

Nurul Maulidah 14.03.1.1.1.00.078. Skrining Tanaman Jagung (*Zea mays* L.) Lokal Madura Tahan Penyakit Bulai (*Perenosclerospora maydis*) di bawah Bimbingan **Dr. Achmad Amzeri, S.P.,M.P**

ABSTRAK

Penyakit bulai merupakan salah satu kendala biotik yang menyebabkan produksi jagung di Indonesia masih tergolong rendah. Penyakit ini disebabkan oleh cendawan *Perenosclerospora maydis* yang menyerang tanaman jagung sejak usia muda, sehingga dapat menyebabkan kerusakan 100% pada tanaman. Penelitian ini dilakukan untuk menguji ketahanan beberapa genotip jagung lokal Madura terhadap penyakit bulai. Penelitian ini dilaksanakan di kebun percobaan Program Studi Agroteknologi Fakultas pertanian Universitas Trunojoyo pada bulan Desember 2017 sampai bulan Maret 2018. Bahan utama yang digunakan yaitu 5 genotip jagung lokal Madura yang berasal dari koleksi Universitas Trunojoyo Madura, jagung Pulut, dan jagung Lagoligo. Penelitian ini menggunakan Rancangan Acak Kelompok dengan 7 perlakuan dan 3 ulangan. Hasil penelitian menunjukkan genotip G1, G2, G5 termasuk kategori tahan terhadap penyakit bulai. Genotip G4 termasuk kategori agak tahan, dan genotip G3 termasuk kategori rentan terhadap penyakit bulai.

Kata kunci : Penyakit bulai, galur tahan, plasma nutfah lokal

Nurul Maulidah 14.03.1.1.1.00.078. Screening of Madurese Local Maize (*Zea mays* L.) Resistancy Toward Downy Mildew Disease (*Perenosclerospora maydis*) under the Guidance of **Dr. Achmad Amzeri, S.P.,M.P**

ABSTRACT

Downy mildew disease is one of the biotic constraints that cause corn production in Indonesia is still relatively low. This disease is caused by the fungus *Perenosclerospora maydis* that attack corn plants since young period, which can cause 100% damage to the plants. This research was conducted to test the resistance of several genotypes of Madurese local maize against downy mildew disease. This research was conducted in experimental field of Agrotechnology Study Program of Agricultural Faculty of Trunojoyo University, Madura on December 2017 until March 2018. The main materials used in this study were 5 Madurese local maize genotypes from the collection of Trunojoyo University, Madura and also Pulut corn and Lagoligo corn. This research used Completely Randomized Block Design with 7 treatments and 3 replicates. The results showed genotypes G1, G2, G5 were categorized as resistant to downy mildew. Genotype G4 was categorized as slightly resistant to downy mildew, and genotype G3 was categorized as susceptible to downy mildew.

Keywords: Downy mildew, resistant lines, local germplasm.