EIP-AGRI Focus Group on IPM Brassica: Minipaper 4 - Plant Protection in organic production of Brassica vegetables and oilseed rape

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Publication abstract (English):
Growers of organic Brassica vegetables and oilseed rape face the same potentially severe plant protection problems as their colleagues in conventional or integrated pest management systems. Management strategies in organic systems rely on preventive measures (crop rotation, crop isolation, soil management, host plant resistance, farm/field location; manipulate timing of planting or harvest; intercropping, mulching), use of functional agro-biodiversity (reduction of pest by enhancing natural enemies), release of biocontrol agents and a few approved pesticides of biological and mineral origin, as well as mating disruption or the use of anti-insect nets (Zehnder et al., 2007). The methods used in organic might also be applicable in IPM systems. However, several factors hamper wide implementation of these methods in IPM. Among the main reasons are (1) a lower efficacy compared to standard pesticide treatments, (2) higher costs, (3) lack of knowledge / information / advice on alternative methods, (4) inconvenience, and (5) the need for close collaboration between neighbouring farmers to achieve good control. In the following paper, we describe the methods used in organic Brassica vegetable and oilseed rape production, and discuss their limitations.

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non-chemical pest control [7]
Plant production and horticulture [8]
cabbage [9]
oilseed rape [10]
spring oilseed rape [11]
winter oilseed rape [12]

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