

CONTENTS & MODULES

IPM PRINCIPLE

2



Tools for pest monitoring

Date (17/11/2010)

WHAT IS...	Pest monitoring is an element of Integrated Pest Management that allows the pest population density in fields to be estimated. For monitoring pest populations, different tools and systems have been developed.
WHY	The purpose of monitoring is to collect information on pest presence and density allowing professional users to make appropriate and timely decisions for managing pests. Monitoring helps to determine whether intervention is needed and if so what, where, when and how. The monitoring methodology or system therefore has a significant impact on the success of IPM.
HOW	<p>Monitoring methods and tools:</p> <ul style="list-style-type: none"> ▶ Regular and thorough visual observations in the fields ▶ Various traps (colour cards, pheromone and other bait-based traps etc.) ▶ The results of monitoring should be interpreted in context, with the results of field observation ▶ Using or benefiting from scientifically sound early warning, forecasting and early diagnosis systems ▶ Advice from professionally qualified advisers. <p>Relevant information (meteorological pest density, disease incidence etc.) that can help farmers in their decision-making may originate from various sources, such as:</p> <ul style="list-style-type: none"> ▶ Competent authorities ▶ Professional organisations ▶ Advisory services ▶ Professional users.
EXAMPLE	The case of western corn rootworm (WCR) offers a good example for monitoring. Adults can be detected with sensitive and highly attractive pheromone and floral bait-based traps established in the maize field. Visual plant checks during the period of adult activity gives additional information on the population density. Colour sticky cards can also be used for this purpose. Adult feeding (symptoms on maize leaves and silks) also add information to the above. Monitoring WCR population in several fields over a larger area gives a broad picture of WCR population levels in the region which should be accompanied by data from local fields. This offers mutual benefits for all farmers in the area.

SOURCES	<p>► Draft Guidance Document for establishing IPM principles (http://www.endure-network.eu/about_crop_protection/european_documents : BIPRO 2009 reports)</p> <p>► on the ENDURE Information Centre : → keywords: measure = decision support / control <i>or</i> thresholds</p> <p>► on the ENDURE website: Western Corn Rootworm in Europe: Integrated Pest Management is the only sustainable solution</p>
CONTACT	Jozsef.Kiss@mkk.szie.hu