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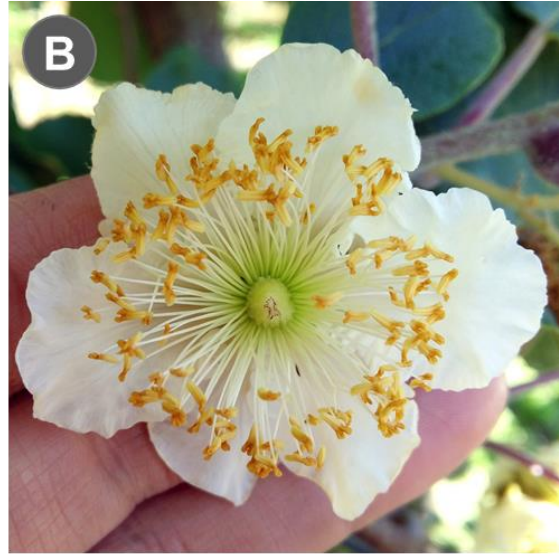2 **SUPPORTING INFORMATION**

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4 **Pollination of exotic fruit crops depends more on extant**

5 **pollinators and landscape structure than on local**

6 **management of domestic bees**
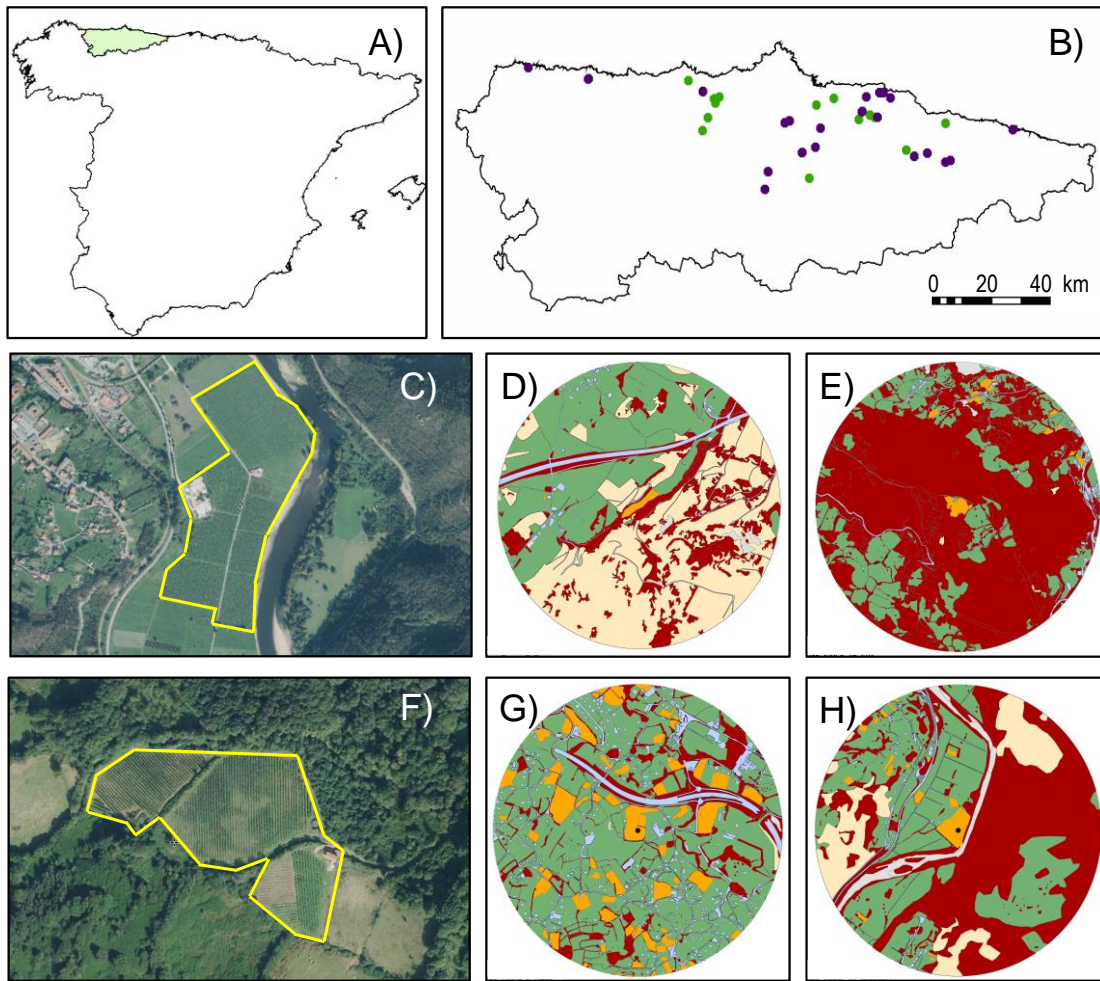
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8 **Marcos Miñarro, Daniel García, Rocío Rosa-García**

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Figure S1. Photographs of (A) female and (B) male kiwifruit flowers and (C) highbush (cv 'Duke') and (D) rabbiteye (cv 'Ochlockonee') flowers. 'Duke' flower is proportionally shorter and has a wider aperture than 'Ochlockonee' flower.

