



Investigation of the Contamination of Ornamental fish of Ahvaz City to Haemorrhagic Bacterial Septicaemia Disorder

Abstract:

Aeromonas are a facultative anaerobe bacteria, gram negative, oxidase, and catalase positive that are found in the Aeromonadaceae family and are classified into two mobile and non-mobile groups. Moving aeromonas are the most common bacteria in freshwater creatures in the world and cause various diseases in fish and other hosts of cold and warm blood. Taxonomy of this genus is complex and among the species of animated aeromonas, *A. hydrophila*, *A. cavia* and *A. veronii* biovar *sobria* are better known. In the fish, these bacteria cause septicemia, hemorrhagic soft tissue rot and furunculosis. In order to isolate and determine the frequency of Aeromonas bacteria in ornamental fish such as Molly, Angel, Gurami, Platy, Oscar and goldfish from the city of Ahvaz with septicemia signs were purchased and using common culture medium TSA in bacterial culture method from lesions of the skin, gills and kidneys were performed in sterile conditions along with the flame by a loop. Initially, they were cultured in four regions, then incubated for 24 hours, and from culture colonies cultured on post-purification media, catalyzed and oxidase tests, and hot staining. The results of the study indicated that the Catalase and oxidase were positive, gram negative and rod-shaped under the microscope. Common biochemical tests such as oxidase, glucose sugar fermentation, growth in the Nutrient Broth absence salt and 6% salt were used to detect aeromonas in the genus. To determine the species of Simon Citrate tests, gas production from glucose, determination of fermentation type (VP), hydrolysis of esculin and tween 80 (lipase), production of Dezaci ribonuclease, gelatinase, indole, fermented sucrose, Arabinose and salisin, decarboxylation of lysine and ornithine and hydrolysis Arginine was used, however, the most definite method for detecting a bacterial species was molecular testing such as PCR. In this experiment, the PCR was investigated using 16srRNA primers and the accuracy of the fish involvement with the aeromonas bacterium was determined. In this study 22 isolate of Aeromonas spp. identified in the studied cases.

Keywords: Fish, ornamental, bacteria, Aeromonas

