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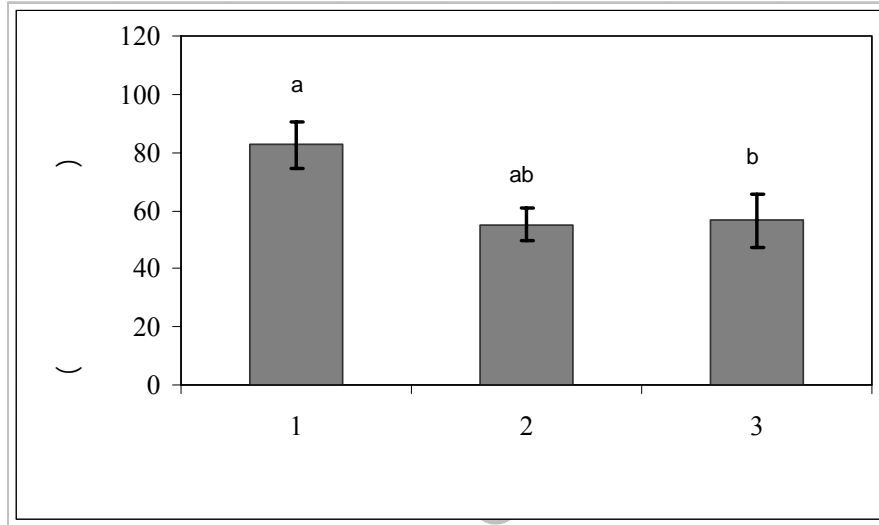
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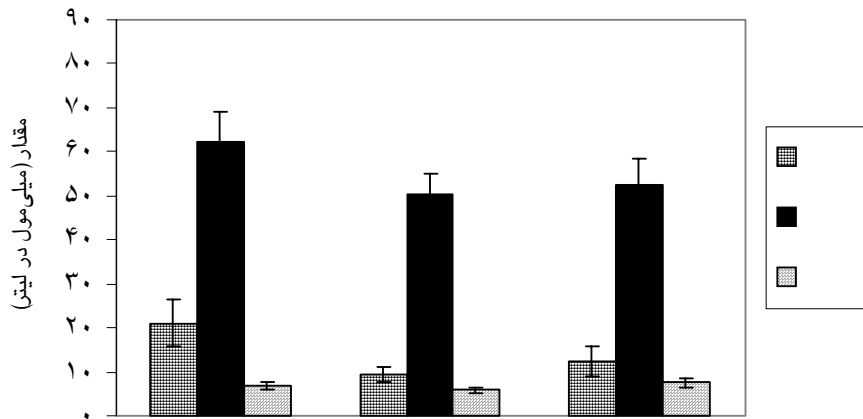
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Seminal Plasma Composition in *Acipenser persicus*: Effect of Stripping Frequency on Ionic Content and Osmolality¹

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Abstract

The seminal plasma composition including ionic content (mM L^{-1}) and osmolality (mOsmol Kg^{-1}), as well as their physiological correlations were studied in *Acipenser persicus* subjected to different stripping frequencies (three times at intervals of 12h after spermiation). The semen of 9 broodstocks was collected by hand stripping 24 hours after induction of spermiation through intramuscular injection of sturgeon pituitary extract. Average values of osmolality, Na^+ , K^+ , Cl^- , Ca^{2+} and Mg^{2+} were 82.56 ± 8.1 , 62.44 ± 6.82 , 6.92 ± 0.88 , 21.11 ± 5.41 , 0.79 ± 0.03 and 0.51 ± 0.03 respectively. The osmolality of seminal plasma at the first stripping was higher than those at the second and third stripping (T-test, $P < 0.05$). The concentrations of monovalent ions were higher than those of divalent ones. (T-test, $P < 0.001$). Changes of Mg^{2+} , Cl^- , and Na^+ were not the same as changes of other ions and osmolality, *i.e.*, the concentrations decreased at second but increased at the third stripping. However, there were no significant differences observed between ion concentrations at different strippings (T-test, $P > 0.05$).

Key words: *Acipenser persicus*, Stripping, Ionic content, Osmolality, Seminal plasma

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