IPM OF SOLANACEOUS CROPS IN EMILIA ROMAGNA REGION, ITALY

R. BUGIANI, L. ANTONIACCI, T. GALASSI, R. ROSSI, F. MAZZINI, C. MONTUSCHI

SERVIZIO FITOSANITARIO - Regione Emilia-Romagna.

IPM in Emilia-Romagna Region

Tomato and potato are the solanaceous crops mostly grown in the region with 47 and 12% regional surface grown with vegetables (64,000 ha) respectively. In the early 90's Emilia-Romagna IPM guidelines for the most important vegetable crops were set up with the aim to reduce the environmental impact, protect farmer and consumer's health, and promote guaranteed quality production along with farmer's income. At present, the Integrated Production Guidelines are applied on 22 vegetables covering 49% of the regional agricultural surface (31913 ha).

Tomato is the most extensively grown following IPM guidelines (25087 ha which means roughly 88% of the tomato grown in the region) Potato crop grown following IPM guidelines is 1.800 ha (26% of the potato grown in the region) because the crop is not included in the UE-reg. n.2200/96, one of the measures Emilia-Romagna region uses to promote the Integrated Production.

CRITERIA FOR LIMITING PESTICIDE USE

General criteria defined by E.U. and recognized by Minister of Agricultural and Regional Governments. Decision n. 96/3864 of U.E. STAR Committee on 31/12/96. Strategies are defined for every crop in order to prevent or contain pests and diseases by using agronomic, biological, biotechnological techniques and limiting the number of chemical applications. Limitation or avoidance of chemical use are based on:

- Toxicology
  - Risk sentences on the product’s label: formulations with R48 R44, R68, R69, R66, R67 should be avoided or limited;
  - Toxic marks on the label: formulation classified as T, T+ e Xn should be avoided or limited;

- Environment
  - Negative effects on non-target organism,
  - waterflows, soil and persistence in the environment

- Residues on treated crops

- Selectivity for beneficials

- Risk of resistant populations

ITER FOR TECHNICAL GUIDELINES DEFINITION

Evaluation of experimental and research results

Discussion with producers

Regional proposals of technical guidelines sent to MIPAF

Committee evaluation

Positive evaluation

Negative evaluation

Minister sends the agreement to the region

Minister sends for further modifications to the region

Final Regional Approval

MEASURES USED TO PROMOTE INTEGRATED PRODUCTION OVER THE TIME

<table>
<thead>
<tr>
<th>Measures</th>
<th>Benefit for farmers</th>
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<tbody>
<tr>
<td>Reg. CE 2078/92</td>
<td>Financial support</td>
</tr>
<tr>
<td>Reg. 2200/96 (OCM)</td>
<td>Qualified technicians</td>
</tr>
<tr>
<td>L.R. n. 29/98</td>
<td>Research, Experimentation, Supervisors, Technical supports</td>
</tr>
<tr>
<td>L.R. n. 28/98</td>
<td>Qualified technicians</td>
</tr>
<tr>
<td>Reg. CE 1257/99</td>
<td>Financial support</td>
</tr>
<tr>
<td>L.R. n. 29/99</td>
<td>Quality control the production label</td>
</tr>
</tbody>
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ORGANIZATION SYSTEM OF INTEGRATED PEST MANAGEMENT IN EMILIA ROMAGNA

Positive evaluation

IPI and MISP forecasting model is a tool to provide farmers and field technicians about the blight risk and the optimal time to spray. On potato crops, it has been used since 1995 and over the years proved to be useful to save from 30 to 60% of fungicide applications.

Potato IPM Guidelines

<table>
<thead>
<tr>
<th>Potatoes - Average reduction of treatments (%)</th>
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<tbody>
<tr>
<td>2001</td>
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<tr>
<td>---</td>
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<tr>
<td>50</td>
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</tbody>
</table>

Euro Blight workshop Bologna (Italy) 2-5 may 2007