CONTENTS & MODULES

MODULE 13

IPM for Western Corn Rootworm (WCR) in Central and Eastern Europe

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WHAT IS…	Western Corn Rootworm (WCR) (*Diabrotica virgifera virgifera* LeConte) is an invasive pest of maize in Europe. WCR larvae cause damage of economic significance by feeding on the root system of maize. Adults consume maize (and other) pollen and silks that could lead to reduced seed setting.
WHY	WCR was first detected in Europe in 1992, in one small field used for continuous maize production close to Belgrade (Serbia, formerly Yugoslavia) international airport. The pest has spread rapidly through Europe. The greatest spread of the WCR population has occurred in the Carpathian basin towards northern and eastern areas. WCR had been detected in 20 European countries by 2009, but had been successfully eradicated in three countries. The larger the size of the infested area, the greater the possibility of the jumping-spread movement beyond the actual spread line (i.e. from central Europe to the Venice region in Italy. However multiple transatlantic introduction of the pest has also been proved. WCR was first detected in Hungary in 1995, with the first damage of economic significance observed in 2001. Heavy yield losses were experienced in infested areas comprising continuous maize fields. Farmers were shocked and did not know how to manage this pest. Information on the biology of the pest in European areas was not available. Control tools, options and IPM strategies were not available or widespread in Europe.
HOW	The presentation analyses: ► The morphology, life cycle and damage of WCR ► Cultural practices and biological control methods ► Chemical control options ► How to develop IPM for WCR
EXAMPLE	WCR females lay their eggs in the soil of maize fields. After overwintering, larvae hatch and feed on maize root systems if maize is planted again in the same field. Therefore, rotation of maize to other crops is the most important non-chemical control strategy. However, rotation of maize should be conducted as part of a system approach over time and space. Not every field should be rotated every year, but a carefully planned rotation system on the farm or over a larger area should be planned in which some maize fields might not be

	rotated.
SOURCES	► **On the ENDURE website:** ENDURE NETWORK - Guide to tackling WCR now available / All the news / About ENDURE ENDURE NETWORK - Learning IPM lessons from WCR in Hungary / All the news / About ENDURE ENDURE NETWORK - New training leaflet: the participatory approach / All the news / About ENDURE ► **On the ENDURE INFORMATION CENTRE:** http://www.endureinformationcentre.eu Keywords: Pests > western corn rootworm
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