Use of salty water sources of desert areas in Iran for aquaculture

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Abstract

In desert areas, there are a lot of salty water sources such as well-river and drainage, due to excessive salinity, they are not suitable for any kind of activity, such as agriculture, drinking and industry. In addition, with the influx of salty water towards freshwaters, the volume of fresh water has also been reduced. The results of these researches show that the salinity of these waters varies from 8-150 ppt. In some parts, there are high-water flow agricultural wells (about 70 liters per second) that, in recent years, due to salinization, no crops and gardens (even pistachios) are used for irrigation, and now it is useless and they are not exploited. The results of this study showed that the lowest and the highest temperature of brackish and saline water sources, regardless of the source of water, varies from 13.5 to 24.5 degrees Celsius. The pH changes in various waters varies from 6. 8 to 8.6. Water hardness fluctuated in most sources of salty water at a range of 1650-4800 mg / l. considering the results of the possibility of culture of rainbow trout, sturgeon, seabream, milk fish, carp, tilapia and Artemia in these waters.

Keywords: saline water sources, halophyte aquatics, desert areas