

## INTISARI

Daerah Aliran Sungai (DAS) Bompon merupakan bagian dari DAS Bogowonto. DAS Bompon membentang di Kecamatan Salaman dan Kecamatan Kajoran, Kabupaten Magelang Provinsi Jawa Tengah. Sub-DAS Bompon merupakan salah satu wilayah yang sering mengalami longsor tanah yang mengakibatkan dampak besar bagi populasi manusia. Hal ini disebabkan oleh topografi wilayahnya yang memiliki banyak lereng, bergunung, dan berbukit. Selain itu ada pengaruh lain yang menyebabkan longsor yaitu kestabilan lereng. Kestabilan lereng merupakan suatu kondisi atau keadaan yang stabil terhadap suatu bentuk dan dimensi lereng. Penelitian ini bertujuan untuk Mengetahui karakteristik tanah pada kelas kestabilan lereng yang berbeda di Sub-DAS Bompon, Kabupaten Magelang dan Mengkaji nilai keragaman karakteristik tanah antar kelas kestabilan lereng yang berbeda di Sub-DAS Bompon, Kabupaten Magelang. Penelitian dilakukan dengan mengumpulkan data data lapangan (infiltrasi tanah, dan permeabilitas tanah) dan data laboratorium (tekstur tanah dan bahan organik tanah). Hasil penelitian menunjukkan bahwa Karakteristik sifat fisik tanah pada kelas kestabilan lereng memiliki hasil yang bervariasi, pada hasil uji tekstur tanah memiliki hasil dominan lempung di setiap kelas kestabilan lereng. Pada uji kadar lengas tanah memiliki hasil bervariasi dikarenakan pengaruh dari kandungan tekstur tanah tiap tiap kelas kestabilan lereng. Uji laju infiltrasi mendapatkan hasil paling tinggi pada kelas kestabilan lereng rendah dan hasil paling rendah berada pada kelas kestabilan lereng sangat tinggi. Hasil uji bahan organik dan permeabilitas memiliki pola semakin tinggi kelas kestabilannya maka nilai bahan organik dan permeabilitasnya semakin tinggi juga. Karakteristik fisik tanah antar kelas kestabilan lereng memiliki memiliki trend yang hampir sama, namun berabanding terbalik pada hasil laju infiltrasi tanah

Kata kunci: Longsor DAS Bompon, Kelas Kestabilan Lereng, Sifat Fisik Tanah

## ABSTRACT

*The Bompon River Watershed (DAS) is part of the Bogowonto Watershed. The Bompon watershed stretches across Salaman District and Kajoran District, Magelang Regency, Central Java Province. The Bompon sub-watershed is one of the areas that frequently experiences landslides which have a major impact on the human population. This is due to the topography of the region which has many slopes, mountains and hills. Apart from that, there are other influences that cause landslides, namely slope stability. Slope stability is a condition or condition that is stable regarding a slope shape and dimensions. This research aims to determine soil characteristics in different slope stability classes in the Bompon Sub-watershed, Magelang Regency and examine the value of variation in soil characteristics between different slope stability classes in the Bompon Sub-watershed, Magelang Regency. The research was carried out by collecting field data (soil infiltration and soil permeability) and laboratory data (soil texture and soil organic matter). The results of the research show that the physical characteristics of the soil in the slope stability classes have varying results, the results of the soil texture test have dominant results of clay in each slope stability class. The soil moisture content test had varying results due to the influence of the soil texture content for each slope stability class. The infiltration rate test obtained the highest results in the low slope stability class and the lowest results were in the very high slope stability class. The organic material and permeability test results show a pattern that the higher the stability class, the higher the organic material and permeability value. The physical characteristics of the soil between slope stability classes have almost the same trend, but are inversely proportional to the results of the soil infiltration rate*

**Keywords:** *Bompon Watershed Landslide, Slope Stability Class, Soil Physical Properties*