**Summary:** In this research study, we isolated *Lactococcus garvieae* from rainbow trout in the middle Black Sea region in Turkey. The disease outbreak occurred at average water temperature of 16.7°C during April-May 2009. Clinically stagnation, inapetence, darkening of the skin, exophthalmia, opacification in the cornea, hemorrhages in the eyes and at the base of pectoral and anal fins, swollen abdomen and wounds on the body surface were observed in infected fish. In necropsy, the existence of accumulation of bloody fluid in the body cavity, ascites in the intestines and the stomach characterized with a yellowish-colored liquid, enlarged and darkening in the spleen and kidney, fading in colour, existence of petechial hemorrhages and enlarged in the liver were detected. In order to isolate the aetiological agent, 20 infected rainbow trout weighting between 50-100 gr were used. As the result of conventional tests used in the identification of the bacteria, the aetiological agent was identified as *L. garvieae*. The isolated *L. garvieae* strain was determined as susceptible to amoxicillin, amoxicillin/clavulanic acid, cephalothin, chloramphenicol, doxycycline, enrofloxacin, pristinamycine and tetracycline.

**Key words:** *Lactococcus garvieae*, phenotypic identification, antimicrobial sensitivity, rainbow trout.