

**DECIO ARISTA ESTANISLAU D. C. RIBEIRO. Kajian Sifat Fisik Tanah pada Perkebunan Salak pasca erupsi Merapi di Desa Banyuadem Kecamatan Srumbung Kabupaten Magelang. Di bawah bimbingan SARI VIRGAWATI dan SETYO WARDOYO.**

### **INTISARI**

Salak Nglumut merupakan salah satu komoditas unggulan dari Kecamatan Srumbung Magelang. Akibat erupsi Gunung Merapi tahun 2010 produksi salak mengalami penurunan. Penelitian bertujuan untuk mengkaji sifat fisik tanah pada tanaman salak pasca erupsi Merapi di Desa Banyuadem Kecamatan Srumbung Kabupaten Magelang. Penelitian dilakukan pada bulan Mei 2012 sampai September 2012. Metode yang digunakan dalam penelitian ini adalah metode survey, pengambilan sampel tanah dilakukan pada titik perwakilan pada kedalaman tanah  $\pm 20$  cm sebagai perwakilan pasca erupsi Merapi di tanah yang ditanami tanaman salak, dan kedalaman 20 cm sampai dengan 50 cm sebagai perwakilan sebelum erupsi Merapi. Parameter yang diteliti Tekstur, BV dan BJ, Permeabilitas, Porositas. Hasil analisis tanah pasca erupsi dibandingkan dengan sifat fisik tanah sebelum erupsi. Permeabilitas tanah pasca erupsi Merapi mengalami penurunan di sebagian tempat dan peningkatan di tempat lain. Tekstur tanah sebelum erupsi Merapi didominasi oleh fraksi pasir, sedangkan setelah erupsi Merapi didominasi oleh fraksi debu. Porositas pasca erupsi Merapi nilainya lebih rendah dari pada sebelum erupsi Merapi. Dikarenakan penambahan material baru dari erupsi Merapi berupa bahan kasar abu vulkanik. Erupsi Merapi telah menyebabkan beberapa perubahan pada sifat fisik tanah serta penurunan pada produksi salak Di Desa Banyuadem.

Kata kunci : Sifat fisik tanah, Erupsi, Salak Pondoh Nglumut, produksi Salak

**DECIO ARISTA ESTANISLAU D. C. RIBEIRO. Study on Soil Physical Characteristic of Snake Fruit Plantation Post Merapi Eruption at Banyuadem Village, Srumbung Sub-District, Magelang District. Advisor committee: SARI VIRGAWATI and SETYO WARDOYO.**

### **ABSTRACT**

*Nglumut snake fruit* is one of the leading commodity from Srumbung, Magelang. As a result of the eruption of Mount Merapi in 2010, the production of *nglumut snake fruit* decreased *snake fruit* the study was aimed to examine soil the physical properties on plant after the 2010 eruption of Merapi at Banyuadem Village Srumbung Sub District, Magelang Resency. The study was conducted from May until September 2012. The research used survey purposive and descriptive methods. Soil sampling  $\pm 20$  cm depth representing soil post eruption, and 20-50 cm depth representing soil before eruption. The observed parameters were texture, bulk density and specific gravity, permeability, porosity, organic matter. The soil physical property was compared between before and post eruption. The soil permeability post eruption has decreased in some places and increased in other places. The soil texture before eruption was dominated by the sand fraction, whereas post eruption was dominated by silt. The soil fraction, the porosity post eruption was lower than before the eruption that was due to the addition of new material from the eruption of Merapi, s.i.e. coarse material volcanic ash. Merapi eruption has caused some changes in the physical properties of the soil as well as decreasing in the production of *snake fruit* in Banyuadem village.

Keywords : Soil physical properties, Eruption, *snake fruit* Nglumut, *snake fruit* production.