THE CORRELATION BETWEEN THE POLARIZATION INDEX AND THE DEGREE OF OOCYTE MATURATION IN THE SIBERIAN STURGEON ACIPENSER BAERII (J.F.BRANDT, 1869)

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Abstract

The need to discover new food sources due to the continuous growth of the world's population is a challenge for today's aquaculture, which is looking for new non-native fish species with high productivity, destined to be grown in recirculating systems. Siberian sturgeon in the culture systems is artificially reproduced by injecting gonadotropic hormone, dosed according to the degree of oocyte maturation which is determined with increased precision by using the method of biopsic puncture.

Depending on the migration of the germinal vesicle inside the fish egg and the water temperature, the degree of oocyte maturation can be determined to achieve a hormonal injection scheme for obtaining the maximum amount of collected eggs for each female. This experiment indicates how to correlate the polarization index with the maturation time of females at different water temperatures, for the elaboration of the injection scheme with different percentage doses of hormones, in order to obtain the maximum number of eggs during the artificial breeding of Siberian sturgeon.

Key words: Siberian sturgeon, polarization index, hormonal stimulation