

Berichte aus der Agrarwissenschaft

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**Feed intake and feed utilisation of juvenile milkfish
(*Chanos chanos* (Forsskål, 1775)) in commercially
managed ponds in the Philippines**

D100 (Diss. Universität Hohenheim)

Shaker Verlag

Aachen 2004

Bibliographic information published by Die Deutsche Bibliothek

Die Deutsche Bibliothek lists this publication in the Deutsche
Nationalbibliografie; detailed bibliographic data is available in
the internet at <http://dnb.ddb.de>.

Zugl.: Hohenheim, Univ., Diss., 2004

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Printed in Germany.

ISBN 3-8322-3263-X

ISSN 0945-0653

Shaker Verlag GmbH . P.O.BOX101818 . D-52018 Aachen

Phone: 0049/2407/9596-0 . Telefax: 0049/2407/9596-9

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Aquaculture has become the fastest growing food production sector world-wide with yearly growth rates of more than 10%. Southeast-Asia has been at the forefront of this growth. In the Philippines, milkfish is the most important cultured fin-fish species and makes up more than 60% of the total aquaculture production. In 2000 more than 204,000 t of milkfish were produced here. A significant part of this production comes from commercial semi-intensive brackishwater ponds of one to 30 ha area. The growth of the cultured fish is based on natural food, which is enhanced through pond fertilisation. Supplemental feed is sometimes provided in addition. Due to competition from other high priced-fish and shrimp aquaculture in recent years, the pond area under milkfish production decreased significantly. However, the milkfish is the only brackishwater-aquaculture species that supplies the local population with high quality protein. Available literature provides only limited information on nutrition cycling in small scale commercial milkfish farms. The aim of this study was therefore to investigate feed quality, feed intake, and utilisation under practical conditions in such milkfish farms.

Three commercial fish farms were monitored between September 1996 and August 1998 on the island of Panay, Philippines. Laboratory feeding and respiration experiments were done in a computer controlled flow-through respirometer at the Southeast Asian Fisheries Development Center-Aquaculture Department, Iloilo, Philippines. The quality and quantity of feed consumed by milkfish in the ponds were determined with the aid of stomach content models based on the observed values. The data from the respiration unit were used to study the utilisation of the given feed and set up a total energy budget for milkfish.

The discussed results prove that supplemental feeding can be reduced or abandoned, if fertilisers are used optimally in semi-intensive milkfish farms. An optimisation of inputs to reduce costs in the pond culture of milkfish are therefore possible.