

## **SECU-RAT, A PUBLIC LITTER BIN ACCESSORY AS A NEW TOOL TO MONITOR AND CONTROL RAT POPULATIONS – SAFETY CONSIDERATIONS FOR CHILDREN, DOGS AND URBAN BIRDS**

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**Abstract** Rats pose a significant problem to society (zoonoses, severe property damage and food loss). The urban environment favours high population density, especially of the Brown rat (*Rattus norvegicus*). Due to high food availability and the presence of attractive habitats for rats in urban parks and gardens, along riverbanks, where birds are fed or on picnic spots, population control is particularly difficult and often ineffective. Public bins are a crucial issue because they offer food to rats, but also because they fit into the urban outdoor environment. SECU-RAT responds to the challenge of laying rodenticide baits and traps exactly where they are needed in an urban outdoor environment: under public bins. Efficacy of 4 different prototypes was measured and validated in different conditions in two different cities. Results are presented in the presentation ‘SECU-RAT, a public litter bin accessory as a new tool to control rats in the urban environment – Efficacy study’. Because optimal safety is required for children and for wild or domestic non-target species, we also tested and validated our prototypes to protect children, dogs and urban birds. We tested SECU-RAT as a child-resistant packaging according to the ISO 8317:2015 protocol that specifies performance requirements and test methods for reclosable packages designated as resistant to opening by children. These methods not only provide a measure of the effectiveness of the packaging in restricting access by children, but also cover the accessibility to the contents by Pest Control Operators. For dogs and medium and large ‘urban’ birds (pigeons, carrion crow), we develop our own test protocols and retained only the prototype configuration that meet the eligibility requirements. Results will be presented on our poster. Manufactured in France to ensure quality and durability, SECU-RAT is patented and compatible with different litter bin models and will be distributed internationally.

**Key words** Rodent population control, monitoring