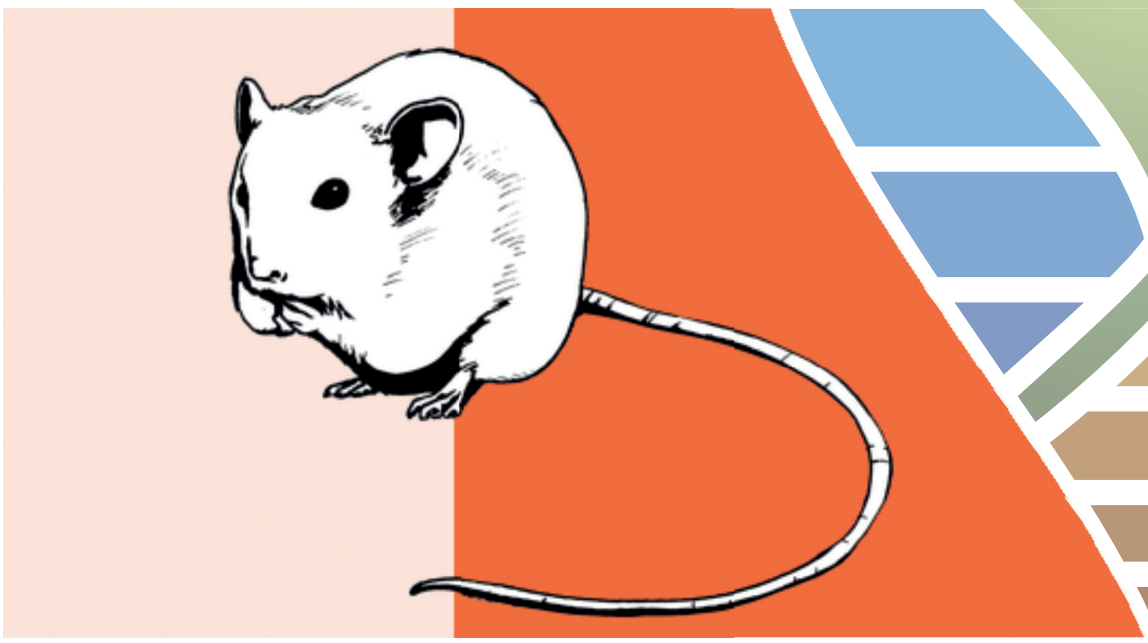
459
Julius-Kühn-Archiv

Jens Jacob, Jana Eccard (Editors)

6th International Conference of Rodent Biology and Management and 16th Rodens et Spatium

Potsdam, Germany, 3-7 September 2018

Book of Abstracts



Julius Kühn-Institut
Bundesforschungsinstitut für Kulturpflanzen

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The Institute's core activity is to advise the federal government and the Federal Ministry of Food and Agriculture in particular on all issues relating to cultivated plants. Its diverse tasks in this field are stipulated in important legal acts such as the Plant Protection Act, the Genetic Engineering Act and the Chemicals Act and in corresponding legal regulations, furthermore they arise from the new BMEL research plan.

The Institute's competence comprises both the functions of a federal authority and the research in the fields of plant genetics, agronomy, plant nutrition and soil science as well as plant protection and plant health. On this basis, the JKI networks all important departmental tasks relating to cultivated plants – whether grown in fields and forests, in the glasshouse or in an urban environment – and develops integrated concepts for plant cultivation as a whole, ranging from plant production to plant care and plant usage. Research and sovereign functions are closely intertwined.
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Plenary Talks

Rat-free New Zealand 2050 – fantasy or reality?

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Rats introduced into previously mammal-free New Zealand (NZ) seriously impact our vulnerable native flora and fauna. As a result, considerable research effort has focused on developing control techniques for reducing and/or eradicating rats with excellent success in the eradication of both Norway rats and ship rats from many offshore islands (n = 105 mammal-free islands). This control work has created numerous predator-free sanctuaries thus enabling the translocation of many endangered native bird species. Unfortunately, we have run out of defendable, non-human occupied islands and the current focus is on the NZ mainland, with a new government goal of ridding NZ of rats, brush-tail possums and stoats by 2050 (called Predator Free NZ 2050 Ltd). During 2010-15, the Centre for Wildlife Management and Conservation (CWMC; based at Lincoln University) began a research programme investigating alternatives to brodifacoum for environmentally-safer rat control, with a focus on tools that could be used on the NZ mainland. In addition to this work, we also investigated the attractiveness of social lures for ship rats and species-specific delivery options for sustained ground-based rat control. In 2015, a privately-funded research and development entity called Zero Invasive Predators Ltd (ZIP; also at Lincoln University) was established with the goal of developing technologies to remove predators from large areas and then defending those areas from reinvasion. In addition to the results from the above CWMC research programme we will also present the results from recent ZIP research investigating the use of "virtual" and geographical barriers designed to prevent reinvasion of rodents back into predator-free areas. ZIP have also developed modified techniques for applying aerial 1080 cereal bait that has potentially removed all rats from a 2,300-ha NZ mainland field site.