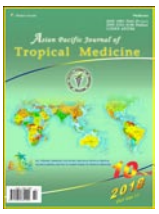

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Identification of filaria species with microscopic methods in Bintan Island, Province of Riau Islands

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ABSTRACT **Objective:** The regency of Bintan Island is on the coast, mangrove forests area, so it becomes a potential area for breeding places of filariasis vector. This study aims to determine the number of filariasis cases based on age, sex, occupation and microscopic species identification of microphilaria species. **Methods:** Blood samples were collected for identification by microscopics with thick blood preparation and Giemsa staining. **Results:** Total of 20 blood samples were collected and tested. Filariasis case in Bintan Regency Riau Islands Province were founded in 3 Districts including Bintan Bay (42%), Seri Lobam (14%) and the highest filariasis incidence rate was in TelukSebongSub-district (44%). Filariasis cases were more common in males than females. The age group of 15 -60 years suffered most from filariasis. More filariasis patients work outside the room than in indoor work. Of the 20 peripheral blood samples, 3 (15%) were found positive for filaria and 17 (85%) negative. The species showed the cause of filariasis is *Brugia malayi*, no other specie was found. Factors that affect the high incidence of filariasis includeed climate, geography, biological environment, forests, beaches, swamps, vectors (mosquitoes), work, knowledge, attitude and behavior. **Conclusions:** *Brugia malayi* is usually found in coastal areas, river basins, swamps and rice fields.

Keywords: Filariasis; Microfilaria; Giemsa; *Brugia malayi*; Bintan Island

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