

**Isolation and identification of *Edwardsiella tarda*  
from the middle intestine of the (Asian catfish)  
*Silurus triostegus* (Heckel, 1843)**

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**Abstract** - The present study represent a first record of the bacterium *Edwardsiella tarda*, Enterobacteriaceae from the middle intestine of the Asian catfish, *Silurus triostegus* on native studies in Iraq. Twenty five fish were collected during December 2006 from the Garmat Ali River, Basrah City, using seine nets. Sampled fish ranged between 350-750 g and 250-650 mm. Ten isolates of were bacteria *Edwardsiella tarda* it is belong to.

**Keywords:** First record, *Edwardsiella tarda*, Asian catfish, Edwardsiellosis.

## **Introduction**

Catfishes are one of the widely spread fishes in the world, with 2,000 known species (Nelson, 1976). Catfish are infected by edwardsiellosis, a disease caused by *Edwardsiella* sp., which includes (*E. tarad*, *E. ictalur* and *E. hoshinae*) a member of the family Enterobacteriaceae, and are the causative agent of septicemia in a variety of fish species (Ewing *et al.*, 1965).

The bacteria are transmitted through the blood to the various parts of the fish, causing a disease known as edwardsiellosis. These bacteria may also be transmitted to other conspecifics or predators (Castro *et al.*, 2006), which may cause diversely affect the environment and the economy of dependent human populations.

Infected fish processed for human consumption may cause digestive problems, meningitis, cholecystitis, endocarditis, liver abscess and osteomyelitis (Janda *et al.*, 1991; Srinivas *et al.*, 2001).

This study has the objective to isolate and identify the most common bacteria from the middle intestine of the (Asian catfish) *Silurus triostegus* in order to estimate infection rates and the consequence of infections for human health.

## **Materials and Methods**

### **Sampling:**

A total of 25 (Asian catfish) *Silurus triostegus* were collected randomly from the Garmat Ali River at Basrah City using seine nets. Sampling was conducted during December 2006.