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21 Figure S2. Details of the study area and examples of orchards and their surrounding
22 landscapes. (A) The region of study (Asturias province, in pale green, within Spain). (B) Map of
23 Asturias with the kiwifruit and blueberry orchards selected for this study depicted as green and
24 purple spots, respectively. (C) Example of a kiwifruit orchard, bordered in yellow. (D) and (E)
25 Examples of land cover types in the 1000-m radius plot around two different kiwifruit orchards:
26 semi-natural woody habitats (dark red patches), pastures (green), eucalyptus plantations (pale
27 yellow), fruit tree plantation (orange), urbanized land (pale blue) and other habitats (pale grey).
28 (F) Example of a blueberry orchard, bordered in yellow. (G) and (H) Examples of land cover
29 types in the 1000-m radius plot around two different blueberry orchards (colour codes as in (D)
30 and (E).

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36 Table S1. Features of orchards under study. Density of honeybee hives and bumblebee

37 colonies refers to number of devices per ha.

Features	Kiwifruit				Blueberry			
	Mean	Min	Max	%	Mean	Min	Max	%
Orchard size (ha)	6.4	0.9	28.0	-	1.7	0.5	5.8	-
Tree age (years)	21.8	7	33	-	7.0	4	12	-
Tree density kiwifruit (trees /ha)	590.0	324	1013	-	-	-	-	-
Plant density highbush blueberry (plants/ha)	-	-	-	-	4117.0	3333	5000	-
Plant density rabbitey blueberry (plants/ha)	-	-	-	-	3753.0	3333	4444	-
Male:female tree proportion	0.21	0.10	0.33	-	-	-	-	-
Orchards without honeybee hives or bumblebee colonies - year 1 (%)				26.7				45.0
Orchards without honeybee hives or bumblebee colonies - year 2 (%)				35.7				45.0
Orchards with honeybee hives - year 1 (%)	-	-	-	53.3	-	-	-	30.0
Orchards with honeybee hives - year 2 (%)	-	-	-	57.1	-	-	-	30.0
Density of honeybee hives - year 1*	11.0	3.0	25.0	-	5.3	0.9	18.7	-
Density of honeybee hives - year 2*	10.7	4.0	21.4	-	3.3	1.3	6.3	-
Orchards with bumblebee colonies - year 1 (%)	-	-	-	40.0	-	-	-	40.0
Orchards with bumblebee colonies - year 2 (%)	-	-	-	21.4	-	-	-	40.0
Density of bumblebee colonies - year 1**	2.1	0.4	4.5	-	3.3	0.9	9.0	-
Density of bumblebee colonies - year 2**	1.8	0.4	4.0	-	3.2	0.9	5.2	-
Orchards with honeybee hives and bumblebee colonies - year 1 (%)	-	-	-	20.0	-	-	-	15.0
Orchards with honeybee hives and bumblebee colonies - year 2 (%)	-	-	-	14.3	-	-	-	15.0

Including only sites with hives

38 *Including only sites with commercial colonies*

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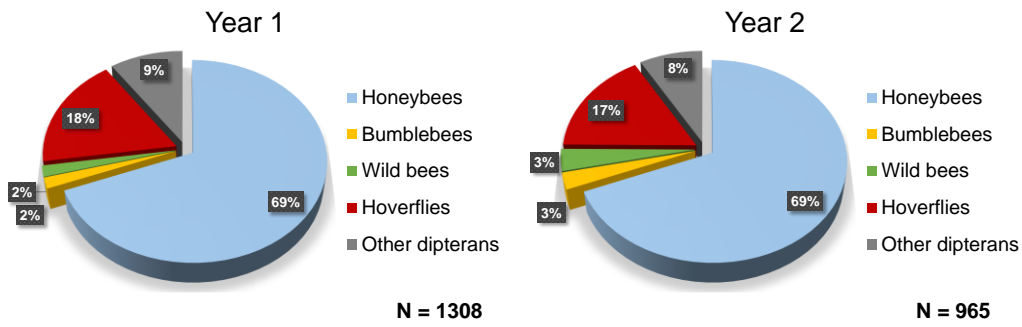41

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51 Table S2. Results of Principal Components Analysis (PCA) accounting for the variability in the six
52 general cover types in R1000 plots across kiwifruit and blueberry orchards. PCAs were calculated
53 based on the percentages of different cover types in the R1000 plots around each orchard
54 (quantified by GIS, ArcGIS9.3). PCA factor scores were obtained from the three first (Varimax)
55 rotated eigenvectors of each analysis. The percentage of variance accounted for by each
56 eigenvector, as well as the loadings of rotated factors (correlations, coefficients ≥ |0.650|
57 highlighted in bold) are shown.

