

**UJI KETAHANAN PADI KETAN PUTIH LOKAL  
ASAL SUMATERA BARAT TERHADAP SERANGAN  
WERENG BATANG COKLAT (*Nilaparvata lugens* Stal 1854)  
(HEMIPTERA: DELPHACIDAE)**

**SKRIPSI**

Oleh



**RAHMADHANI  
NIM. 1910251001**

**Pembimbing:**

- 1. Dr. My Syahrawati, SP. M.Si.**
- 2. Dr. Ir. Reflinaldon, M.Si.**

**FAKULTAS PERTANIAN  
UNIVERSITAS ANDALAS  
PADANG  
2024**

**UJI KETAHANAN PADI KETAN PUTIH LOKAL  
ASAL SUMATERA BARAT TERHADAP SERANGAN  
WERENG BATANG COKLAT (*Nilaparvata lugens* Stal 1854)  
(HEMIPTERA: DELPHACIDAE)**

**Abstrak**

Wereng Batang Coklat (*Nilaparvata lugens* Stal) merupakan hama utama pada tanaman padi, termasuk padi ketan putih. WBC menyerang padi pada semua fase pertumbuhan yang dapat menyebabkan puso (*hopperburn*). Penelitian ini bertujuan untuk menguji tingkat ketahanan padi ketan putih lokal asal Sumatera Barat terhadap serangan WBC. Penelitian ini dilaksanakan di rumah kaca, Fakultas Pertanian, Universitas Andalas dengan menggunakan Rancangan Acak Lengkap (RAL) dengan 7 perlakuan dan 4 ulangan. Perlakuan terdiri dari padi ketan putih lokal asal Agam, Padang Pariaman, Tanah Datar, Pasaman Timur, Kuranji, padi varietas IR 74 dan padi varietas TN1 (Kontrol). Padi ditanam dengan menggunakan ember dan diinfestasikan WBC saat umur padi 7 HSS, sebanyak 8 ekor nimfa WBC instar 2-3 perbatang, dengan jumlah 20 batang dalam satu ulangan. Pengamatan dilakukan terhadap mortalitas WBC, persentase tanaman terserang, intensitas serangan, tinggi tanaman, dan jumlah daun, pengamatan diamati dengan interval 2 hari sekali setelah diinfestasikan sampai tanaman TN1 (Kontrol) mati 90%. Hasil penelitian menunjukkan bahwa ketahanan padi ketan putih lokal asal Sumatera Barat terhadap WBC bervariasi antara rentan sampai agak tahan. Padi ketan putih asal Tanah Datar menunjukkan kriteria rentan sedangkan asal Pasaman Timur dan Padang Pariaman menunjukkan kriteria agak rentan. Padi ketan putih asal Agam dan Padang menunjukkan kriteria agak tahan. Pada padi ketan putih asal Agam dan Padang ditemukan mortalitas tertinggi (39,06%, 40,93%), diikuti dengan persentase tanaman terserang terendah (66,25%, 65,00%), dan intensitas serangan terendah (30,97%, 29,16%).

**Kata kunci:** Intensitas serangan, mortalitas, rentan, resistensi, varietas lokal

# THE RESISTANCE OF LOCAL WHITE GLUTINOUS RICE FROM WEST SUMATRA AGAINST BROWN PLANTHOPPER (*Nilaparvata lugens* Stal 1854) (HEMIPTERA: DELPHACIDAE)

## Abstract

Brown Planthopper (*Nilaparvata lugens* Stal) is the main pest on rice, including white glutinous rice. WBC attacks rice at all growth phases and can cause (hopperburn). This study aims to test the level of resistance of local white glutinous rice from West Sumatra to WBC attack. This research was conducted in the greenhouse, Faculty of Agriculture, Andalas University using a Completely Randomized Design (CRD) with 7 treatments and 4 replications. The treatment consisted of local white glutinous rice from Agam, Padang Pariaman, Tanah Datar, Pasaman Timur, Kuranji, rice varieties IR 74 and rice varieties TN1 (Control). Rice was planted using a bucket and infested with WBC at the age of 7 HSS, with 8 WBC nymphs instar 2-3 per stem, with a total of 20 stems in one replication. Observations were made on WBC mortality, percentage of infested plants, intensity of attack, plant height, and observations were made at 2 day intervals after infestation until TN1 (Control) plants were 90% dead. The results showed that the resistance of local white glutinous rice from West Sumatra to WBC varied from susceptible to moderately resistant. White glutinous rice from Tanah Datar is susceptible while those from Pasaman Timur and Padang Pariaman are moderately susceptible. White glutinous rice from Agam and Padang is moderately resistant. In white glutinous rice from Agam and Padang the highest mortality (39.06%, 40.93%) was found, followed by the lowest percentage of infested plants (66.25%, 65.00%), and the lowest intensity of attack (30.97%, 29.16%).

**Keywords:** Intensity of attack, mortality, susceptible, resistance, local varieties

