

REPORT OF TRANSMISSIBLE DISEASE OUTBREAKS IN WILD FISH OF THE PROVINCE OF CORDOBA, ARGENTINA

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INTRODUCTION

The province of Cordoba has a great quantity of water mirrows that cover more than 100.000 ha. One of the most important utilities of lentic environments is the recreational fishing, that has developed a new sport - economical ressource, particularly the pejerrey (*Odontesthes bonariensis*) fishing. The fish species of the province has been fully studied during the last years, but there is no information related to disease existence and its status.

This work was carried out to describe the transmissible disease outbreaks of wild fish of the central-south area of the province (31 and 35°S, 62 and 65°W) reported at the Universidad Nacional de Rio Cuarto between 1993 and 1995.

MATERIAL AND METHODS

The specimens were caught up alive and processed by routine methods for the isolation of bacteria, fungi and parasites and their posterior histopathology.

RESULTS

Between 1993 and 1995 seven outbreaks with the presence of sick fish were reported by government authorities. Five of these were in lentic environments LE (artificial lakes and lagoons) and two in lotic environments LO. The species affected and studied of the LE were : *O. bonariensis* (3 outbreaks), *Cyphocharax voga* (1), *Rhamdia sapo* (1), *Pimelodus albicans* (1), *Hoplias malabaricus* (1) and *Oligosarcus* sp. (1) isolating *Aeromonas hydrophila*, *Lernaea* sp., *Argulus* sp. and finding *Contracaecum* sp. In the LO were affected *Plecostomun cordovae* (1 outbreak), *Jenynsia lineata* (1), *Cnesterodon decemmaculatus*(1) and *Astyanax eigenmanniorum* (1) isolating *Pseudomona fluorescens*, *Saprolegnia* sp., *Ichthyophthirius multifiliis*, *Trichodina* sp. and *Gyrodactylus* sp.

DISCUSSION

It is particularly important to remark that the same diagnosis was found in different environments and in several species. There exists a potential risk of an increase in the dissemination of pathogens through bait fishing practices. *A. hydrophila* and *Contracaecum* sp. are zoonotic species. Therefore, there would also be a potential hazard for human beings. *I. multifiliis*, *Trichodina* sp. and *Argulus* sp. could indicate critical levels of pollution of these environments. The direct action of several infectious agents and other factors could have a negative effect on the fishery economy. It is necessary to perform epidemiological studies in order to assess the population disease status and determine which are the different risk factors related to the environment conservation.

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