ABSTRACT
The population ecology of saltwater crocodile (Crocodylus porosus) in Arguni Bay, Irian Jaya was studied during 1990-1998 period. In this study, the habitats were divided into five types (1. dominant vegetation Nypa fruticicans and primary forest; 2. primary forest with floating vegetation Hanguana malayana along the river bank; 3. dominant vegetation N. fruticicans; 4. mangrove; 5. lake with dominate vegetation N. fruticicans and mangrove, along the lake bank was covered by Barringtonia spp, Ficus spp and Callophyllum spp, whereas almost at lake offshore was covered by lotus floating plant). Results of GLM statistical analysis showed there were no significant (p>0.05) interaction between habitat type and survey time, neither on the habitat type and time of survey. The Duncan test on habitat showed a grouping in three categories (A, AB and B) in which habitat 5 was at first ranking. However, there was no grouping on time of survey. From this study it was concluded that mangrove habitat was essential for C. porosus life and used as a nursery ground.

Key words: statistic analysis, trend population, habitat, Crocodylus porosus, Irian Jaya.