

RODENTS AND THEIR CONTROL IN THE SOUTHERN PORT OF IRAN

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Abstract Rodents are one of the main health problems in the cities, especially in ports. These animals make economic damages and are potential health dangers in Bandar Abbas, the main economic southern port of Iran. In this study, rodents were captured with live traps using tomato, cucumber and cheese baits from different parts of the city, before and after control program during 2003-2004. Control was conducted with Facorat and zinc phosphate. The caught rodents were transferred to the parasitology laboratory of Bandar Abbas training and public health research center. After anaesthetization, four thin and thick blood films were prepared from the heart of animals, their morphometric characters were recorded and ectoparasites were removed and conserved in ethanol 70%, mounted and identified. Blood films were stained with Giemsa and examined under light microscope for blood parasites. We captured 105 rodent demonstrated four species: *Rattus rattus* (3%), *R. norvegicus* (78%), *Mus musculus* (3%) and *Tatera indica* (16%) before the control program. The most frequency was observed in Ayatollah Ghafari quarter, 17 rodents per 24 traps. After 12 months, the duration of control program, rodents were captured again to assess the success of control activity. In this stage, 35 rodents which consisted of four species were obtained: *R. norvegicus* (51.4%), *R. rattus* (37.1%), *T. indica* (8.6%) and one weasel (2.9%). We found the most frequency in Forest Park and Khoon-Sorkh quarters with 12 rodents per 24 traps.

Study on ectoparasites showed contamination with *Xenopsylla cheopis*, *Polyplax* sp., *Ixodes* sp. and *Ornithonyssus* sp. Blood parasites were identified as *Trypanosoma* sp., *Babesia* sp., *Borrelia* sp. and one unknown bacteria.

Food materials, sweepings gathered in some parts of the city, illegal storing and transporting of some food materials such as wheat, corn are the main reasons for high frequency of rodents in some quarters of Bandar Abbas. The number of rodents is reduced to one third after control program. This shows the relative success of this program. For better results it is necessary to train people about the public health significance of rodents, rat proofing the buildings, correct repelling of trash, and extension of the control program with suitable rodenticides.