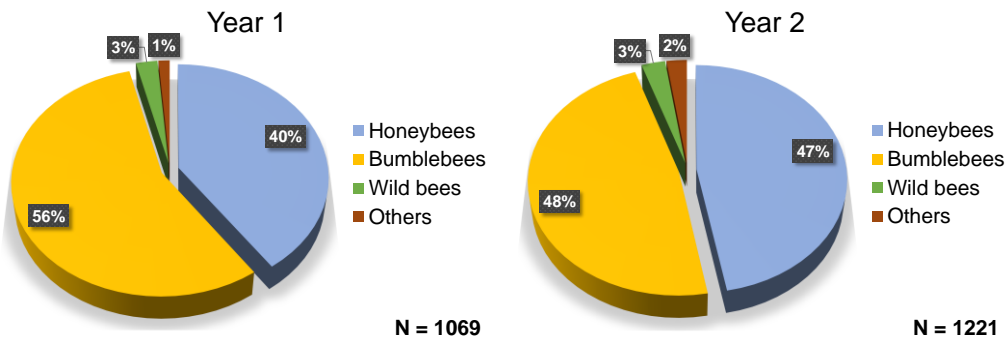| Crop	Factors	PC1	PC2	PC3
Kiwifruit	% Variance explained	42.02	23.71	15.56
	Semi-natural woody habitats	-0.536990	-0.247425	**-0.780498**
	Urbanized land	-0.154156	-0.265047	**0.857783**
	Pastures	**0.876150**	-0.284646	0.249256
	Fruit tree plantations	0.213668	-0.665787	0.211120
	Exotic tree plantations	-0.230668	**0.903688**	0.069954
	Other habitats	**-0.782343**	0.343247	0.200206
Highbush and rabbiteye blueberry	% Variance explained	36.84	22.63	20.29
	Semi-natural woody habitats	**-0.836642**	-0.479660	-0.198422
	Urbanized land	0.070086	-0.608515	**0.673588**
	Pastures	**0.943985**	-0.080996	-0.074526
	Fruit tree plantations	0.587833	-0.038514	**-0.690348**
	Exotic tree plantations	0.103398	**0.941951**	0.166513
	Other habitats	0.058446	0.148746	0.556456

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A) Kiwifruit

Year 1

69% Honeybees
2% Bumblebees
2% Wild bees
18% Hoverflies
9% Other dipterans

N = 1308

Year 2

69% Honeybees
3% Bumblebees
3% Wild bees
17% Hoverflies
8% Other dipterans

N = 965

B) Highbush blueberry

Year 1

40% Honeybees
56% Bumblebees
3% Wild bees
1% Others

N = 1069

Year 2

47% Honeybees
48% Bumblebees
3% Wild bees
2% Others

N = 1221

C) Rabbiteye blueberry

Year 1

2% Honeybees
94% Bumblebees
3% Wild bees
1% Others

N = 1207

Year 2

9% Honeybees
87% Bumblebees
2% Wild bees
2% Others

N = 1339
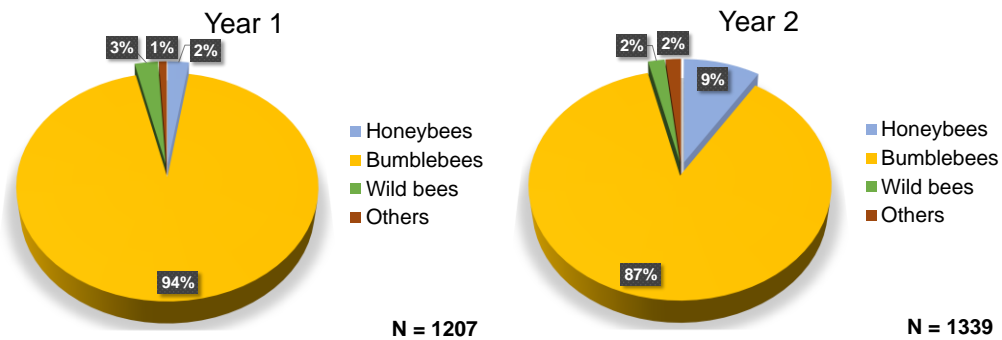
Figure S3. Pollinator assemblage in the two sampling years for kiwifruit (A), highbush blueberry (B) and rabbiteye blueberry (C) crops. N is the number of insect visits recorded for each crop and year.

