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Titolo del progetto: **Sorveglianza sanitaria in pesci autoctoni ed ornamentali: valutazione epidemiologica del rischio nel Lazio**

SUMMARY Ornamental fish and their trade have experienced a substantial growth in the last decades, connecting numerous countries and promoting commerce. The downside to this vast social/economical phenomenon is though the diffusion of a great amount of bacterial pathogens that are both able to induce pathologic conditions in fish and humans. These often present themselves as underlying conditions in carrying fish, making it difficult to enact a proper diagnose as well as posing as a serious threat for public welfare. The non totally effective regulations that rule prevention in this commerce and the poor understanding of these pathogens' ecology has allowed these microbes to thrive and to be introduced abundantly into Importing countries. Symptoms induced by infections in humans usually prove to be aspecific, and treatment periods are often very long and inappropriate. Another focal point of this issue, is the supposed possibility that these pathogens have of infecting autochthonous wild species, or even worse livestock fish cultured for food; this does not only pose as a primary risk for the environment and economy of food fish trading, but also as a secondary source of infection, hence hazard, for humans. This preliminary survey has the purpose of detecting the presence of said bacteria in the retail area of Rome and Viterbo (Italy), trying to focus on which of these pathogens are mostly present and attempting to gather more information regarding their ecology and pathogenic activity. It is still necessary to investigate the spread of Opisthorchiasis. Opisthorchiasis is a fish borne parasitic infection caused by helminths of the genus Opisthorchis (Digenea, Opisthorchiidae), affecting humans and other fish-eating mammals. The cycle in nature is maintained through the transmission between fish belonging the Cyprinidae family and carnivores. There are two pathogenic species for humans: O. felineus and O. viverrini, widespread especially in the countries of Southeast Asia. In 2003, in Italy, the first 2 cases of opisthorchiasis occurred in humans, hospitalized at the hospital of Perugia, for consumption of raw fish caught in Lake Trasimeno. Since 2006, 186 cases have been diagnosed, the majority of which are epidemic outbreaks due to the consumption of raw fish in restaurants or gastronomic events. To date, in Italy O. felineus seems to be located in the lakes of Bracciano, Bolsena and Vico, where all the aspects of the biological cycle of the parasite have been investigated, in the context of previous research projects. For these reasons, it is clear the need to expand the epidemiological knowledge regarding O. felineus, investigating its presence in cyprinids caught in other lakes of the Lazio Region in particular: lake of Vico (VT), lake of Martignano (RM) and lakes of Salto and Turano (RI). A total of 18 samples were taken on the 4 lakes during which both fish and molluscs were caught. Only 8 tench (8/10) from lake of Vico were positive for metacercarie of O. felineus, while all the other samples were negative. For the molluscs, 2 positive samples were found 1 in the lake of Vico and one in the lake of Salto.