BIO-BLOK® INTELLIGENT FIXED FILM BIOLOGICAL FILTER MEDIA

3.1.4. Evaluation of BIO-BLOK® 150 HD

The result of the 4 tests comparing the BIO-BLOK® 150 HD with the Bionet 200 (GermanyI as filter medium has given occasion for the following conclusion:

Specific growth rate and gross feed conversion ratio

Using BIO-BLOK® 150 HD as filter medium, the result is a significantly higher growth rate (SGR) and a lower gross feed conversion ration (FCR).

Test no. 1 (start)		
	SGR	**FCR**
BIO-BLOK® 150 HD	0.46%	2.06
Bionet 200	0.34%	4.29

Test no. 3 (maximum load)		
	SGR	**FCR**
BIO-BLOK® 150 HD	1.45%	1.45
Bionet 200	1.28%	1.67

Decomposition of ammonia: NH_4^+-N converted per stated m2 per day

Test no. 2 (normal load)	
BIO-BLOK® 150 HD	0.20 gm NH_4^+-N per m2
Bionet 200	0.15 gm NH_4^+-N per m2

VAT Registration Number 491201374
HEAD OFFICE: 4 Mill Hill, Gamlingay, Sandy, Bedfordshire SG19 3LW Contact details 01767 651151-
Fax: 01767 651269 e-mail: andygostling@cougarwastewater.co.uk

Test no. 3 (maximum load)	
BIO-BLOK® 150 HD	0.447 gm NH_4^+-N per m2
Bionet 200	0.386 gm NH_4^+-N per m2

Speed of starting and operation

BIO-BLOK® 150 HD has proven to be quicker with regard to starting of the nitrification processes (test No. 1) and with regard to keeping lower NH_4^+ and NO_2^- values at normal load as well as at increasing load.

Operating economy

With regard to commercial aquaculture, the most important result of this comparative test was the better specific growth rate (SGR) and lower gross feed conversion ration (FCR) in the system with BIO-BLOK® 150 as filter medium in test No. 3 with maximum load on the biofilters.

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