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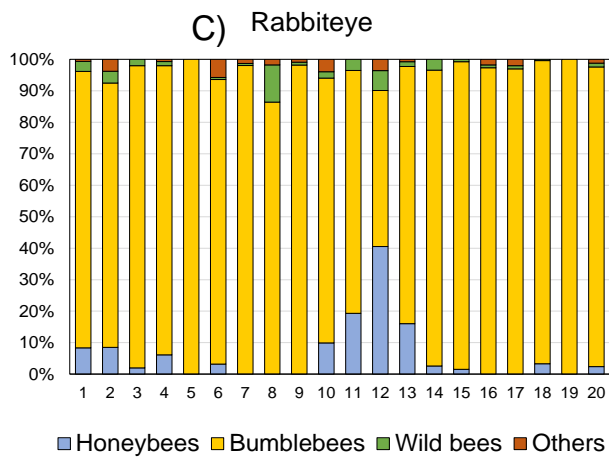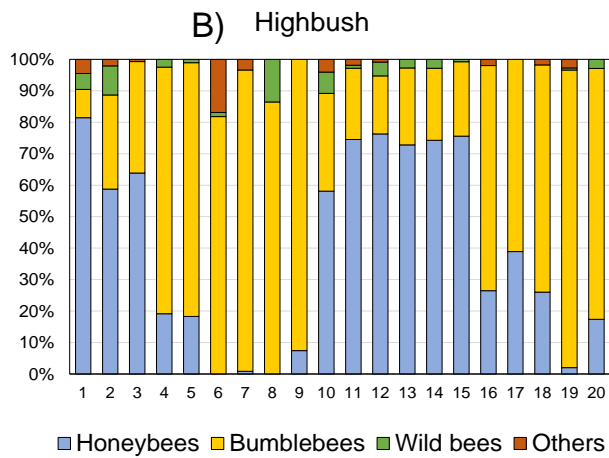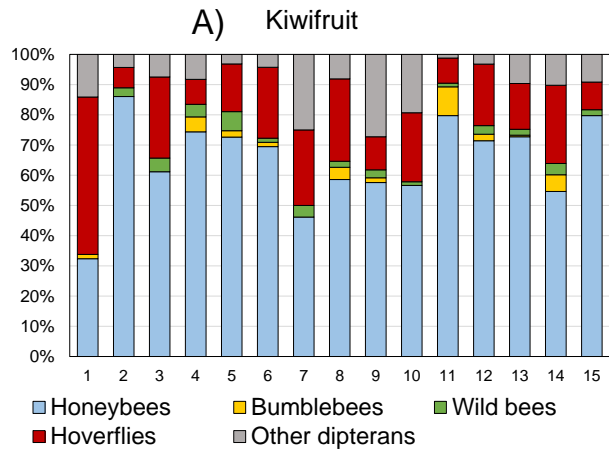72   Table S3. List of pollinators recorded visiting flowers in kiwifruit crops.

Species	Order	Pollinator group
Apis mellifera	Hymenoptera	Honeybee
Bombus lucorum	Hymenoptera	Bumblebee
Bombus pascuorum	Hymenoptera	Bumblebee
Bombus sylvarum	Hymenoptera	Bumblebee
Bombus terrestris	Hymenoptera	Bumblebee
Halictus crenicornis	Hymenoptera	Wild bee
Halictus leucaheneus	Hymenoptera	Wild bee
Halictus quadricinctus	Hymenoptera	Wild bee
Halictus tumulorum	Hymenoptera	Wild bee
Lasioglossum (Evylaeus) sp.	Hymenoptera	Wild bee
Lasioglossum fulvicorne	Hymenoptera	Wild bee
Lasioglossum laticeps	Hymenoptera	Wild bee
Lasioglossum lativentre	Hymenoptera	Wild bee
Lasioglossum malachurum	Hymenoptera	Wild bee
Lasioglossum parvulum	Hymenoptera	Wild bee
Lasioglossum pauperatum	Hymenoptera	Wild bee
Lasioglossum pauxillum	Hymenoptera	Wild bee
Lasioglossum politum	Hymenoptera	Wild bee
Lasioglossum pygmaeum	Hymenoptera	Wild bee
Lasioglossum sextrigatum	Hymenoptera	Wild bee
Lasioglossum transitorium	Hymenoptera	Wild bee
Lasioglossum zonulum	Hymenoptera	Wild bee
Cheilosia sp.	Diptera	Hoverfly (Eristalinae)
Eristalis similis	Diptera	Hoverfly (Eristalinae)
Eristalis tenax	Diptera	Hoverfly (Eristalinae)
Riponnensia splendens	Diptera	Hoverfly (Eristalinae)
Syritta pipiens	Diptera	Hoverfly (Eristalinae)
Volucella zonaria	Diptera	Hoverfly (Eristalinae)
Xylota segnis	Diptera	Hoverfly (Eristalinae)
Chrysotoxum bicinctum	Diptera	Hoverfly (Syrphinae)
Chrysotoxum festivum	Diptera	Hoverfly (Syrphinae)
Episyrphus balteatus	Diptera	Hoverfly (Syrphinae)
Eupeodes corollae	Diptera	Hoverfly (Syrphinae)
Melanostoma mellinum	Diptera	Hoverfly (Syrphinae)
Melanostoma scalare	Diptera	Hoverfly (Syrphinae)
Melanostoma sp.	Diptera	Hoverfly (Syrphinae)
Meliscaeva auricollis	Diptera	Hoverfly (Syrphinae)
Neoascia podagrica	Diptera	Hoverfly (Syrphinae)
Platycheirus sp.	Diptera	Hoverfly (Syrphinae)
Sphaerophoria scripta	Diptera	Hoverfly (Syrphinae)
Syrphus ribesii	Diptera	Hoverfly (Syrphinae)
Syrphus vitripennis	Diptera	Hoverfly (Syrphinae)
Xanthandrus comtus	Diptera	Hoverfly (Syrphinae)
Anthomyiidae sp.	Diptera	Fly
Chloromyia formosa	Diptera	Fly
Chrysopilus asiliformis	Diptera	Fly
Neomyia cornicina	Diptera	Fly
Stomorhina lunata	Diptera	Fly
Tabanus sp.	Diptera	Fly
Clanoptilus sp.	Coleoptera	Coleoptera
Rhagonycha fulva	Coleoptera	Coleoptera

