

At the World Aquaculture 2011, Natal, Brazil

First results in use of B-safe feed additives in tilapia

The first results on the use of B-safe feed additives (Neovia, France) were presented by Pascal Boisot, Phong Huy Dao, Gaëlle Benzoni, and Alain Guyonvarch. They described the findings of a study conducted at the IN VIVO NSA research centre in Vietnam. The use of B-safe resulted in a significant increase in growth (+9.5 to +10.8%) and a significant reduction of feed conversion ratio (-11% to -12%).

B-safe is a patented cation exchanged clay and is one of five products in feed additives range of IN VIVO NSA group, a French leader in premixes, mineral supplements, nutritional specialties and salt licks. Cation exchanged clays have been reported to be an effective antibacterial material and the interest as a growth promoter factor has been reported in terrestrial species such as poultry. The authors indicate that to their knowledge, the interest of cation-exchanged clays has never been studied in fish species.

The study involved 1,920 fish (*Oreochromis niloticus* x *Oreochromis mossambicus*) of average initial weight of 27.2+2.6g, divided in 3 groups of 640 fish. Each group was subdivided in 8 cages of 2.5 m³ (80 fish/cage). Cages were placed in a fresh water pond. Fish were fed to apparent satiation for 38 feeding days with a commercial type feed (protein:31%, fat: 4.5%, fibre: 4.5% and starch: 20%) with or without a patented cation-exchanged clay. Individual body weights were controlled at the start and at the end of the study. Daily feed consumption and daily mortality per cage were also recorded.

The authors said that despite the additional cost of B-safe, feed cost to produce 1 tonne of fish was reduced by about 10% at the two doses. In conclusion, results of this study demonstrate that B-safe can have a

zootechnical and economical interest in growing tilapia and that a dose of 2kg/tonne was optimal in the environmental context of this study.

Table 1. Main results (Mean± standard deviation).

	Group 1 : Control	Group 2 : Bsafe SD 2kg/ tonne	Group 3 : Bsafe SD 3kg/tonne	P-Value
Initial weight	27.3 + 2.6	27.0 + 2.7	27.2 + 2.6	ns
Final weight (g)	129.0 +20.8 ^a	138.3 +22.2 ^b	139.4 + 21.6 ^b	<0.001
Daily weight gain (g/day)	2.08 + 0.15 ^a	2.28 + 0.10 ^b	2.31 + 0.13 ^b	<0.001
Mortality (%)	2.03 + 1.48	1.72 + 1.33	1.09 + 1.24	ns
Daily feed consumption per fish (g)	3.50 + 0.10	3.45 + 0.10	3.46 + 0.09	ns
FCR	1.71 + 0.11 ^b	1.53 + 0.08 ^a	1.51 + 0.08 ^a	<0.001
Feed cost to produce 1 tonne of fish (Euro)	537	483	481	

ns: non significant
^{a,b}: means with common superscripts are not significantly different from each other at the 5% level

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Better protein and energy with fermentation product

Research conducted by Dr Wutiporn Phromkunthong, Associate Professor and Head of the Kidchakan Supamattaya Aquatic Animal Health Research Center at the Prince of Songkla University, Thailand on the effect of DVAQUA® on the ingredient digestibility in tilapia was presented by Dr. Brian Hunter, Diamond V Asia.

The basis for the research study was to determine if adding a commercial nutritional fermentation product (DVAQUA) to feed mash, before pelleting, to juvenile sex-reversed tilapia would increase digestibility and possibly increase opportunities to formulate less expensive diets. Diamond V, headquartered in Cedar Rapids, Iowa, USA, is the world's leading supplier of nutritional fermentation products used to optimize digestive function and nutrition key to animal and aqua health, productivity, efficiency and profitability.

Hunter stated, "The value to the industry is to show how DVAQUA can help increase feed digestibility, and permit lower cost formulations. This is especially important now; since raw material prices have sky rocketed these past two years, and has affected the profitability of feed millers and farmers."

Hunter noted that further research is planned to determine the effects of DVAQUA on improving growth and feed efficiency in juvenile sex-reversed tilapia. See page 26 for full article. More information: Web: www.diamondv.com.

Skretting Australasian Aquaculture 2012 (AA12)



This is the fifth biennial conference and trade show for the Australian and Asia Pacific aquaculture industry. Pheroze Jungalwalla, Chair, Skretting Australasian Aquaculture 2012 said, "Developments in research continue to lead to improvements in aquaculture production.

Whether it is genetic improvement of farmed species, advances in health management, increased production efficiency, or higher product quality for consumers - the aquaculture industry continues to develop innovative and sustainable practices".

Skretting Australasian Aquaculture 2012 'The Next Ten Years' will provide a valuable opportunity for presentations from academia, researchers and industry, facilitating the meaningful exchange of information amongst the aquaculture and related industries and inspiring all participants to contribute to the future. AA12 will provide a forum for education, knowledge transfer, and development of new skills along with professional development of all sectors within the industry. It is also to keep up with global developments; immerse in challenging presentations, conversations and debates with thought leaders, and network with aquaculture champions.

The conference and trade show will be held from 1- 4 May 2012 at the Melbourne Convention & Exhibition Centre, Victoria, Australia. Organisers have issued a call for papers with a deadline of 15 September. Online submission is encouraged to the conference website: www.australasian-aquacultureportal.com.