The Protein Content and Protease Activity of Local Green Fly, Chloroprocta sp., Maggot Crude Extracts

Publons ID	38122254
Wos ID	WOS:000472799700017
Doi	10.1063/1.5097486
Title	The Protein Content and Protease Activity of Local Green Fly, Chloroprocta sp., Maggot Crude Extracts
First Author	
Last Author	
Authors	Anjarwati, DU; Hidayati, R; Kristiantoro, D; Peramiarti, IDSAP; Asnani, A;
Publish Date	2019
Journal Name	1ST INTERNATIONAL CONFERENCE ON MATERIAL SCIENCE AND ENGINEERING FOR SUSTAINABLE RURAL DEVELOPMENT
Citation	
Abstract	Maggot extracts of local green flies, Chloroprocta sp., is a potential anti-biofilm candidate who can inhibit biofilm formation, break down the biofilm matrix, and reduce the viability of embedded Staphylococcus epidermidis. One component of S. epidermidis biomatrix is protein thus protease activity is presumably needed for biofilm detachment. Hence, this study aimed to analyze the protease activity and the protein content of maggot crude extracts from green flies, Chloroprocta sp. A quantitative enzymatic assay of protease activity with casein as a substrate was performed with some modifications. The protein content was measured with the Lowry method at a wavelength of 750 nm with tyrosine as a standard. The results revealed that the crude extracts from 0.425 grams maggots /mL PBS has protease activity of 4.875 U/mg and protein content of 29.252 ppm. These results indicated that the crude extract of maggot from local green flies, Chloroprocta sp. has protease as the active compound which could potentially be an anti-biofilm.
Publish Type	Book in series
Publish Year	2019
Page Begin	(not set)
Page End	(not set)
Issn	0094-243X
Eissn	
Url	https://www.webofscience.com/wos/woscc/full-record/WOS:000472799700017
Author	Dr Dr DWI UTAMI ANJARWATI, M.Kes