

INTISARI

Penelitian ini bertujuan untuk mengidentifikasi karakteristik pori tanah dan stabilitas agregat serta mengamati sifat kimia tanah pada lahan hutan, pertanian semi organik dan organik. Penelitian dilaksanakan pada bulan Maret sampai Juli 2021 di lahan hutan, pertanian semi organik, dan pertanian organik di Desa Batur, Kecamatan Getasan, Kabupaten Semarang, dan Laboratorium Departemen Tanah, Fakultas Pertanian, Universitas Gadjah Mada, Yogyakarta. Pengambilan sampel tanah dilakukan di 9 lokasi dengan 3 lokasi lahan hutan, 3 lokasi lahan pertanian semi organik, dan 3 lokasi lahan pertanian organik. Setiap contoh tanah diambil secara komposit pada lahan dengan 3 jeluk tanah yang berbeda yaitu 0-20 cm, 20-40 cm, dan 40-60 cm. Hasil penelitian menunjukkan bahwa penggunaan lahan mampu mempengaruhi pori air drainase, C-organik, asam humat, dan asam fulvat. Nilai C-organik tanah cenderung menurun seiring bertambahnya jeluk tanah.

Kata kunci: Pori tanah, Stabilitas agregat, Hutan, Pertanian Semi Organik, Pertanian Organik

ABSTRACT

This study aims to identify soil pore characteristics and aggregate stability and observe the chemical properties of soil in forest land, semi-organic and organic agriculture. The research was carried out from March to July 2021 on forest land, semi-organic agriculture, and organic agriculture in Batur Village, Getasan District, Semarang Regency, and the Laboratory of the Soil Department, Faculty of Agriculture, Gadjah Mada University, Yogyakarta. Soil sampling was carried out in 9 locations with 3 locations of forest land, 3 locations of semi-organic agriculture, and 3 locations of organic agriculture. Each soil sample was taken compositely on land with 3 different soil depths, namely 0-20 cm, 20-40 cm, and 40-60 cm. The results showed that land use was able to affect the drainage pore water, C-organic, humic acid, and fulvic acid. Soil organic carbon value tends to decrease along with increasing soil depth.

Keywords: Soil Pore, Aggregate Stability, Forest, Semi-organic Agriculture, Organic Agriculture