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Figure S4. Relative abundance of pollinators visiting flowers in each orchard of kiwifruit (A), highbush blueberry (B) and rabbiteye blueberry (C) crops. Numbers on the X-axes correspond to the different orchards.

83   Table S4. List of pollinators recorded visiting flowers in highbush blueberry crops.

Species	Order	Pollinator group
Apis mellifera	Hymenoptera	Honeybee
Bombus hortorum	Hymenoptera	Bumblebee
Bombus lapidarius	Hymenoptera	Bumblebee
Bombus pascuorum	Hymenoptera	Bumblebee
Bombus pratorum	Hymenoptera	Bumblebee
Bombus sylvarum	Hymenoptera	Bumblebee
Bombus terrestris	Hymenoptera	Bumblebee
Andrena dorsata	Hymenoptera	Wild bee
Andrena flavipes	Hymenoptera	Wild bee
Andrena nitida	Hymenoptera	Wild bee
Andrena pilipes	Hymenoptera	Wild bee
Anthophora plumipes	Hymenoptera	Wild bee
Colletes cunicularius	Hymenoptera	Wild bee
Halictus rubicundus	Hymenoptera	Wild bee
Lasioglossum calceatum	Hymenoptera	Wild bee
Lasioglossum fulvicorne	Hymenoptera	Wild bee
Lasioglossum lativentre	Hymenoptera	Wild bee
Lasioglossum pallens	Hymenoptera	Wild bee
Osmia bicornis	Hymenoptera	Wild bee
Xylocopa violacea	Hymenoptera	Wild bee
Nomada hispanica	Hymenoptera	Cuckoo bee
Episyrphus balteatus	Diptera	Hoverfly
Scaeva selenitica	Diptera	Hoverfly
Mesembrina meridiana	Diptera	Fly
Sarcophaga stercoraria	Diptera	Fly
Macroglossum stellatarum	Lepidoptera	Butterfly
Vanessa atalanta	Lepidoptera	Butterfly
Vanessa cardui	Lepidoptera	Butterfly

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88   Table S5. List of pollinators recorded visiting flowers in rabbiteye blueberry crops.

Species	Order	Pollinator group
Apis mellifera	Hymenoptera	Honeybee
Bombus hortorum	Hymenoptera	Bumblebee
Bombus hypnorum	Hymenoptera	Bumblebee
Bombus jonellus	Hymenoptera	Bumblebee
Bombus lapidarius	Hymenoptera	Bumblebee
Bombus lucorum	Hymenoptera	Bumblebee
Bombus magnus	Hymenoptera	Bumblebee
Bombus pascuorum	Hymenoptera	Bumblebee
Bombus pratorum	Hymenoptera	Bumblebee
Bombus sylvarum	Hymenoptera	Bumblebee
Bombus terrestris	Hymenoptera	Bumblebee
Bombus campestris	Hymenoptera	Cuckoo bumblebee
Bombus sylvestris	Hymenoptera	Cuckoo bumblebee
Andrena dorsata	Hymenoptera	Wild bee
Andrena nigroaenea	Hymenoptera	Wild bee
Andrena nitida	Hymenoptera	Wild bee
Anthophora aestivalis	Hymenoptera	Wild bee
Anthophora plumipes	Hymenoptera	Wild bee
Eucera nigrescens	Hymenoptera	Wild bee
Lasioglossum calceatum	Hymenoptera	Wild bee
Lasioglossum morio	Hymenoptera	Wild bee
Lasioglossum pallens	Hymenoptera	Wild bee
Lasioglossum zonulum	Hymenoptera	Wild bee
Osmia bicornis	Hymenoptera	Wild bee
Episyrphus balteatus	Diptera	Hoverfly
Eristalis similis	Diptera	Hoverfly
Eupeodes luniger	Diptera	Hoverfly
Vanessa atalanta	Lepidoptera	Butterfly

