Occurrence of Norway rat (*Rattus norvegicus*) in above-ground and underground habitats in Budapest, Hungary

Bajomi, D., Kiss, Z., Papp, G. Bábolna Bio Ltd., Budapest, Hungary, igazgato@babolna-bio.com

DOI: 10.5073/jka.2011.432.025

In 1971-1972 a rat control program was implemented throughout Budapest and continuous maintenance work has been going on since 1973. In order to ensure efficacy, all rat occurrence related data have been recorded since 1974. Using the special code system developed by us, it is possible to determine which are the macro-habitats and, within those the micro-habitats, where Norway rats occur most frequently.

It is assumed that during rat control in urban areas (i.e. large cities) or maintenance of rat-free conditions, it is not necessary to perform rodenticide treatments in the sewer system. To assess the importance of control in the sewer system and to test this assumption, the authors conducted a separate analysis of the data related to Norway rat occurrence in Budapest between 2000 and 2009.

Considering the average of the 10 years in question -63% of the rats occurred in buildings and related habitats, 30% in the sewer system while 7% occurred at places other than in these habitats. With rats living in a given building, the frequency of their occurrence in the sewer system near that building was also determined.

In the light of the data obtained, rat control in the sewer system is considered to be of primary importance in terms of efficacy within a long term urban rat management program.