

CONTROL OF SCORPIONS USING COLD ULTRA-LOW VOLUME TECHNIQUE IN THE CITY OF SÃO PAULO

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The presence of *Tityus serrulatus* scorpion in an urban environment presents a threat to the population, correlated to high population density and reflected on registered accidents. In difficult access areas as drainpipe and sewage system pulverization techniques has shown undesirable results. We propose the spatial application technique with large cold ultra-low volume (ULV) equipment, as a new tool for control, using as insecticide microencapsulated Lambda-cyhalothrin CS 10. Pilot project was performed at Sacomã district, located in the southeast region of the city, in 2008 and 2009. Previous monthly monitoring was performed on pipelines to verify the infestation. Also, previous tests were performed with the ULV equipment to assess parameters as flow, pressure and drop size. After insecticide application evaluation monitoring was performed. As a result, from November 2009 to October 2010 only one specimen of scorpion was found, in February 2010. We concluded that this technique yielded a significant reduction in scorpion population, while being less toxic and safer for the applying individual, for the population and the environment. It permits to treat a large number of pipelines in a short period of time, reaching extensive areas using fewer professionals. This technique showed satisfying results compared to manual capture, because without periodic visits it is possible to increase investigation in other areas. Moreover, we also observed reduction in density of cockroaches, which are the main diet in urban environment.

Key Words *Tityus serrulatus*, microencapsulated insecticide, spatial application, urban environment.