

INTISARI

Kendala utama yang dialami oleh petani bawang merah sistem surjan di daerah Panjatan, Kabupaten Kulon Progo adalah serangan patogen penyebab penyakit. Penyakit hawar daun bawang merah yang disebabkan oleh *Stemphylium vesicarium* dan penyakit moler yang disebabkan oleh *Fusarium* spp. adalah penyakit penting yang menyerang pada bawang merah. Perkembangan penyakit dipengaruhi oleh kondisi lingkungan seperti iklim dan keberadaan inang. Penelitian ini bertujuan untuk mengetahui perkembangan penyakit hawar daun dan moler bawang merah dan kaitannya dengan anasir iklim berupa suhu, kelembaban, dan intensitas penyinaran serta ketersediaan inang di lahan surjan. Penelitian dilakukan di lahan surjan Kalurahan Gotakan, Panjatan Kulon Progo dan Laboratorium Penyakit Tumbuhan Departemen Hama dan Penyakit Tumbuhan Universitas Gadjah Mada. Penelitian dilakukan dengan melakukan observasi insidensi dan intensitas penyakit pada musim kemarau periode Agustus-September, kemudian dikaitkan dengan anasir iklim berupa suhu, kelembaban, dan intensitas penyinaran serta struktur komoditas di sekitar lahan pengamatan. Pengamatan di laboratorium menunjukkan adanya konidium dari *Stemphylium vesicarium*, *Alternaria* sp., dan *Colletotrichum* sp. pada sampel tanaman bergejala. Hasil penelitian menunjukkan bahwa pada lahan seluas 44,91 ha terdapat proporsi inang *Stemphylium vesicarium* sebesar 30,91% dan inang *Fusarium* spp. sebesar 36,52%. Kemudian pada tiga anasir iklim yang diamati, yaitu suhu, kelembaban, dan intensitas penyinaran tidak berpengaruh secara signifikan terhadap perkembangan penyakit. Kata kunci: bawang merah, hawar daun, moler, suhu, kelembaban, intensitas penyinaran

ABSTRACT

The main constraint faced by shallot farmers in the Surjan system in the Panjatan area, Kulon Progo Regency, is the attack of pathogenic diseases. Leaf blight disease caused by *Stemphylium vesicarium* and twisted disease disease caused by *Fusarium* spp. are important diseases that affect shallots. The development of these diseases is influenced by environmental conditions such as climate and the presence of hosts. This research aims to investigate the development of leaf blight and bulb rot diseases in shallots and their relationship with climate factors including temperature, humidity, and light intensity, as well as the availability of hosts in the Surjan fields. The research was conducted in the Surjan fields of Gotakan village, Panjatan, Kulon Progo, and the Plant Disease Laboratory, Department of Plant Pests and Diseases, Gadjah Mada University. The study involved observing the incidence and intensity of the diseases during the dry season in August-September, and then correlating them with climate factors such as temperature, humidity, light intensity, and the commodity structure around the observation sites. Observations in the laboratory showed the presence of conidia from *Stemphylium vesicarium*, *Alternaria* sp., and *Colletotrichum* sp. in symptomatic plant samples. The research results showed that in the surveyed area of 44.91 hectares, the proportion of hosts for *Stemphylium vesicarium* was 30.91%, and for *Fusarium* spp. was 36.52%. Furthermore, the three observed climate factors, namely temperature, humidity, and light intensity, did not significantly affect the development of the diseases.

Keywords: shallot, leaf blight, twisted disease, temperature, humidity, light intensity