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Research Note

CYPRINODON VARIEGATUS (CYPRINODONTIFORMES: CYPRINODONTIDAE), BIO-REGULATOR OF MOSQUITO LARVAE OF *AEDES TAENIORHYNCHUS* AND *CULEX BAHAMENSIS* IN THE ISLE OF YOUTH, CUBA

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Cyprinodon variegatus is a common species that inhabits our mangroove and brackish lagoons and has exceptional characteristics: a great ecological plasticity and a very eurhyaline adaptative range (L. Koldenkova et al., 1990, *Clave Pictória para los Principales Especies de Peces Larvivoros de Cuba,* Panphlete, Inst. Med. Trop. Pedro Kouri 48 p.). Thus, it is able to tolerate high saline concentrations, and this species can be found even at 167 ppm in salinity (L. Solis et al., 1990, *Cyprinodon variegatus* una limitante para el desarrollo de la Artemia en Cuba. *Rev. Pesca al Dia, 92:* 38). It can also be found in fresh-water. Recently we have found two mosquito species typical of our Seaboard, *Aedes taeniorhynchus* and *Culex bahamensis,* in second and third larval stages respectively in small brackish water ponds of 20 m^2 and 25 m^2, near to the mangroove forest of *Rhyzophora mangle* at Punta del Este on the Isle of Youth (I. García Avila, 1977. *Fauna cubana de mosquitos y sus criaderos tipicos,* Academy of Science, 84 p.).

After wards on account of rainy days the mangroove lagoon overflew and some specimens of *C. variegatus* crossed to the abovementioned breeding places. Therefore, we checked the breeding places again and could see that the larvae of both mosquito species were at the fourth stage, but their population was greatly diminished. We kept on checking and in only two days few fishes of this species consumed all the mosquito larvae. It is important to point that when we did the sampling in the breeding place we couldn't find any bioregulators except the fishes.

We verified the consumption of larvae by the fishes, collecting these in the breeding places of the mosquitoes and separating them in small glass flasks in order to analyze the fecal particles with the stereoscopic microscope by the method described by E. Ungureanu et al. (1981. Detailed study design for field studies regarding the evaluation of efficacy of larvivorous fishes for the control of malaria WHO/VBC/81.816; 12 p).

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