The following supplementary material contains eight detailed life tables for the two sites, Courroux and Delémont in Switzerland, that were used to create the summary tables 2 and 3 in the manuscript. (word file, 85.1kb)

Supplementary Table 1. Life table of diamondback moth, *Plutella xylostella*, at Courroux, Switzerland for June–July 2014 on oilseed rapa, *Brassica napus*.

Stage	Factor	Stage l_x	d_x	Factor d_x	Marginal attack rate (m_x)	Apparent mortality Stage qs	Factor q_x	Real mortality (r_x) Stage d_x/l_0	Factor d_x/l_0	k – value Stage	Factor kx	% of generational mortality $100k_x/K_G$
egg		1000	863.2360			0.86324		0.863236		0.85890		
	predation			261.7000	0.4529		0.2617		0.26170		0.26194	4.91873
	unknown			596.0000	0.7468		0.5960		0.59600		0.59655	11.20201
	infertility			4.6360	0.0008		0.0046		0.00464		0.00034	0.00644
	parasitism			0.9000	0.0002		0.0009		0.00090		0.00007	0.00125
L1		136.7640	124.8397			0.91281		0.1248397		1.05954		
	predation			32.2353	0.4674		0.2357		0.03224		0.27359	5.13744
	unknown			68.7649	0.7392		0.5028		0.06876		0.58362	10.95929
	parasitism			23.8395	0.3724		0.1743		0.02384		0.20233	3.79937
L2-L3		11.9243	11.8612			0.99471		0.0118612		2.27613		
	predation			8.1284	0.9724		0.6817		0.00813		1.55983	29.29065
	unknown			3.2593	0.7631		0.2733		0.00326		0.62545	11.74471
	parasitism			0.4735	0.1888		0.0397		0.00047		0.09085	1.70608
L4		0.0631	0.0517			0.81888		0.0000517		0.74203		
	predation			0.0331	0.6649		0.5241		0.00003		0.47487	8.91717
	unknown			0.0164	0.4187		0.2600		0.00002		0.23560	4.42413
	parasitism			0.0022	0.0701		0.0348		0.00000		0.03156	0.59266

Prepupa/Pupa	0.0114	0.0068			0.59145	0.0000068	0.38875	
predation			0.0027	0.3027	0.2382	0.00000	0.15657	2.94002
unknown			0.0003	0.0401	0.0270	0.00000	0.01776	0.33350
parasitism			0.0037	0.3897	0.3262	0.00000	0.21443	4.02655
Adults	0.0047						$K_G=$	5.3254
Sex ratio (% females)	0.5							
Adult females	0.0023							
Potential fecundity	160							
Potential F_1 progeny	0.3738							
R_0*	0.0003738							
Total mortality = %	99.9998							

Supplementary Table 2. Life table of diamondback moth, *Plutella xylostella*, at Courroux, Switzerland for May–June 2015 on oilseed rapa, *Brassica napus*.

Stage	Factor	Stage l_x	d_x	Factor d_x	Marginal attack rate (m_x)	Apparent mortality Stage qs	Factor q_x	Real mortality (r_x) Stage d_x/l_0	Factor d_x/l_0	k – value Stage	Factor kx	% of generational mortality $100k_x/K_G$
egg		1000	932.2620			0.93226		0.932262		1.00491		
	predation			337.8900	0.6231		0.3379		0.33789		0.42375	10.57480
	unknown			459.8930	0.7350		0.4599		0.45989		0.57676	14.39308
	infertility			134.4790	0.0101		0.1345		0.13448		0.00439	0.10966
	parasitism			0.0000	0.0000		0.0000		0.00000		0.00000	0.00000
L1		67.7380	51.0963			0.75432		0.0510963		0.60964		
	predation			19.4403	0.4138		0.2870		0.01944		0.23194	5.78818
	unknown			12.5701	0.2920		0.1856		0.01257		0.14998	3.74265
	parasitism			19.0859	0.4081		0.2818		0.01909		0.22772	5.68264
L2-L3		16.6417	15.8961			0.9552		0.0158961		1.34868		
	predation			5.6304	0.6671		0.3383		0.00563		0.47770	11.92109
	unknown			7.7661	0.7807		0.4667		0.00777		0.65891	16.44302
	parasitism			2.4996	0.3863		0.1502		0.00250		0.21207	5.29231
L4		0.7456	0.6057			0.81233		0.0006057		0.72661		
	predation			0.2881	0.5487		0.3863		0.00029		0.34556	8.62348
	unknown			0.2610	0.5137		0.3500		0.00026		0.31306	7.81254
	parasitism			0.0567	0.1449		0.0760		0.00006		0.06798	1.69644
Prepupa/Pupa		0.1399	0.0725			0.51847		0.0000725		0.31738		
	predation			0.0582	0.4435		0.4158		0.00006		0.25452	6.35160
	unknown			0.0000	0.0000		0.0000		0.00000		0.00000	0.00000
	parasitism			0.0144	0.1347		0.1027		0.00001		0.06285	1.56852