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Table S6. Results of Generalized Linear Mixed Models evaluating the effects of pollination
treatment (open vs. supplementary pollination) on fruit set and fruit weight in kiwifruit, highbush
blueberry and rabbiteye blueberry crops. Models included the variance (±SD) estimate for
tree/plant and orchard identity, considered as random factors. Details of the family of error
distribution and link function used are also given.

| Crop	**Fruit set** (Binomial, logit)				
	Predictors	Estimate	SE/SD	z	P
Kiwifruit	Intercept	3.388	0.170	19.97	<0.001
	Treatment (Supplementary pollination)	-0.087	0.170	-0.51	0.609
	Tree [Orchard] (random factor)	0.592	0.769		
	Orchard (random factor)	0.005	0.073		
	Fruit weight (Gaussian, log)				
	Predictors	Estimate	SE/SD	t	P
	Intercept	6.527	0.037	172.52	<0.001
	Treatment (Supplementary pollination)	0.109	0.019	5.74	<0.001
	Tree [Orchard] (random factor)	0.030	0.173		
	Orchard (random factor)	0.013	0.115		
Highbush blueberry	**Fruit set** (Binomial, logit)				
	Predictors	Estimate	SE/SD	z	P
	Intercept	2.332	0.198	11.80	<0.001
	Treatment (Supplementary pollination)	0.030	0.077	0.40	0.692
	Plant [Orchard] (random factor)	2.396	1.548		
	Orchard (random factor)	0.429	0.655		
	Fruit weight (Gaussian, log)				
	Predictors	Estimate	SE/SD	t	P
	Intercept	1.276	0.036	21.48	<0.001
	Treatment (Supplementary pollination)	0.034	0.034	188.87	0.057
	Plant [Orchard] (random factor)	0.037	0.191		
	Orchard (random factor)	0.019	0.140		
Rabbiteye blueberry	**Fruit set** (Binomial, logit)				
	Predictors	Estimate	SE/SD	z	P
	Intercept	2.440	0.155	15.74	<0.001
	Treatment (Supplementary pollination)	-0.055	0.085	-0.653	0.513
	Plant [Orchard] (random factor)	1.647	1.283		
	Orchard (random factor)	0.204	0.452		
	Fruit weight (Gaussian, log)				
	Predictors	Estimate	SE/SD	t	P
	Intercept	0.862	0.031	27.65	<0.001
	Treatment (Supplementary pollination)	0.004	0.020	0.209	0.835
	Plant [Orchard] (random factor)	0.021	0.146		
	Orchard (random factor)	0.013	0.115		

100 Table S7. Descriptive statistics (number of tree/plants, mean, standard deviation, minimum and
101 maximum values) of fruit set (%) and fruit weight (g) for each study crop according to pollination
102 treatment.

Crop	Variable	Treatment	N	Mean	SD	Min	Max
Kiwifruit	Fruit set	Open pollination	84	95.78	4.19	86.70	100.00
		Supplementary pollination	84	95.43	3.44	86.70	100.00
	Fruit weight	Open pollination	84	94.12	15.26	64.20	124.30
		Supplementary pollination	84	100.90	12.63	77.50	129.70
Highbush blueberry	Fruit set	Open pollination	192	82.13	19.29	26.49	100.00
		Supplementary pollination	187	82.19	19.79	19.59	100.00
	Fruit weight	Open pollination	192	1.473	0.376	0.561	2.141
		Supplementary pollination	187	1.520	0.387	0.681	2.356
Rabbiteye blueberry	Fruit set	Open pollination	188	84.77	17.60	17.17	100.00
		Supplementary pollination	181	84.95	16.49	32.49	100.00
	Fruit weight	Open pollination	188	0.833	0.214	0.443	1.306
		Supplementary pollination	181	0.850	0.260	0.404	1.672

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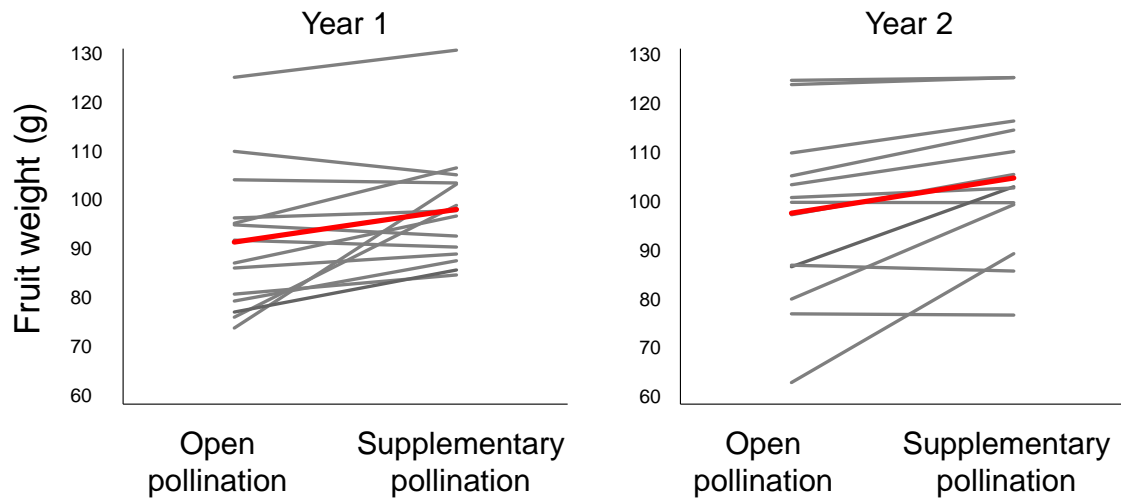
Figure S5. Fruit weight in kiwifruit crops in the two sampling years according to the pollination treatment applied. Higher values in supplementary than in open pollination reflect a pollination limitation. Red lines represent the average value for all orchards (in grey). Note that the y-axes start at 60 g.

