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## Poster Session 1 – Rodent Management

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### **35 Low rates of resistance to anticoagulant rodenticides in the population of Norway rats, *Rattus norvegicus*, in Barcelona (Spain)**

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Rodent pest management nowadays depends on the anticoagulant rodenticides because of their outstanding efficiency and excellent safety profile. Anticoagulant resistance is known as one of the major factors interfering with rodent control. Within this context the Agència de Salut Pública de Barcelona, in the framework of the rodent surveillance and control program carried out in the city, started, in 2016, a project that included a study to determine the presence of anticoagulant resistance mutations in Norway rats in Barcelona, northern Spain. From December 2016 to November 2017, we captured with death traps 236 rats in different sections of sewer system. A piece of tail was taken from each rat for further analysis. DNA was screened for the presence of mutations in the VKORC1 gene responsible for anticoagulant resistance. None of the samples presented mutations associated to anticoagulant resistance, and consequently the proportion of anticoagulant resistant individuals should be very low (0%, 95% confidence interval 0-1.6%). Results from this study indicates that anticoagulant resistance is not currently a problem for the control of rats in the city of Barcelona. Nevertheless, monitoring for resistance is important if we are to understand the scope of its spread and to manage resistant rodent populations.

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Jens Jacob, Jana Eccard (Editors)

6<sup>th</sup> International Conference of Rodent  
Biology and Management  
and  
16<sup>th</sup> Rodens et Spatium

Potsdam, Germany, 3-7 September 2018

Book of Abstracts



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Bundesforschungsinstitut für Kulturpflanzen

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