Adults	0.0674	$K_G=$	4.0072
Sex ratio (% females)	0.5		
Adult females	0.0337		
Potential fecundity	160		
Potential F_1 progeny	5.3904		
R_0*	0.0053904		
Total mortality = %	99.9966		

Supplementary Table 3. Life table of diamondback moth, *Plutella xylostella*, at Courroux, Switzerland for May–June 2016 on oilseed rapa, *Brassica napus*.

Stage	Factor	Stage		Factor	Marginal attack rate (m_x)	Apparent mortality		Real mortality (r_x)		k - value		% of generational mortality $100k_x/K_G$
		l_x	d_x	d_x		Stage qs	Factor q_x	Stage d_x/l_0	Factor d_x/l_0	Stage	Factor k_x	
egg		1000	628.2291			0.62823		0.6282291		0.42136		
	predation			333.9370	0.4090		0.3339		0.33394		0.22842	7.95546
	unknown			271.2300	0.3477		0.2712		0.27123		0.18553	6.46158
	infertility			18.4501	0.0136		0.0185		0.01845		0.00593	0.20649
	parasitism			4.6120	0.0034		0.0046		0.00461		0.00148	0.05162
L1		371.7709	165.5963			0.44543		0.1655963		0.25604		
	predation			4.7970	0.0169		0.0129		0.00480		0.00742	0.25832
	unknown			154.9043	0.4239		0.4167		0.15490		0.23951	8.34161
	parasitism			5.8951	0.0208		0.0159		0.00590		0.00911	0.31745
L2-L3		206.1746	198.7479			0.96398		0.1987479		1.44344		
	predation			93.1595	0.7894		0.4518		0.09316		0.67659	23.56419
	unknown			66.4340	0.6708		0.3222		0.06643		0.48249	16.80412
	parasitism			39.1544	0.4804		0.1899		0.03915		0.28437	9.90388
L4		7.4267	5.4505			0.73391		0.0054505		0.57497		
	predation			2.2215	0.4170		0.2991		0.00222		0.23435	8.16184
	unknown			2.6189	0.4707		0.3526		0.00262		0.27626	9.62170
	parasitism			0.6101	0.1377		0.0821		0.00061		0.06436	2.24142
Prepupa/Pupa		1.9762	0.6568			0.33234		0.0006568		0.17544		
	predation			0.3498	0.1936		0.1770		0.00035		0.09343	3.25405
	unknown			0.1464	0.0861		0.0741		0.00015		0.03910	1.36184
	parasitism			0.1606	0.0941		0.0813		0.00016		0.04291	1.49442

Adults	1.3194
Sex ratio (% females)	0.5
Adult females	0.6597
Potential fecundity	160
Potential F_1 progeny	105.5540
R_0*	0.1055540
Total mortality = %	99.9340

$K_G=$ 2.8713

Supplementary Table 4. Life table of diamondback moth, *Plutella xylostella*, at Delémont, Switzerland for August 2014 on cabbage, *Brassica oleracea.*

