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APPENDIX A (TABLE A1). Model specifications for alternative models for the influence of the cover of oilseed rape in the previous year (p_0) and in the year of pollinator sampling (p_1)

Model	No. of parameters	Model equation
M1: $b_{OSR} \neq b_L$, $a \neq 1$, no effect from year	3	$\frac{(p_{1,i}+1)^a-1}{2^a-1} \times \frac{(b_{OSR}p_{0,i}+b_L(1-p_{0,i}))}{p_{1,i}}$
M2: $b = b_{OSR} = b_L$, $a \neq 1$, no effect from year *	2	$\frac{(p_{1,i}+1)^a-1}{2^a-1} \times \frac{b}{p_{1,i}}$
M3: $b_{OSR} \neq b_L$, $a=1$, no effect from year	2	$(b_{OSR}p_{0,i} + b_L(1-p_{0,i}))$
M4: $b_{OSR} \neq b_L$, $a \neq 1$, effect from year, $s = s_{OSR} = s_L$ for b_{OSR} , b_L ($s_i = 1$ if $i \leq n'$; $s_i = s$ otherwise) †	4	$\frac{(p_{1,i}+1)^a-1}{2^a-1} \times \frac{s_i\left(b_{OSR}p_{0,i}+b_L(1-p_{0,i})\right)}{p_{1,i}}$
M5: $b = b_{OSR} = b_L$, $a \neq 1$, effects from year $s = s_{OSR} = s_L$ for b_{OSR} , b_L **	3	$\frac{(p_{1,i}+1)^a-1}{2^a-1} \times \frac{s_i b}{p_{1,i}}$
M6: $b_{OSR} \neq b_L$, $a \neq 1$, effect from year only for b_L (s_L) ††	4	$\frac{(p_{1,i}+1)^a-1}{2^a-1} \times \frac{\left(b_{OSR}p_{0,i}+s_{L,i}b_L(1-p_{0,i})\right)}{p_{1,i}}$
M7: $b_{OSR} \neq b_L$, $a \neq 1$, effects from year only for b_{OSR} (s_{OSR})	4	$\frac{(p_{1,i}+1)^a-1}{2^a-1} \times \frac{\left(s_{OSR,i}b_{OSR}p_{0,i}+b_L(1-p_{0,i})\right)}{p_{1,i}}$
M8: $b_{OSR} \neq b_L$, $a \neq 1$, independent effect from year for b_{OSR} (s_{OSR}) and b_L (s_L)	5	$\frac{(p_{1,i}+1)^a-1}{2^a-1} \times \frac{\left(s_{OSR,i}b_{OSR}p_{0,i}+s_{L,i}b_L(1-p_{0,i})\right)}{p_{1,i}}$
M9: $b_{OSR} \neq b_L$, $a \neq 1$, independent effects from year for b_{OSR} (s_{OSR}), b_L (s_L), a (s_a)	6	$\frac{(p_{1,i}+1)^{s_{a,i}a}-1}{2^{s_{a,i}a}-1} \times \frac{\left(s_{OSR,i}b_{OSR}p_{0,i}+s_{L,i}b_L(1-p_{0,i})\right)}{p_{1,i}}$

b_{OSR} =per-area bee productivity oilseed rape, b_L= per-area bee productivity rest of the landscape, a= preference parameter (a=1 no preference/avoidance of oilseed rape compared to the rest of the landscape, figure 2) and s_{OSR}, s_L, s_a as year-specific multipliers for the second pair of study years 2011/2012; observations are indexed from i=1 to n' for the first study year

and from $i = n'+1$ to n for the second study year; † first and † † second best models for other wild bees (Table 1); * first and **second best model for bumble bees (Table 2)