



The journal NeoBiota is a continuation of the former NEOBIOTA publication series. For volumes 1–8 see <http://www.oekosys.tu-berlin.de/menue/neobiota/>

Whilst globalisation has brought many benefits, it has also contributed to the spread of harmful pests, weeds, and pathogens capable of damaging crops, livestock and natural resources. Our challenge is to extract benefits from international trade whilst managing biosecurity systems to provide acceptable levels of protection from harmful pests. Pest risk assessment is a process that can inform policymakers about biological risks associated with different forms of international trade, and to assist them in deciding on phytosanitary precautions that might be required to reduce the pest risks to acceptable levels.

This special issue of Neobiota provides a snapshot of recent scientific advances in pest risk analysis methods. The papers draw on practical examples to illustrate how this fast-moving area of applied science can inform biosecurity regulation and policy. Topics covered include bioclimatic modelling and pattern analysis methods to estimate the geographical extent of pest threats and the economic consequences should the threats be realised; modelling the rate of spread of pests; model-based methods for improved surveillance; an exploration of the effects of climate change on pest risk; and methods for estimating and portraying uncertainty in these various models.



NeoBiota 18 ♦ 2013

ADVANCING RISK ASSESSMENT MODELS TO ADDRESS CLIMATE CHANGE, ECONOMICS AND UNCERTAINTY
EDITED BY DARREN J. KRITICOS AND ROBERT C. VENETTE



NeoBiota

Advancing research on alien species and biological invasions

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Western corn rootworm *Diabrotica virgifera virgifera* adult
feeding on maize pollen

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