Table S8. Results of Generalized Linear Mixed Models evaluating the effects of the abundance of honeybees and wild pollinators and the richness of pollinators on fruit set and fruit weight in kiwifruit, highbush blueberry and rabbiteye blueberry crops. In kiwifruit, fruit weight limitation was estimated as the log ratio fruit weight in supplementary- and open-pollination treatments. Details of the family of error distribution and link function used, values of marginal and conditional (in brackets) R2, variance (SD) estimate for orchard identity, considered as a random factor, as well as Variance Inflation Factor (VIF) of fixed predictors, are also shown.

Crop

Kiwifruit

Fruit set				(Binomial, logit)		**Fruit weight deficit**				(Gamma, log)	
R^2 = 0.255 (0.299)						R^2 = 0.259 (0.418)					
Predictors	Estimate	SE/SD	z	P	VIF	Predictors	Estimate	SE/SD	t	P	VIF
Intercept	2,198	0.659	3.33	<0.001		Intercept	0.121	0.069	1.73	0.096	
Honeybee abundance	0.322	0.204	1.58	0.114	1.95	Honeybee abundance	-0.068	0.019	-3.61	<0.001	1.78
Wild pollinator abundance	-0.324	0.088	-3.69	<0.001	1.86	Wild pollinator abundance	0.019	0.008	2.43	0.021	1.66
Pollinator richness	0.101	0.065	1.56	0.120	1.33	Pollinator richness	0.011	0.005	1.96	0.054	1.26
Male proportion	2,603	2,203	1.18	0.237	1.21	Male proportion	-0.139	0.240	-0.58	0.571	1.08
Orchard (random factor)	0.076	0.276				Orchard (random factor)	0.002	0.051			

Highbush blueberry

Fruit set				(Binomial, logit)		**Fruit weight (open pollination)**				(Gaussian)	
R^2 = 0.318 (0.750)						R^2 = 0.137 (0.450)					
Predictors	Estimate	SE/SD	z	P	VIF	Predictors	Estimate	SE/SD	t	P	VIF
Intercept	0.331	0.355	0.93	0.351		Intercept	1,290	0.186	6.94	<0.001	
Honeybee abundance	-0.481	0.504	-0.95	0.340	1.09	Honeybee abundance	-0.947	0.273	-3.47	<0.001	1.12
Wild pollinator abundance	5,916	0.990	5.98	<0.001	1.03	Wild pollinator abundance	0.768	0.586	1.13	0.194	1.06
Pollinator richness	0.047	0.045	1.04	0.300	1.10	Pollinator richness	0.035	0.026	1.34	0.182	1.08
Orchard (random factor)	0.697	0.835				Orchard (random factor)	0.098	0.312			

Rabbiteye blueberry

Fruit set				(Binomial, logit)		**Fruit weight (open pollination)**				(Gaussian)	
R^2 = 0.180 (0.744)						R^2 = 0.037 (0.268)					
Predictors	Estimate	SE/SD	z	P	VIF	Predictors	Estimate	SE/SD	t	P	VIF
Intercept	2,521	0.542	4.65	<0.001		Intercept	0.776	0.132	5.88	<0.001	
Honeybee abundance	-36.817	7,694	-4.78	<0.001	1.36	Honeybee abundance	0.157	2.024	0.08	0.938	1.14
Wild pollinator abundance	0.685	1,240	0.55	0.581	1.38	Wild pollinator abundance	0.775	0.377	2.06	0.042	1.18
Pollinator richness	-0.045	0.057	-0.79	0.430	1.07	Pollinator richness	-0.010	0.016	-0.65	0.519	1.04
Orchard (random factor)	1,065	1,032				Orchard (random factor)	0.025	0.159			

Table S9. Results of Generalized Linear Mixed Models evaluating the effects of landscape structure (PC1, PC2, PC3; see Table S2) and the management of domestic pollinators on abundance and richness of pollinators in kiwifruit. In brackets, details of the family of distribution and link function used. Values of marginal and conditional (in brackets) R^2, variance (SD) estimate for orchard identity, considered as a random factor, as well as Variance Inflation Factor (VIF) of fixed predictors, are also shown.

