INTISARI

Penelitian ini bertujuan untuk mengkaji perkembangan tanah dan klasifikasi tanah berdasarkan USDA, FAO/UNESCO dan PPT Bogor di Bukit Bugel, Kalibawang, Kulon Progo. Pengambilan sampel dilakukan pada tiga formasi geologi yang berbeda beserta zona transisi yaitu Kolovium, Formasi Andesit Tua, dan Formasi Jonggrangan. Analisis sampel ini meliputi analisis fisika, kimia dan mineralogi yang dilaksanakan di Laboratorium Umum Tanah, Laboratorium Fisika Tanah dan Kimia Tanah Fakultas Pertanian serta di Laboratorium Umum Geologi Fakultas Teknik, Universitas Gadjah Mada. Parameter fisika tanah meliputi analisis BV, BJ, porositas, dan tekstur sedangkan untuk parameter kimia tanah meliputi parameter pH, kapasitas pertukaran kation, kandungan bahan organik, kejenuhan basa, kandungan nitrogen, kation tertukar, dan analisis mineralogi tanah. Hasil penelitian menunjukkan bahwa perkembangan tanah memiliki perbedaan karakteristik sifat fisika, kimia, dan mineralogi tanah. Ordo tanah yang terbentuk di Bukit Bugel, Kalibawang, Kulon Progo menurut USDA adalah Inceptisol dan Alfisol. Berdasarkan FAO/UNESCO adalah Cambisols dan Lixisols. Berdasarkan PPT Bogor adalah Kambisol dan Latosol.

Kata kunci: Perkembangan Tanah, Formasi Andesit Tua, Kolovium, Formasi Jonggrangan

ABSTRACT

This research was intended to study soil development and soil classification according to USDA, FAO/UNESCO and PPT Bogor in Bugel Hill, Kalibawang, Kulon Progo. Sample was taken in three different geological formation along with the transition zone the Colluvium, Old Andesite Formation, and Jonggrangan Formation. Sample analysis included physical analysis, chemical analysis and mineralogy analysis conducted in the General Soil Laboratory, Soil Physic and Soil Chemical Laboratory in Faculty of Agriculture and the General Geology Laboratory in Faculty of Engineering Universitas Gadjah Mada. Soil physical parameter included BV analysis, BJ, porosity, and texture analysis meanwhile soil chemical parameter included pH, cation exchange capacity, organic material content, base concentration, nitrogen content, exchanged cation, and soil mineralogy analysis. Result of the research indicated that soil development have different physical, chemical and soil mineralogy characteristics. Soil order formed in Bugel Hill, Kalibawang, Kulon Progo according to USDA was Inceptisol and Alfisol. Based on FAO/UNESCO classification it is classification it was Cambisols and Lixisols. Based on PPT Bogor classification it was Cambisols and Latosol.

Keywords: Soil Development, Old Andesite Formation, Colluvium, Jonggrangan Formation