

POTENSI HUMIN HASIL ISOLASI TANAH HUTAN DAMAR BATURRADEN DALAM MENURUNKAN KESADAHAN AIR

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Abstract	<p>The hardness water is not good for consumption because can resulted kidney disease One of the method which can be used to degrade rodamin B is adsorption use humin. Humin is biggest fraction of humat materials that insoluble in acid, alcohol and base. The ability of humin for adsorp Ca^{2+} and Mg^{2+} caused by the existence of OH phenolic and carboxylic functional group which can interacted with metal ion. The aim of this study is to recognize humin characteristic from the soil of Baturraden resin forest, and ability of humin from the soil of Baturraden resin forest for decreasing the hardness water. Humin was isolated from the Baturraden resin forest and purified use mixture of HCl:HF. Purified humin is characterised such as identify of functional group of humin, stipulating of water content, stipulating of dust content, obstetrical stipulating of total acidity content, carboxylic and OH phenolic functional group. Decreasing of hardness water was analysed with variation time 0, 10, 30, 60, 180, 300, 600, 900, 1200 dan 1440 minute. Humin that isolated from Baturraden resin forest have characteristic such as water content 16.6199 %; dust content 9.2050 %; total acidity content 475 cmol / Kg; carboxylic rate 200 cmol/Kg, and OH phenolic rate 275 cmol/Kg. Decreasing of hardness water in Darmakradenan, Ajibarang subdistrict, Banyumas regency was 54,745 % with equilibrium time at 600 minute (10 hours).</p>
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