

THE INFLUENCE OF THE SANITARY CONDITION OF THE POST WINTERING CYPRINIDS ON THE FISHING PRODUCTION FROM THE BRATES FARM

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Key words: health conditions, Brates fish farm, cyprinids, trichodinosis

INTRODUCTION

The development and mass triggering of the illnesses in fish, which may lead to considerable mortalities may take place mainly during and after the wintering of the fish, being well known the fact that the wintering period is one of the most critical ones in their life.

Thus, in conditions consisting of low temperature water, reduction of the intensity of the metabolic processes, secession of feeding and seeing to the energetic needs of the fish based on the accumulated reserves, the setting for wintering under weigh and in unhygienic tanks, unfit for this faze, is vulnerable to attack from pathogenic agents.

Due to the fact that lately there have been recorded losses by mortality in fish populations in the period imediately after wintering, the investigation of the health state of the fish right after taking it out of wintering for the purpose of organising measures of preventing and combating of illnesses.

So, during the period of 2003-2004, researches regarding the health conditions after wintering of the main species of cultured fish at the Brates farm have been done. On this farm some losses of the fish material both during wintering and in the next period have been recorded.

MATERIAL AND METHOD

The fish came form the Brates farm, 15 individuals from each species: common carp (*Cyprinus carpio* L.), silver carp (*Hypophthalmichthys molitrix* Val.) and big head (*Aristichthys nobilis* Rich.), each of them being one year of age, being examined right after the wintering period.

For the purpose of identifying the illnesses, the usual research methods have been utilised (clinical, micological, parasitical exams have been conducted). The results have been analised with the extent degree (E%) and parasitic intensity degree (low, medium, high) (Munteanu and Bogatu, 2003; Roberts, 1989; Schlotfeldt et al., 1995).

RESULTS AND DISCUSSIONS

The results of the reaserch are presented in graphs 1, 2 and 3.

During research there have been 7 diagnosed parasitic diseases. myxosporidiosis, ichthyophthiriosis, trichodiniosis, infestation with *Glosatella*, dactylogiriosis, gyrodactilosis, hepaticolosis.

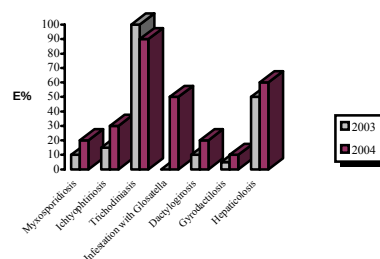


Fig. 1. Diseases and affection degree (E%) at common carp species from Brates farm

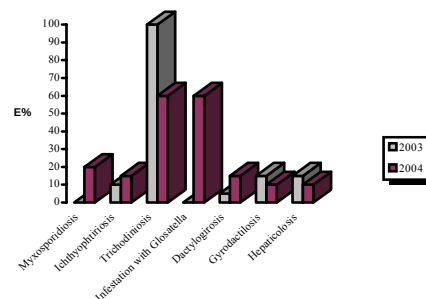


Fig. 2. Diseases and affection degree (E%) at silver carp species from Brates farm

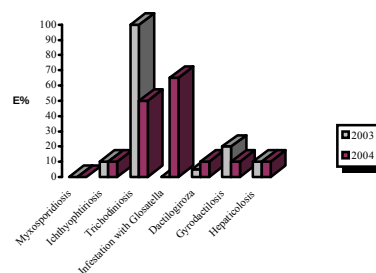


Fig. 3. Diseases and affection degree (E%) at big head species from Brates farm

In years 2003 and 2004, after wintering, trichodiniasis in the first summer common carp, silver carp, big head with a very high degree of extensiveness and intensity has manifested. Also, in common carp, hepaticolosis with a 50% parasitic extent has been diagnosed.

The one summer old cyprinid batch, put forth for wintering in the year 2002 was of 74.809 kg, after wintering, in 2003, losses of 19,52% of the entire batch have been recorded. In the year 2003 a batch of 33.128 kg, consisting of one year old cyprinids has been put for wintering with losses of 15.05% recorded in 2004.

CONCLUSIONS

From the presented data analysis the following may be drawn:

- In the Brates farm, the state of the fish batch after wintering is generally good, except for some years when the conditions for the manifestation of trichodiniasis are met.
- The specific disease of the fish batch during wintering is trichodiniasis with a high degree of extensiveness and intensity.
- Of the species on which parasites have manifested, common carp was the most affected.
- The one summer old cyprinid batch, put forth for wintering in the year 2002 was of 74.809 kg, after wintering, in 2003, losses of 19,52% of the entire batch have been recorded. In the year 2003 a batch of 33.128 kg, consisting of one year old cyprinids has been put for wintering with losses of 15.05% recorded in 2004.
- For the purpose of improving the environmental conditions, it is recommended that the wintering of the fish not be done in growth ponds; if there is no other choice, the population density during wintering should be smaller, and during autumn, measures of preemptive bathing of the fish in antiparasitic solutions and reduction of the organic load of the water from the designated tanks should be adopted.

REZUMAT

Cunoașterea îmbolnăvirilor la pești are o importanță deosebită, bolile reprezentând factori limitativi ai producției piscicole atât prin încetinirea ritmului de creștere și scăderea valorii alimentare, cât și prin mortalitățile pe care le pot provoca. Declanșarea și răspândirea îmbolnăvirilor la pești sunt favorizate de calitatea mediului acvatic din timpul iernării materialului piscicol, de starea fiziologică a acestuia – stare subordonată mediului. Cercetările efectuate în pepiniera Brates la momentul scoaterii de la iernat a materialului piscicol au pus în evidență existența bolilor parazitare provocate de protozoare, viermi și crustacei.

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