

عنوان مقاله:

Antibacterial activity, antibiotic susceptibility and probiotic use of lactic acid bacteria (LAB) in Persian sturgeon ((Acipenser persicus

محل انتشار:

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خلاصه مقاله:

Growth behavior of five lactic acid bacteria previously isolated from Persian sturgeon (*Acipenser persicus*), were evaluated at different pH, temperature and salt concentrations. Also, antibacterial activity of extracellular products (ECPs) of this LAB were assessed to *Aeromonas hydrophila*. Further, their antibiotic susceptibility was determined with some commonly used antibiotics in aquaculture. In an in vivo work the effect of *Lactococcus lactis* as the supplementary diet was evaluated on growth performance of Persian sturgeon for a period of 56 days. Strong growth of all LAB were seen at 20 and 300 C, as well as 40 and 80 g L⁻¹ NaCl. The LAB ECPs exhibited varied results of antagonism to the *A. hydrophila* with maximum activity observed at temperature between 25 and 300 C Also, the higher antagonistic activity was observed for ECPs of *W. cibaria*, *P. pentosaceus*, and *L. lactis* at pH 9. Both *W. cibaria* and *E. faecalis* were resistance to oxytetracycline, erythromycin, trimethoprim sulfamethoxazol, enrofloxacin, florfenicol, and flumequine, while *L. lactis* was sensitive to oxytetracycline, erythromycin, enrofloxacin, florfenicol. These results showed that use of *L. lactis* can act as a positive probiotic in Persian sturgeon feed via improvement of .fish growth performance, feed efficiency and fish health

کلمات کلیدی:

.sturgeon, health, *Lactococcus lactis*, probiotic

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