Stage	Factor	Stage l_x	Stage d_x	Factor d_x	Marginal attack rate (m_x)	Apparent mortality Stage qs	Apparent mortality Factor q_x	Real mortality (r_x) Stage d_x/l_0	Real mortality (r_x) Factor d_x/l_0	k-value Stage	k-value Factor kx	% of generational mortality $100k_x/K_G$
egg		1000	726.1000			0.7261		0.7261		0.54807		
	predation			460.0000	0.5597		0.4600		0.46000		0.35630	11.78079
	unknown			241.5090	0.3500		0.2415		0.24151		0.18706	6.18514
	infertility			23.8800	0.0105		0.0239		0.02388		0.00457	0.15116
	parasitism			0.7000	0.0003		0.0007		0.00070		0.00013	0.00443
L1		273.9000	201.2617			0.7348		0.2012617		0.57640		
	predation			107.4236	0.5076		0.3922		0.10742		0.30767	10.17288
	unknown			90.7705	0.4504		0.3314		0.09077		0.25997	8.59585
	parasitism			3.0595	0.0200		0.0112		0.00306		0.00876	0.28973
L2-L3		72.6383	66.5875			0.9167		0.0665875		1.07935		
	predation			20.2806	0.5309		0.2792		0.02028		0.32874	10.86961
	unknown			43.5830	0.8034		0.6000		0.04358		0.70646	23.35876
	parasitism			2.7239	0.0967		0.0375		0.00272		0.04415	1.45992
L4		6.0508	3.8295			0.6329		0.0038295		0.43524		
	predation			1.7390	0.3656		0.2874		0.00174		0.19763	6.53458
	unknown			1.4116	0.3089		0.2333		0.00141		0.16043	5.30451
	parasitism			0.6791	0.1628		0.1122		0.00068		0.07718	2.55180
Prepupa/Pupa		2.2212	1.3065			0.5882		0.0013065		0.38533		
	predation			0.7463	0.3976		0.3360		0.00075		0.22010	7.27736
	unknown			0.0766	0.0507		0.0345		0.00008		0.02259	0.74688
	parasitism			0.4837	0.2800		0.2178		0.00048		0.14265	4.71661

Adults	0.9147		
Sex ratio (% females)	0.5		
Adult females	0.4574	$K_G=$	3.0244
Potential fecundity	160		
Potential F_1 progeny	73.1764		
R_0*	0.0731764		
Total mortality = %	99.9543		

Supplementary Table 5. Life table of diamondback moth, *Plutella xylostella*, at Delémont, Switzerland for May–June 2015 on cabbage, *Brassica oleracea*.

Stage	Factor	Stage l_x	d_x	Factor d_x	Marginal attack rate (m_x)	Apparent mortality Stage qs	Apparent mortality Factor q_x	Real mortality (r_x) Stage d_x/l_0	Real mortality (r_x) Factor d_x/l_0	k-value Stage	k-value Factor kx	% of generational mortality $100k_x/K_G$
egg		1000	895.2665			0.89527		0.8952665		0.58635		
	predation			442.3100	0.6720		0.4423		0.44231		0.48413	14.97352
	unknown			74.8500	0.1719		0.0749		0.07485		0.08193	2.53390
	infertility			378.1065	0.0457		0.3781		0.37811		0.02029	0.62762
	parasitism			0.0000	0.0000		0.0000		0.00000		0.00000	0.00000
L1		104.7335	91.2334			0.8711		0.0912334		0.88975		
	predation			23.6907	0.4126		0.2262		0.02369		0.23104	7.14583
	unknown			60.0961	0.7406		0.5738		0.06010		0.58608	18.12677
	parasitism			7.4466	0.1540		0.0711		0.00745		0.07262	2.24610
L2-L3		13.5001	12.4412			0.92156		0.0124412		1.10547		
	predation			4.6801	0.6162		0.3467		0.00468		0.41585	12.86159
	unknown			4.5000	0.6018		0.3333		0.00450		0.39985	12.36691
	parasitism			3.2611	0.4869		0.2416		0.00326		0.28977	8.96208
L4		1.0589	0.7303			0.68967		0.0007303		0.50818		
	predation			0.3985	0.4719		0.3763		0.00040		0.27730	8.57659
	unknown			0.1941	0.2673		0.1833		0.00019		0.13508	4.17799
	parasitism			0.1377	0.1979		0.1300		0.00014		0.09579	2.96263
Prepupa/Pupa		0.3286	0.0925			0.28139		0.0000925		0.14351		
	predation			0.0270	0.0918		0.0820		0.00003		0.04182	1.29358
	unknown			0.0000	0.0000		0.0000		0.00000		0.00000	0.00000
	parasitism			0.0655	0.2087		0.1994		0.00007		0.10168	3.14490

