

Evaluation of Different Food Baits by Using Kill Traps for the Control of Lesser Bandicoot Rat (*Bandicota bengalensis*) in Field Crops of Pothwar Plateau, Pakistan

Authors : Nadeem Munawar, Iftikhar Hussain, Tariq Mahmood

Abstract : The lesser bandicoot rat (*Bandicota bengalensis*) is widely distributed and a serious agricultural pest in Pakistan. It has wide adaptation with rice-wheat-sugarcane cropping systems of Punjab, Sindh and Khyber Pakhtunkhwa and wheat-groundnut cropping system of Pothwar area, thus inflicting heavy losses to these crops. Comparative efficacies of four food baits (onion, guava, potato and peanut butter smeared bread/Chapatti) were tested in multiple feeding tests for kill trapping of this rat species in the Pothwar Plateau between October 2013 to July 2014 at the sowing, tilling, flowering and maturity stages of wheat, groundnut and millet crops. The results revealed that guava was the most preferred bait as compared to the rest of three, presumably due to particular taste and smell of the guava. The relative efficacies of all four tested baits guava also scoring the highest trapping success of 16.94 ± 1.42 percent, followed by peanut butter, potato, and onion with trapping successes of 10.52 ± 1.30 , 7.82 ± 1.21 and 4.5 ± 1.10 percent, respectively. In various crop stages and season-wise the highest trapping success was achieved at maturity stages of the crops, presumably due to higher surface activity of the rat because of favorable climatic conditions, good shelter, and food abundance. Moreover, the maturity stage of wheat crop coincided with spring breeding season and maturity stages of millet and groundnut match with monsoon/autumn breeding peak of the lesser bandicoot rat in Pothwar area. The preferred order among four baits tested was guava > peanut butter > potato > onion. The study recommends that the farmers should periodically carry out rodent trapping at the beginning of each crop season and during non-breeding seasons of this rodent pest when the populations are low in numbers and restricted under crop boundary vegetation, particularly during very hot and cold months.

Keywords : *Bandicota bengalensis*, efficacy, food baits, Pothwar

Conference Title : ICWCT 2017 : International Conference on Wildlife Control Technology

Conference Location : Paris, France

Conference Dates : August 28-29, 2017