

AKTIVITAS TRIPSIN-LIKE DAN KIMOTRIPSIN-LIKE PADA IKAN SIDAT TROPIK Anguilla bicolor McClelland

Title	AKTIVITAS TRIPSIN-LIKE DAN KIMOTRIPSIN-LIKE PADA IKAN SIDAT TROPIK Anguilla bicolor McClelland
Author Order	2 of 3
Accreditation	3
Abstract	<p>The ability of eel (<i>Anguilla bicolor</i> McClelland) to digest feed protein is highly dependent on the alkaline proteases in the intestine which are trypsin-like and chymotrypsin-like. Information on the trypsin-like and chymotrypsin-like activities is needed to understand the digestive capacity of eels to ingest feed proteins. However, the information on this subject is insufficient. This research aimed to determine the activity of trypsin-like and chymotrypsin-like of eel on the different body weight and incubation temperature. Three groups of eel stadia were selected to represent different body weight, i.e., elver, yellow eel, and pre-silver stadia, and three different enzyme incubation temperatures of 30, 40, and 50°C was applied. The trypsin-like and chymotrypsin-like activity were measured using a spectrophotometry method. The results showed the activities of trypsin-like and chymotrypsin-like were significantly different between the body size and the intestine segment ($P < 0.05$). The highest trypsin-like and chymotrypsin-like activities were found in the elver stadia approximately 41.25 ± 0.898 g, in the anterior part of the intestine ($P < 0.05$). The incubation temperatures were not differed significantly ($P > 0.05$). This study showed the eel had a higher digestive capacity of protein at elver stadium, mainly occur in the anterior part of the intestine, whereas, the temperature ranges from 30 to 50°C had no significant effect on the enzyme activities.</p>
Publisher Name	Fakultas Biologi Universitas Jenderal Soedirman
Publish Date	2018-03-01
Publish Year	2018
Doi	DOI: 10.20884/1.sb.2018.5.1.660
Citation	
Source	Scripta Biologica
Source Issue	Vol 5, No 1 (2018)
Source Page	55-60
Url	https://journal.bio.unsoed.ac.id/index.php/scriblio/article/view/660/pdf
Author	HANA, S.Si, M.Si