

FAJAR PRAMONO. Kajian Dampak Erupsi Merapi 2010 Terhadap Kualitas Tanah Di Desa Sindumartani Kecamatan Ngemplak Kabupaten Sleman. Dibawah bimbingan **IR. DIDI SAIDI, M.SI** dan **DR. IR. DJOKO MULYANTO, MP.**

INTISARI

Penelitian Kajian Dampak Erupsi Merapi 2010 Terhadap Kualitas Tanah Di Desa Sindumartani Kecamatan Ngemplak Kabupaten Sleman menitikberatkan pada pengaruh luapan air sungai Gendol terhadap beberapa sifat fisik tanah, kimia tanah dan kualitas tanah, yang dilakukan dengan menghitung indeks kualitas tanah menurut Mausbach & Seybold (1998).

Penelitian ini menggunakan metode survey dengan pengambilan sampel secara purposif. Pengambilan sampel tanah berdasarkan daerah luapan air sungai Gendol yaitu Zona I (pada jarak 0 - 102,28 meter dari sungai), Zona II (pada jarak 102,28 - 201,25 meter dari sungai), dan Zona III (pada jarak 202,25 - 301,95 meter dari sungai). Analisis sampel tanah meliputi berat volume (BV), porositas, kemantapan agregat, pH H₂O, pH KCl, nitrat, N total, C organik, P tersedia, K tertukar, sedangkan kedalaman akar berdasarkan pengamatan lapangan.

Hasil penelitian menunjukkan adanya pengaruh luapan air sungai Gendol terhadap kualitas tanah, dengan indeks kualitas tanah untuk Zona I sebesar 0,30; Zona II sebesar 0,37; dan Zona III sebesar 0,55. Tingginya indeks pada Zona III ditunjang oleh beberapa sifat fisik dan sifat kimia yang baik antara lain, kemantapan agregat, N total, dan C organik. Sedangkan indeks kemiripan parameter fisik dan kimia menunjukkan perbedaan pada zona tertentu.

FAJAR PRAMONO. Impact Assessment Study of Merapi eruption 2010 Of Soil Quality In Sindumartani Ngemplak Sleman Regency. Advisor committee **IR. DIDI SAIDI, M.SI and DR. IR. DJOKO MULYANTO, MP.**

ABSTRACT

Impact Assessment study of Merapi eruption 2010 Of Soil Quality In Sindumartani Ngemplak Sleman Regency focused on the influence of Gendol river overflow the quality of soil, which is done by calculating an index of soil quality by Mausbach and Seybold (1998).

This study uses survey with purposive sampling. Soil sampling by river overflow areas Gendol namely Zone I (the distance from 0 to 102.28 meters from the river), Zone II (at a distance of 102.28 to 201.25 meters from the river), and Zone III (at a distance of 202, 25 to 301.95 meters from the river). Analysis of soil samples include bulk density (BV), porosity, aggregate stability, pH H₂O, pH KCl, nitrate, total N, organic C, available P, exchangeable K, while the depth of the root based on field observations.

The results showed the influence of river overflow Gendol the quality of soil, the soil quality index for the Zone I of 0.30; Zone II of 0.37, and 0.55 for Zone III. The high index in Zone III is supported by several physical and chemical properties of good among others, aggregate stability, total N and organic C. While the similarity index of physical and chemical parameters showed differences in the particular zone.