

CONTENTS & MODULES

MODULE 12



Resistant cultivars of winter wheat in IPM

Date (31/10/2010)

WHAT IS...	<p>The use of cultivars with effective resistance genes is an important measure to reduce the risk of disease development and yield losses in winter wheat.</p> <p>Cultivar resistance against major diseases offers one of the greatest potentials for reducing dependence on fungicides in integrated control strategies.</p>
WHY	<p>Wheat is the most important cereal crop grown in Europe. Yield losses from specific wheat diseases are significant worldwide. Resistant plants (cultivars) are able to overcome the effect of a specific pathogen without yield loss, while susceptible ones react with severe symptoms and yield loss to pathogenic infection. Cultivars tolerant to a specific pathogen can endure infection without severe yield loss.</p>
HOW	<p>Training on resistant wheat varieties:</p> <ul style="list-style-type: none"> ▶ Collection of information from EuroWheat website ▶ Collection of information from national sources (for example, national databases) ▶ Sharing personal experiences among the participants of the training ▶ Demonstration field visits ▶ Establishing small experimental plots to have local information on different wheat varieties ▶ Presentation and discussion with local breeders on resistant wheat varieties
EXAMPLE	<p>There are a wide range of wheat cultivars in Hungary (GK and MV varieties) which possess good resistance to the major wheat diseases, such as stem rust, brown rust and powdery mildew. Growing new varieties has the advantage of including resistance/tolerance against leaf spot diseases and <i>Fusarium</i>. It is essential to consider local conditions (climate, soil type) as well as growing conditions (tillage, crop rotation etc.) when selecting wheat cultivars.</p>
SOURCES	<ul style="list-style-type: none"> ▶ Eurowheat website: http://www.eurowheat.org/EuroWheat.asp ▶ On the ENDURE website: http://www.endure-network.eu/about_endure
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