

ANTIBIOTIC SUSCEPTIBILITY OF
***Flavobacterium psychrophilum* ISOLATED FROM RAINBOW**
TROUT (*Oncorhynchus mykiss*) IN TURKEY

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ABSTRACT

This study was conducted to determine antibiotic susceptibility of *Flavobacterium psychrophilum* isolated from diseased rainbow trout (*Oncorhynchus mykiss*) from two hatcheries in the Mediterranean region of Turkey. Tissue samples for bacteriology were taken from rainbow trout fry (body weight 1-2g) in April 2015. The samples were collected from kidney and spleen and streaked onto tryptone yeast extract salts (TYES) agar. Agar plates were incubated at 15°C for 72 hours. Fourteen isolates were identified as *F. psychrophilum* using biochemical, physiological and morphological characteristics and API ZYM test. Antibiotic sensitivities of the isolates were determined by the disc diffusion method on TYES agar. The results were evaluated according to NCCLS standards. Only one isolate from each hatchery was used for antibiogram test. Both of them were sensitive to amoxicillin/clavulanic acid 2:1, penicillin, nitrofurantoin, florfenicol, amoxicillin, clindamycin, chloramphenicol, ampicillin, doxycycline, streptomycin, and erythromycin. The tested isolates were resistant to sulfadiazine, sulfamethoxazole/trimethoprim, oxolinic acid, vancomycin, trimethoprim/sulfadiazine, gentamicin, kanamycin, nalidixic acid, oxacillin, enrofloxacin, flumequine, tobramycin. While the examined isolates were sensitive to florfenicol, they were resistant to sulfonamides, which is in general agreement with antibiotic sensitivity studies of *F. psychrophilum* from other geographical regions. The results indicated that antimicrobial susceptibility testing of *F. psychrophilum* from each region is important issue to be able to combat disease.

KEYWORDS: *Flavobacterium psychrophilum*, rainbow trout, antibiotics, hatcheries.

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