

Annex A5.1: Major oilseed rape diseases and weeds control strategies and b							
	Key pest	Secondary pest	No problem	Control strategies currently used	IPM alternatives already available	Bottlenecks	Additional comments
Fungi							
<i>Plasmodiophora brassicae</i>	UK/CH/LV/DE/DK/ FR/SE			crop rotation and late sowing, liming, resistant varieties, boron	Same as current strategies	resistant varieties may be lower yielding, resistance not stable, land use (much land is rented), monitoring services costly, sampling strategies problematic, conflict	Some current control strategies were left out here, should be moved back in from the general
<i>Verticillium longisporum</i>	ES/LV/SE/FR	UK/GE	CH/DK	crop rotation and healthy seed, no minimal tillage,	Partial resistance	no good resistance available, no chemicals available	
<i>Sclerotinia sclerotiorum</i>	UK/CH/DK/	LV/SE/FR/DE		crop rotation, ploughing, remove of infected debris, fungicides, disease forecasting	Biological control, disease forecasting	rotation not easy, no resistant varieties, wide host range, risk for fungicide resistance, biological control is expensive and complicated but can contribute to control in combination with other measures, challenge to develop monitoring and disease forecasting,	Fungicides most important current method; Forecasting system works in UK but leads to many sprays, other forecasting systems are not reliable enough; challenge to have EU-wide initiative to improve forecasting and decision support systems
<i>Leptosphaeria maculans</i> (<i>Phoma lingam</i>)	UK/CH/LV/DK	FR/GE	SE	crop rotation, resistant varieties, remove of infected debris, fungicides	soil tillage, spore trapping	limited range of resistant varieties, farmers prefer minimal tillage; pathogen adaptation to host resistance; no specific resistances left (RLM7 is last one)	
<i>Pyrenopeziza brassicae</i>	UK	DK/FR	GE/CH/LV/SE	resistant varieties, fungicides	soil tillage, rotations and ploughing	fungicide resistance serious problem in UK, limited number of varieties with good resistance, yield penalty, resistance unstable, increased disease pressure means increased spray, farmers prefer	
Viruses							
Beet western yellows (= Turnip yellows virus)	UK/SE/DK	FR	CH/LV/DE	insecticides to target vector	time of sowing, resistant varieties	neonic ban has increased foliar insecticide use, insect vectors resistant to pyrethroids, resistance could come with yield penalty, only one resistant variety available	

Weeds	All countries			herbicides, wide rows	mechanical control	herbicide resistance in grass weeds, in some countries few herbicides registered, mechanical control is more expensive	mechanical weed control can be attractive if you look at savings of seed costs, herbicides and growth regulators
							<p>We need more work on how to come from monitoring results to recommendations on what the farmer should do in the field, that understanding is missing in many cases.</p> <p>Reliable and easy to use forecasting is really needed</p>