisar 3,24 – 5,22. Parasitoid tidak ditemukan; dari semua koloni kutu *P. manihoti* yang dipelihara tidak ada yang terparasitid demikian juga parasitoid tidak ada yang mencul. Responden menyatakan bahwa hama kutu putih *P. manihoti* mengancam produksi singkong, potensi menurunkan hasil panen 20 - 40%.

Kata kunci: Kutu Putih Singkong, *Phenacoccus manihoti*, distribusi, singkong, parasitoid

ABSTRACT

DISTRIBUTION OF CASSAVA MEALYBUG *Phenacoccus manihoti* AND PARASITOID EXPLORATION IN CENTRAL JAVA PROVINCE AND YOGYAKARTA SPECIAL REGION

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Central Java Province and Yogyakarta Special Region are the second and sixth national cassava producers. National cassava production is threatened by exotic pests such as Cassava Mealybug (*Phenacoccus manihoti*) which entered Indonesia in 2010. The research aims to (1) determine the geographical distribution and spatial distribution pattern of *P. manihoti* (2) determine the presence of *P. manihoti* parasitoids in Central Java Province and Yogyakarta Special Region, (3) determine the perception of cassava farmers towards *P. manihoti* pest. The transect method was applied to determine 51 observation points at a distance of six km between each point, starting from Pasir Village, Ayah District, Kebumen Regency, Central Java Province along the provincial road and ending at Glinggang Village, Pracimantoro District, Wonogiri Regency. If at an observation point there were no cassava plants available, the observation continued to the right or left side for about one km. The purposive sampling method was applied to collect 30 samples at each observation point. The sample unit was cassava shoots of about 30 cm that were infested. Sampled cassava shoots and cassava mealybug *P. manihoti* were reared in the laboratory. The number of emerged mealybug and parasitoids were counted. A total of 120 respondents were recruited using the ice-ball method. The results showed that the geographical distribution of *P. manihoti* mealybug in Central Java Province was found in Banyumas Regency, Kebumen Regency, Purworejo Regency and Wonogiri Regency while in Yogyakarta Special Region Province in Gunungkidul Regency. The spatial distribution pattern of *P. manihoti* mealybug in cassava plantations followed a clustering pattern; the standardized Morisita Index (Ip) was 0.01 and the clustering index (Mc) ranged from 3.24 - 5.22. Parasitoids were not found; none of the *P. manihoti* mealybug colonies reared were parasitized and none of the parasitoids emerged. Respondents stated that *P. manihoti* mealybug threaten cassava production, potentially reducing yields by 20-40%.

Keyword: Cassava pink mealybug, *Phenacoccus manihoti*, distribution, cassava, parasitoid