

INTISARI

Lengas tanah merupakan faktor penting bagi pertumbuhan tanaman. Bagi tanaman cabe, lengas tanah sangatlah krusial karena tanaman cabai sensitif terhadap ketersediaan air. Ketersediaan air pada lengas tanah dapat berpotensi mengakibatkan gagal panen apabila terlalu berlebihan ataupun kekurangan. Curah hujan menjadi pemasok utama pemenuhan lengas tanah. Oleh karenanya, curah hujan yang rendah pada lahan pertanian di Selopamioro perlu dikaji agar dapat mengetahui pemenuhan kebutuhan air berguna bagi pertumbuhan tanaman di Selopamioro. Penelitian bertujuan untuk mengkaji pengaruh curah hujan terhadap agihan cacak lengas tanah di lahan petanian cabe rawit, Nawungan, Selopamioro. Luas lahan pengamatan sebesar 472.6 m². Metode penentuan titik sampel dilakukan secara terstruktur dengan kedalaman 0-10 cm, 10-20 cm, 20-30 cm, dan 30-40 cm. Penelitian dilakukan pada bulan Maret – Juni 2023. Pengambilan sampel lengas terbagi atas dua periode, sampel lengas periode hujan diambil pada bulan Maret - April dan sampel periode kering diambil pada bulan Juni. Sampel lengas periode hujan dibagi dalam 4 waktu pengambilan yaitu 2 jam, 3 jam, 4 jam, hingga 5 jam pasca hujan. Analisis laboratorium dilakukan pengujian parameter lengas tanah (gravimetri), tekstur (pemipetan), stabilitas agregat (De booth), dan sebaran pori tanah (pF 0, pF 2.54, pF 4.25). Pengukuran lapangan dilakukan pada parameter laju infiltrasi dan permeabilitas menggunakan minidisk infiltrometer. Hasil penelitian menunjukkan curah hujan tidak menunjukkan pengaruh nyata terhadap kandungan lengas tanah di lahan penelitian. Lengas tanah secara spasial menunjukkan pola yang beragam. Beberapa kejadian hujan menunjukkan semakin dalam jeluk tanah, maka lengas tanah semakin meningkat secara teratur. Beberapa kejadian lainnya menunjukkan pola yang tidak teratur dan fluktuatif pada kedalaman jeluk yang semakin meningkat. Lengas tanah secara temporal menunjukkan semakin jauh jeda waktu pengambilan pasca hujan, nilai kadar lengas semakin rendah.

Kata kunci : Lengas tanah, curah hujan, distribusi vertikal, temporal

ABSTRACT

Soil moisture is an important factor for plant growth. For chili plants, soil moisture is very crucial because chili plants are sensitive to water availability. The availability of water in soil moisture can potentially result in crop failure if it is too excessive or deficient. Rainfall is the main supplier of soil moisture. Therefore, low rainfall on agricultural land in Selopamioro needs to be studied in order to determine whether water needs are met to be useful for plant growth in Selopamioro. The research aims to examine the effect of rainfall on soil moisture distribution in cayenne pepper farming land, Nawungan, Selopamioro. The observation area is 472.6 m². The method for determining sample points is carried out in a structured manner with depths of 0-10 cm, 10-20 cm, 20-30 cm and 30-40 cm. The research was conducted in March - June 2023. Moisture sampling was divided into two periods, rainy period moisture samples were taken in March - April and dry period samples were taken in June. Moisture samples from the rainy period are divided into 4 collection times, namely 1 hour, 2 hours, 3 hours and 4 hours after the rain. Laboratory analysis carried out testing of soil moisture parameters (gravimetry), texture (piping), aggregate stability (De booth), and soil pore distribution (pF 0, pF 2.54, pF 4.25). Field measurements were carried out on infiltration rate and permeability parameters using a minidisk infiltrometer. The research results showed that rainfall did not show a real influence on the soil moisture content in the research area. Soil moisture spatially shows diverse patterns. Several rain events show that the deeper the soil sinks, the more soil moisture increases regularly. Several other events show irregular and fluctuating patterns as the depth of the sink increases. Temporally, soil moisture shows that the longer the time lag after rain collection, the lower the moisture content value.

Key words: Soil moisture, rainfall, vertical distribution, temporal