Adults	0.2362
Sex ratio (% females)	0.5
Adult females	0.1181
Potential fecundity	160
Potential F_1 progeny	18.8921
R_0*	0.0188921
Total mortality = %	99.9882

$K_G=$ 3.2332

Supplementary Table 6. Life table of diamondback moth, *Plutella xylostella*, at Delémont, Switzerland for July–August 2015 on cabbage, *Brassica oleracea.*

Stage	Factor	Stage l_x	d_x	Factor d_x	Marginal attack rate (m_x)	Apparent mortality Stage qs	Apparent mortality Factor q_x	Real mortality (r_x) Stage d_x/l_0	Real mortality (r_x) Factor d_x/l_0	k-value Stage kx	k-value Factor kx	% of generational mortality $100k_x/K_G$
egg		1000	900.3928			0.90039		0.9003928		0.95094		
	predation			530.9500	0.7434		0.5310		0.53095		0.59070	14.54740
	unknown			321.6370	0.5613		0.3216		0.32164		0.35783	8.81247
	infertility			13.5458	0.0016		0.0135		0.01355		0.00069	0.01688
	parasitism			34.2600	0.0040		0.0343		0.03426		0.00173	0.04270
L1		99.6072	58.1449			0.58374		0.0581449		0.38064		
	predation			28.7160	0.3513		0.2883		0.02872		0.18798	4.62962
	unknown			19.4590	0.2542		0.1954		0.01946		0.12739	3.13721
	parasitism			9.9699	0.1395		0.1001		0.00997		0.06527	1.60736
L2-L3		41.4623	40.6094			0.97943		0.0406094		1.68677		
	predation			15.7864	0.7791		0.3807		0.01579		0.65571	16.14849
	unknown			19.9633	0.8518		0.4815		0.01996		0.82920	20.42122
	parasitism			4.8598	0.3717		0.1172		0.00486		0.20186	4.97128
L4		0.8529	0.7125			0.83546		0.0007125		0.78374		
	predation			0.4631	0.6905		0.5430		0.00046		0.50938	12.54483
	unknown			0.2369	0.4512		0.2778		0.00024		0.26058	6.41743
	parasitism			0.0125	0.0312		0.0147		0.00001		0.01378	0.33929
Prepupa/Pupa		0.1403	0.0629			0.44843		0.0000629		0.25840		
	predation			0.0579	0.4218		0.4129		0.00006		0.23791	5.85914
	unknown			0.0032	0.0300		0.0230		0.00000		0.01325	0.32623
	parasitism			0.0018	0.0165		0.0126		0.00000		0.00725	0.17847

Adults	0.0774
Sex ratio (% females)	0.5
Adult females	0.0387
Potential fecundity	160
Potential F_1 progeny	6.1921
R_0*	0.0061921
Total mortality = %	99.9961

K_G= 4.0605

Supplementary Table 7. Life table of diamondback moth, *Plutella xylostella*, at Delémont, Switzerland for May–June 2016 on cabbage, *Brassica oleracea.*

