INTISARI

PENGELOLAAN SUMBERDAYA TANAH BERKELANJUTAN DI AREA SAWAH SUB DAS BOMPON, MAGELANG

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Pengelolaan sumberdaya tanah merupakan usaha untuk menjaga dan memanfaatkan sumberdaya tanah dalam kegiatan pertanian secara berkelanjutan. Area penelitian terletak di zona deposisional hulu Sub DAS Bompon pada bentang lahan transisi vulkanik antara Gunungapi Sumbing dan Pegunungan Menoreh. Tujuan penelitian adalah menganalisis dan mendeskripsikan hubungan antara karakteristik morfologi tanah dengan parameter kunci tanah kaitannya dengan evaluasi dan rekomendasi pengelolaan sumberdaya tanah berkelanjutan di area sawah hulu Sub DAS Bompon. Penelitian dilaksanakan dengan metode survei melalui pendekatan kualitatif dan kuantitatif. Hasil penelitian menunjukkan bahwa karakteristik morfologi tanah, yaitu jeluk tanah yang dalam, distribusi partikel dengan dominasi klei, struktur gumpal, konsistensi tanah lekat/teguh, kandungan lengas tanah yang cenderung tinggi, nilai BV sedang, pH tanah agak masam, kandungan C-organik, N-total dan KPK tanah rendah serta KB dengan kriteria tinggi yang berhubungan dengan parameter kunci tanah. Parameter kunci tanah yang teridentifikasi meliputi porositas, fraksi klei, BV, BJ, pH, C-organik, N-total, C/N, K- dd, Na-dd, Mg-dd dan KPK. Evaluasi dan rekomendasi pengelolaan sumberdaya tanah berkelanjutan untuk kegiatan pertanian di area sawah hulu Sub DAS Bompon meliputi: perbaikan saluran irigasi, pembuatan embung, aplikasi pupuk organik dan pengapuran, rotasi tanaman dan varietas, demo plot terkait budidaya pertanian, penyuluhan dan pendampingan teknologi budidaya pertanian, pembentukan kelompoktani, pengelolaan kebun campur di lereng sekitar area penelitian serta sebagai daerah agroforestri dan konservasi air (jangka panjang). Hasil penelitian diharapkan dapat ditindaklanjuti, sehingga kegiatan pertanian di area sawah hulu Sub DAS Bompon dapat dilaksanakan secara optimal dan berkelanjutan.

Kata kunci: morfologi, padi sawah, parameter kunci, pengelolaan, sumberdaya tanah

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ABSTRACT

SUSTAINABLE MANAGEMENT OF SOIL RESOURCES IN PADDY FIELDS OF THE BOMPON SUB-WATERSHED, MAGELANG

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Management of soil resources is an effort to maintain and utilize soil resources in sustainable agricultural activities. The research area is located in upstream zone of the Bompon sub-watershed in the volcanic transition landscape between the Sumbing Volcano and Menoreh Mountains. The purpose of this research to analyze and describe the relationship between morphological characteristics of soil with main soil parameters related to the evaluation and recommendations for sustainable management of soil resources in upstream paddy fields of the Bompon watershed. The research was conducted by survey method through quantitative and qualitative approaches. The results showed characteristics of soil morphology, namely soil depth, particles distribution with dominant clays, viscous structures, soil consistency/hardness, soil water content to be high, moderate BD values, pH is slightly acidic, C-organic content, N-total and low CEC, high BS values related to the main soil key parameters. The main soil key parameters identified include porosity, clay fraction, BD, PD, pH, C-organic, N-total, C/N, K, Na, and exchangable Mg, CEC. Evaluation and recommendations for sustainable management of soil resources for agricultural activities in upstream rice fields of the Bompon sub-watershed include: repairing irrigation line, making ponds, applying organic fertilizer and liming, crop rotation and varieties, demonstration plots, counseling, and accompanion in agricultural cultivation technology, formating of farmer groups, managing mixed gardens on the slopes, as agroforestry areas and water conservation (long term). The result of this research expected to be followed up, so agricultural activities in upstream zone of Bompon sub-watershed can be implemented optimally and sustainable.

Keywords: key parameters, management, morphology, paddy field, soil resources

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