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Population Ecology of the House Rat (Rattus rattus) in Rural Human Dwelling of Pothwar Plateau, Pakistan

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Abstract : Understanding the population characteristics of pest species is crucial to develop suitable management plans. The present study was aimed to determine the population ecology of House rat (Rattus rattus) in rural human dwellings of Pothwar, Pakistan. Seasonal rodent trapping was conducted in four villages of Pothwar area from March 2012 to February 2014. A total of 217 individuals of R.rattus were captured from houses, shops, and farm houses. There was no significant difference in the abundance of species across different trapping seasons. The species sex ratio was unbiased and did not differ significantly from 1:1 at all the sites and across all the trapping seasons. The population of R. Rattus had individuals of different age groups, viz., juvenile, sub adults and adults. Overall, more adult individuals were captured in spring and summer season. Breeding activity was continuous throughout the year and reproductively active individuals relatively outnumbered inactive individuals. The results showed that village indoor habitats provided a suitable habitat for rat populations all the year round. The information obtained from this study will be helpful in the development of control strategies for R. rattus populations in commensal habitats.

Keywords: ecology, indoor pests, Rattus rattus, population characteristics

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