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**WATER TREATMENT TEST WITH IONIC ACCELERATOR
WITH PERMANENT NATURAL MAGNETS IN FISH
HATCHERIES IN THE PROVINCES OF SUBIACO AND
ANGUILLARA (RM)**

Report carried out by Ing. Stefano Canese - ENEA - Roma



WATER MAGNETIZATION FOR TREATMENT OF COREGONE EGGS

MATERIALS AND METHODS

The eggs obtained by squeezing from recently dead spawners were dry fertilized with sperm of the same species collected in the same way.

The fertilized eggs of a homogenous batch, after being rinsed, have been divided into two batches of 200.000 eggs each and incubated into two identical bottles of Zug: the only difference was the fact that in one of the bottles the water was subjected to magnetization and the other not.

The magnetization was realized by passing the water through an ionic accelerator with natural permanent magnets of 10.000 Gauss.

The degenerated eggs have been removed from the two bottles almost every day.

RESULTS

DATA	NOTES
18.01.00	About 200.000 fertilized eggs have been sowed in each of the two bottles.
29.01.00	After eggs have been treated homogenously by two operators, who have almost daily removed the degenerated eggs, in the bottle with magnetized water the embryo percentage was 59%, compared to 56% of the other sample.
18.02.00	In the bottle with magnetized water, the embryo percentage was 80%, compared to the 77% of the other sample. The two bell jars appear quite the same, but: <ul style="list-style-type: none">▪ With magnetized water it appears to be less clusters of degenerate eggs and mold;▪ On microscopic examination, the molds appear in equal quantities both in the test and in the sample;▪ In the case of non-magnetized water, the degenerated eggs appear much more wrinkled (they seem dehydrated) than the eggs in the control sample.
27.02.00	In the two bell jars the hatching is almost finished and there are larvae that are still hatching; the quantity of remaining eggs is the same in the two bell jars, but in the bell jar with magnetized water there are less eggs that are about to hatch. According to the operators, this can be interpreted as an advance of hatching equal to 1.5 days in the case of the bottle with magnetized water.

WATER MAGNETIZATION FOR TREATMENT OF FARIO TROUT EGGS

MATERIALS AND METHODS

The eggs obtained by squeezing breeding animals anesthetized with phenoxyethanol were dry fertilized with sperm of the same species collected in the same way.

The fertilized eggs of a homogenous batch (unfortunately the quality was not so excellent), after being rinsed, have been divided into two batches of 12.500 eggs each and incubated into two identical Californian cassettes: the only difference was the fact that in one the water was subjected to magnetization and in the other not. The magnetization was realized by passing the water through an ionic accelerator with natural permanent magnets of 10.000 Gauss.

The degenerated eggs have been removed from the two cassettes almost every day.

RESULTS

DATA	NOTES
13.01.00	About 12.500 fertilized eggs have been sowed in each of the two cassettes.
17.02.00	After eggs have been treated homogenously by two operators, who have almost daily removed the degenerated eggs, in the cassette with magnetized water there appear to be a higher quantity of eggs.
22.02.00	The remaining eggs in the cassette with magnetized water are 9.750; the eggs in the cassette with non-magnetized water are 5.250.
28.02.00	The hatched larvae in the cassette with magnetized water are twice the ones in the cassette with non-magnetized water.

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