

Potensi Daun Trembilungan (*Begonia hirtella* Link) sebagai Antibakteri dan Antifungi

Title	Potensi Daun Trembilungan (<i>Begonia hirtella</i> Link) sebagai Antibakteri dan Antifungi
Author Order	of
Accreditation	
Abstract	<p><i>Begonia hirtella</i> leaf are commonly used by people in mountainous areas to treat itchy due to insect bites and skin infection. This study aims to (1) determine proper solvent extract of <i>B. hirtella</i> leaf on antibacterial activity of <i>S. aureus</i> and <i>E. coli</i> and on antifungal activity of <i>C. albicans</i> (2) determine the lowest concentration of leaf extract of <i>B. hirtella</i> that indicate the formation of inhibition zone (3) know the content of bioactive compounds contained in each leaf extract of <i>B. hirtella</i>. The method used in this study is experimental with completely randomized design (CRD). The treatments were type of solvents (n-hexane, ethyl acetate, ethanol and water) and a serie of the ethyl acetate extract concentration of 500 ppm, 450 ppm, 400 ppm, 350 ppm, 300 ppm and 250 ppm against <i>S. aureus</i>, <i>E. coli</i> and <i>C. albicans</i>. Data were analyzed using analysis of variance (Anova) and the significant differences between the treatments were analyzed by Duncan test at 95% confidence level. The result showed that each solvent extracts affect microbes growth with a highly significant difference $p < 0.05$. Solvent extracts that have the best inhibitory zone is ethyl acetate against <i>S. aureus</i> with an average diameter of inhibitory zone 13.75 ± 1.26 mm. Increasing concentrations of ethyl acetate extract of 250 ppm to 500 ppm increase inhibition zone against microbes. The lowest concentration that show inhibition zone was 300 ppm. The formation inhibition of zone on microbes growth happened due to their compounds in the extract. Extract of n-hexane contains stigmasterol, ethyl acetate contains neophytadiene, while the ethanol extract contains ethyl palmitate</p>
Publisher Name	Fakultas Biologi Universitas Jenderal Soedirman
Publish Date	2017-08-27
Publish Year	2016
Doi	DOI: 10.20884/1.mib.2016.33.3.309
Citation	
Source	Majalah Ilmiah Biologi BIOSFERA: A Scientific Journal
Source Issue	Vol 33, No 3 (2016)
Source Page	126 - 133
Url	
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