Crop and urban systems

Thinking outside the box! Improving the use of bait stations for the management of commensal rodents

Quinn, Niamh^{1*}; Miles, Bosarge^{1,2}; Stapp, Paul²

- ¹ University of California, Agriculture and Natural Resources, Irvine, USA
- ² California State University, Fullerton, USA
- * nmquinn@ucanr.edu

DOI: 10.20315/evmc.2025.030

Commensal rodents are one of the most widespread mammals in the urban environment. They pose threats to the public's health and cause structural damage to buildings. Yet, their biology remains understudied. This leads to a lack of understanding of these species, and to incomplete management. Research has shown that commensal rodents enter bait stations less often than expected. This may be one of the reasons why certain populations of commensal rodents never achieve a satisfactory population decrease. Research has also shown that if rodents do not enter bait stations within two weeks of the start of the management program, the program is likely to fail.

We will discuss evaluations of whether modifications to bait stations and luring approaches influence station discovery, entry, bait consumption, or nightly activity of rats. We will also discuss how yard- and landscape-scale characteristics influence visitations to stations by rats in the presence of pets and livestock, nearby food resources, and past and ongoing rodent management.

