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Contribution to a study of *white spot syndrome virus*'s vectors for optimization of the biosecurity of an aquaculture farm: Case of Aqualma farm Mahajamba

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White spot syndrome virus (WSSV) has emerged as the main pathogen of shrimp that has caused epizootics and serious consequences for shrimp aquaculture around the world. In Madagascar, this epidemic has led to the closure of many shrimp farms and the conversion of shrimp farms into other activities. Being vectors of WSSV, the abundance and composition of megabenthic fauna such as crabs are recorded at four stations located at the five farms of Aqualma. The sediment is also studied to determine the correlation between fauna and their environment. Crab species are distributed unevenly on the farm; characterized as dominant species with the Jolly, *Metopograpsus* sp. and *Neosarmatium meinerti* classification, cover more than half of the crabs present in the Mahajamba farm with 36.73% and 17.88% respectively in terms of relative abundance. *Scylla serrata, Uca annulipes, Uca rapax, Uca spp1, Uca spp2* are only influential species whose relative abundance varies from 5.88% to 13.88%. Some of these species correlate with each other while others are not. Only Uca crabs have a negative correlation with their environment, where their presence in the basins is strongly conditioned by a few parameters. The results showed a higher risk of horizontal transmission of WSSV from wild animals to the receptor ecosystem of the catchment area if the presence of the virus is detected in the megabenthic fauna and if biosecurity measures faults in the introduction of these animals into the breeding area.

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