Stage	Factor	Stage		Factor	Marginal attack rate	Apparent mortality		Real mortality (r_x)		k - value		% of generational mortality
		l_x	d_x	d_x	(m_x)	Stage qs	Factor q_x	Stage d_x/l_0	Factor d_x/l_0	Stage	Factor k_x	$100k_x/K_G$
egg		1000	694.7090			0.69471		0.694709		0.50613		
	predation			173.6100	0.2566		0.1736		0.17361		0.12877	8.00472
	unknown			503.2890	0.5767		0.5033		0.50329		0.37330	23.20540
	infertility			17.8100	0.0093		0.0178		0.01781		0.00406	0.25211
	parasitism			0.0000	0.0000		0.0000		0.00000		0.00000	0.00000
L1		305.2910	117.1156			0.38362		0.1171156		0.21015		
	predation			55.3006	0.2043		0.1811		0.05530		0.09923	6.16841
	unknown			61.8150	0.2254		0.2025		0.06182		0.11092	6.89505
	parasitism			0.0000	0.0000		0.0000		0.00000		0.00000	0.00000
L2-L3		188.1754	125.0534			0.66456		0.1250534		0.47438		
	predation			74.3280	0.4776		0.3950		0.07433		0.28196	17.52716
	unknown			31.3632	0.2396		0.1667		0.03136		0.11897	7.39570
	parasitism			19.3623	0.1556		0.1029		0.01936		0.07345	4.56579
L4		63.1219	36.7190			0.58171		0.0367190		0.37853		
	predation			12.0775	0.2492		0.1913		0.01208		0.12450	7.73948
	unknown			21.0196	0.3928		0.3330		0.02102		0.21669	13.46969
	parasitism			3.6218	0.0824		0.0574		0.00362		0.03734	2.32091
Prepupa/Pupa		26.4030	2.2956			0.08694		0.0022956		0.03950		
	predation			1.1170	0.0433		0.0423		0.00112		0.01922	1.19480
	unknown			0.3883	0.0153		0.0147		0.00039		0.00668	0.41531
	parasitism			0.7904	0.0308		0.0299		0.00079		0.01360	0.84546

Adults	24.1074
Sex ratio (% females)	0.5
Adult females	12.0537
Potential fecundity	160
Potential F_1 progeny	1928.5914
R_0*	1.9285914
Total mortality = %	98.7946

K$_G$= 1.6087

Supplementary Table 8. Life table of diamondback moth, *Plutella xylostella*, at Delémont, Switzerland for July–August 2016 on cabbage, *Brassica oleracea*.

Stage	Factor	Stage l_x	d_x	Factor d_x	Marginal attack rate (m_x)	Apparent mortality Stage qs	Factor q_x	Real mortality (r_x) Stage d_x/l_0	Factor d_x/l_0	k-value Stage	Factor k_x	% of generational mortality $100k_x/K_G$
egg		1000	604.7808			0.60478		0.6047808		0.39913		
	predation			215.4330	0.2816		0.2154		0.21543		0.14361	5.50451
	unknown			376.1468	0.4386		0.3761		0.37615		0.25075	9.61089
	infertility			13.2010	0.0109		0.0132		0.01320		0.00477	0.18272
	parasitism			0.0000	0.0000		0.0000		0.00000		0.00000	0.00000
L1		395.2192	173.9172			0.44005		0.1739172		0.25185		
	predation			169.6536	0.4320		0.4293		0.16965		0.24568	9.41655
	unknown			2.1954	0.0073		0.0056		0.00220		0.00318	0.12186
	parasitism			2.0682	0.0069		0.0052		0.00207		0.00299	0.11479
L2-L3		221.3020	207.5027			0.93764		0.2075027		1.20513		
	predation			119.3792	0.7974		0.5394		0.11938		0.69333	26.57436
	unknown			41.8013	0.4282		0.1889		0.04180		0.24277	9.30516
	parasitism			46.3223	0.4618		0.2093		0.04632		0.26903	10.31155
L4		13.7993	9.9672			0.72229		0.0099672		0.55641		
	predation			5.4231	0.5020		0.3930		0.00542		0.30275	11.60385
	unknown			3.3118	0.3467		0.2400		0.00331		0.18488	7.08632
	parasitism			1.2322	0.1465		0.0893		0.00123		0.06879	2.63652
Prepupa/Pupa		3.8322	1.3946			0.36391		0.0013946		0.19648		
	predation			0.0759	0.0243		0.0198		0.00008		0.01069	0.40987
	unknown			0.3565	0.1092		0.0930		0.00036		0.05022	1.92499
	parasitism			0.9622	0.2681		0.2511		0.00096		0.13557	5.19605

Adults	2.4376		
Sex ratio (% females)	0.5		
Adult females	1.2188	**K_G=**	2.6090
Potential fecundity	160		
Potential F_1 progeny	195.0071		
R_0*	0.1950071		
Total mortality = %	99.8781		