STUDY ABOUT SUPPEMENTARY FEEDING OF CARP WITH GRANULATED MIXED FEEDS

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Abstract

For achieving of high fish production on hectare is necessary, unless natural feed, to use supplementary feed sources.

Usually, in classical farms there are administered supplements consist in cereal meal and its subproducts and groats.

A modern reasonable feed implicates using of granulated feeds that correlate nutrient viewpoint with species-age-category requirements of grown fish and it lends oneself, for administering, to aquatic medium.

Our investigation were effectuated on two lots of one summer old Cyprinus carpio sapling, during 45 days period(26 of July-10 of September).

The analysed data served for prominence of weight growing, feed input and survival of fish from both lots(voucher lot –LM and experimental lot-LE),wich was feeded with granulated feed with 28%(LM) and 38%(LE) protean value.

In the end of experiment, on experimental lot were obtained, comparative to voucher lot, a 22.8% biger corporal weight, a / shorter input index and a 17 percent points beter viability ,results wich mark out the advantages of using in carp feeding of granulated feeds with high protean value.

Key words: aquaculture, input, granulated, growing, proteins

MATERIAL AND METHOD

The esperiments were effectuated on two lots (Lm and Le) composed both from 30 Cyprinus carpio sapling exemplars. Fish was grown in submersible cages.

The supplementary feed was represented by granulated nutriments with a 28,5% protean level on control lot, respective 38% on experimental lot.

The structure and nutrient value of feeds administered on these two fish lots are presented in table 1.

Table 1
The structure and nutrient characteristics of granulated mixed feed used on feeding program on LM and LE lots

Specification	UM	Lot	
		LM	LE
ED	Kcal/kg	3270	3455
PB	%	28,5	38
Met+cist	%	0,95	1,34
Lizine	%	1,71	2,54
Calcium	%	0,69	1,33
Available phosphorus	%	0,48	0,83
Maize	%	30	10
Soya groat	%	28	30
Sunflower groat	%	3	2,9
Fish flour	%	15	31,1
Wheat bran	%	20	20
Soya oil	%	2	3,9
Premix	%	1	1
Cement(binding)	%	1	1

RESULTS AND DISCUSSIONS

Data registered during experiment provided informations about some indicators, as: weight evolution, feed input indicator, survival.

On experimental lot,where was used a granulated mixed feed with 38% protean level, was reached on 45 days old a corporal weight with 23% biger than control lot, where was used a granulated mixed feed with 28.5% protean level (tab 2).

Concerning to feed input it can be observed from table 3 that on experimental lot,where was used granulated feed with 38% protean level,the feed input indicator was with 7% smaller than control lot,where was used a granulated feed with 28.5% protean level.

Concernig to fish survival (in good relation with their health situation) it can affirm that it wasn't influenced by feed quality, but just by environment factors, wich were not on optimum limits. On experimental lot the survival rate was with 7 points better than one of control lot (tab. 4).

Table2
Weight increase of fish during all experiment

Medium weight on populating (g)		Medium weight on 45 days old (g)		
LM	LE	LM	LE	LE/LM %
30	30	74,11	91,5	123

Table 3
Feed input indicator registered on fish from both lots

Lot	Feeded days number	Dailymedium input (g)	Daily medim increase (g)	Input indicator (kg feed/kg increase)
LM	45	2,65	0,98	1,26
LE	45	3,27	1,35	1,18

Table 4
The mortality evolution of fish from both lots

	Losses on experimental period (exemplars)		Mortality (%)	
Period (days)	LM	LE	LM	LE
Populating	0	0	0	0
0-15	1	1	4	4
15-30	3	1	14	4
30-45	4	4	23	21
Total period	8	6	47	31

COCLUSIONS

The analysis of results obtained in our experiments allows us to declare that feed protean level and its granulated presentation mode, doubtless influence weight increase, daily medium increase and feed input on fish as well.

Thus, in the end of experiment, on experimental lot, where was administered feed with 10.5% protean level more than on control lot, it was registered a medium corporal weight with 17.39 g heigher than control lot.

Daily medium increase attained on experimental lot fish was with 0.37 g higher than control lot, wich determined the achievement of a feed input indicator with 7% smaller on experimental lot than control lot.

Survival percent of fish, easy out of tehnological limits due to big temperature variations during experiments period, had values with 7% higher on experimental lot than control lot.

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