Identification and Prevalence of Parasites Isolated from Eels (Anguilla bicolor) Along Migrated Pathway at Serayu River, Central Java

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| Author Order | 3 of 3 |
| Accreditation | 2 |
| Abstract | Eels especially Anguilla bicolor has been a major capture species along the migration pathways at Serayu river for both consumption and aquaculture purposes. Yellow eels always exhibited a strong and health when they were caught. However, mass mortalities always found during holding and culture period. Parasites was one of the obstacles of the eels aquaculture. The aims of this study were to observed the health status and parasites investation of eels along the migration pathway. Three capture stations namely Adipala, Sampang and Purwojati were appointed as a sampling sites. Thirty captured eels ranging from 25.48 cm $\tilde{A}e\hat{A}=$ 28.92 cm were randomly selected at each sites during October to December 2018.Ninety eel samples demonstrated in a good health. Ectoparasites observation discovered that Trichodina was the predominant parasites. Further indentification revealed that they were belongs to T. matsu, T. domerguei and T. jandarica with prevalence rate ranged from 40% to 90%. Whilst Vorticella found at low prevalence and intensity namely; 6.7% and 0.2 respectively. The endoparasites nematodes obtained were Anguillicola and Spirocamallanus with prevalence rate and intensity 3.3%-6.7%, 0.03 $\tilde{A}e\hat{A}\in \hat{A}^{\circ}$ 0.06 and 13.3%, 0.13 respectively. Molecular identification of nematodes demonstrated that they were closely related to Anguillicola crassus and Spirocamallanus philppinensis with similarity 95.40% and 97.93% respectively. There were no genetically differences between two species Anguillicola crassus from Adipala and Sampang. From this study it can be seen that Eels migrated upstream were in a good heatth. Trichodina, Vorticella, Anguillicola and Spirocamallanus found infestated eels during upstream migration. |
| Publisher Name | Fisheries and Marine Science Faculty - Jenderal Soedirman University |
| Publish Date | 2019-07-30 |
| Publish Year | 2019 |
| Doi | DOI: 10.20884/1.oa.2019.15.1.689 |
| Citation | |
| Source | Journal Omni-Akuatika |
| Source Issue | Vol 15, No 1 (2019): Omni-Akuatika May |
| Source Page | 81-92 |
| Url | http://ojs.omniakuatika.net/index.php/joa/article/view/689/240 |
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