

PENCITRAAN RESISTIVITAS 2D BAWAH PERMUKAAN TANAMAN JATI (Tectona Grandis Sp.) MENGGUNAKAN KONFIGURASI WENNER (STUDI KASUS: LAHAN TANAMAN JATI DI BELAKANG GEDUNG MIPA UNSOED)

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Author Order	1 of 2
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Abstract	<p>Two dimensional (2D) resistivity survey was conducted on a teak field behind the MIPA building of UNSOED, Purwokerto. The purpose of this research was to know the subsurface condition of the teak field, so that can also determine the suitability of the field to teak plant. The survey was conducted using resistivity-meter NANIURA type NRD 22S. The type of configuration was used is Wenner, with a minimum electrode spacing of two meters and maximum of ten meters. The measurement conducted for three tracks, namely LJ1, LJ2 and LJ3 with length of them self are 64 meters, 70 meters, and 40 meters, with relatively flat topography at an altitude of 110 meters above sea level. Data processing was done using RES2DINV 3.57.37 software that the result is a 2D-image of subsurface resistivity. The depth is obtained for each track is 5.37 meters. Interpretation of hydrogeology refers to local geological information. The result of interpretation is digitized using Arc-View GIS 3.3 in order to obtain final result that is hydro-geological images.</p> <p>The result of research show that at the LJ1 and LJ3 contain two layers of rock, there is sandy soil and clayey sand. At the LJ2 track there are three layers, sandy soil, clayey sand, and sand. The resistivity value of sandy soil is 79.4 Ωm to 193.0 Ωm, resistivity of clayey sand is 18.9 Ωm to 83.4 Ωm and resistivity of sand is 15.7 Ωm to 31.8 Ωm. The more downward tendency of resistivity value is more smaller, which indicates more water content. The results of research show that the layers of rock which is found in the land of teak is sandy soil, clayey sand and sand. According to the reference, the entire layer of rock is less than optimal to plant teak. Keywords: 2D-resistivity, land of teak plant, sub surface, Wenner configuration.</p>
Publisher Name	BERKALA FISIKA
Publish Date	2012-03-29
Publish Year	2011
Doi	
Citation	
Source	BERKALA FISIKA
Source Issue	Vol 14, No 1 (2011): Berkala Fisika
Source Page	1-10
Url	https://ejournal.undip.ac.id/index.php/berkala_fisika/article/view/2796/pdf
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