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RESEARCH REPORTS

Sustainable Aquaculture for a Secure Future

Title: Assessment of the Trash-fish Diet for Snakehead Aquaculture in Vietnam: Species Composition and Chemical Characterisation

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Abstract: Traditional culture of snakehead (*Channa striata* (Bloch 1793) and *Channa micropeltes*, (Cuvier 1831), Channidae) in Vietnam have been based on capture of snakehead fingerlings from the wild and feeding them with chopped trash-fish also taken from the wild. From August to October 2008, freshwater trash fish samples (3 kg composite samples) were collected from three fish distribution sites at Chau Doc, Thoai Son and Chau Thanh districts in An Giang province, in the Mekong Delta, Vietnam. The species composition was determined along with the size frequency, sources, and chemical composition of the freshwater trash-fish used for snakehead aquaculture. Thirty-three species of freshwater fish were identified in the freshwater trash-fish samples, 12 of which were juveniles of commercially important species. Marine trash-fish samples were also collected from the same distribution sites for analysis of chemical composition and product freshness. Chemical composition of freshwater trash-fish indicates their protein levels to be nutritionally adequate for snakehead aquaculture. Marine trash-fish showed high total volatile base nitrogen (TVB-N) values, compared to freshwater trash-fish, indicating that they are not fresh. The fish stocks of these freshwater trash-fish species should be assessed and the inland fishery should be managed properly, especially during the flood season.

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