Honeybee abundance (Gaussian, log)

R^2 = 0.351 (0.406)

Predictors	Estimate	SE/SD	t	P	VIF
Intercept	2.310	0.237	9.75	<0.001	
PC1	-0.668	0.149	-4.49	0.001	1.10
PC2	0.234	0.142	1.64	0.135	1.01
PC3	-0.268	0.156	-1.72	0.121	1.23
Occurrence honeybee colonies	0.258	0.307	0.84	0.422	1.23
Occurrence bumblebee colonies	0.216	0.299	0.72	0.479	1.11
Orchard (random factor)	0.099	0.315			

Wild pollinator abundance (Gaussian, log)

R^2 = 0.278 (0.521)

Predictors	Estimate	SE/SD	t	P	VIF
Intercept	1.971	0.229	8.63	<0.001	
PC1	-0.206	0.145	-1.42	0.185	1.06
PC2	0.259	0.141	1.84	0.098	1.01
PC3	-0.367	0.155	-2.37	0.041	1.22
Occurrence honeybee colonies	-0.200	0.302	-0.66	0.523	1.22
Occurrence bumblebee colonies	0.229	0.248	0.92	0.363	1.07
Orchard (random factor)	0.206	0.454			

Pollinator richness (Gamma, log)

R^2 = 0.093 (0.093)

Predictors	Estimate	SE/SD	t	P	VIF
Intercept	1.689	0.060	27.97	<0.001	
PC1	-0.035	0.038	-0.92	0.359	1.12
PC2	0.061	0.037	1.66	0.096	1.03
PC3	-0.025	0.039	-0.64	0.522	1.20
Occurrence honeybee colonies	-0.062	0.077	-0.80	0.422	1.20
Occurrence bumblebee colonies	0.142	0.080	1.77	0.077	1.14
Orchard (random factor)	0	0			

Table S10. Results of Generalized Linear Mixed Models evaluating the effects of landscape structure (PC1, PC2, PC3; see Table S2) and the management of domestic pollinators on abundance of pollinators in highbush blueberry crops. In brackets, details of the family of error distribution and link function used. Values of marginal and conditional (in brackets) R^2, variance (SD) estimate for orchard identity, considered as a random factor, as well as Variance Inflation Factor (VIF) of fixed predictors, are also shown.

Honeybee abundance (Gamma, log)

R^2 = 0.325 (0.495)

Predictors	Estimate	SE/SD	t	P	VIF
Intercept	0.105	0.027	3.83	<0.001	
PC1	-0.061	0.026	-2.40	0.016	1.10
PC2	-0.044	0.026	-1.70	0.089	1.01
PC3	-0.052	0.026	-1.99	0.046	1.23
Density honeybee colonies	-0.001	0.005	-0.24	0.808	1.23
Density bumblebee colonies	0.007	0.009	0.84	0.399	1.11
Orchard (random factor)	0.004	0.061			

Wild pollinator abundance (Gamma, log)

R^2 = 0.254 (0.360)

Predictors	Estimate	SE/SD	t	P	VIF
Intercept	-2.040	0.149	-13.73	<0.001	
PC1	0.272	0.116	2.34	0.019	1.28
PC2	0.272	0.107	2.55	0.011	1.06
PC3	0.018	0.108	0.17	0.866	1.09
Occurrence honeybee colonies	0.199	0.229	0.87	0.385	1.12
Occurrence bumblebee colonies	0.025	0.236	0.1	0.917	1.31
Orchard (random factor)	0.061	0.248			

Pollinator richness (Gaussian, log)

R^2 = 0.059 (0.405)

Predictors	Estimate	SE/SD	t	P	VIF
Intercept	3.824	0.320	11.97	<0.001	
PC1	-0.209	0.253	-0.83	0.422	1.25
PC2	0.011	0.233	0.05	0.962	1.06
PC3	-0.143	0.236	-0.61	0.554	1.09
Occurrence honeybee colonies	-0.302	0.468	-0.64	0.523	1.11
Occurrence bumblebee colonies	-0.278	0.513	-0.60	0.596	1.30
Orchard (random factor)	0.682	0.826			

Table S11. Results of Generalized Linear Mixed Models evaluating the effects of landscape structure (PC1, PC2, PC3; see Table S2) and the management of domestic pollinators on abundance and richness of pollinators in rabbiteye blueberry crops. In brackets, details of the family of error distribution and link function used. Values of marginal and conditional (in brackets) R^2, variance (SD) estimate for orchard identity, considered as a random factor, as well as Variance Inflation Factor (VIF) of fixed predictors, are also shown.

Honeybee abundance (Gamma, log)

R^2 = 0.134 (0.413)

Predictors	Estimate	SE/SD	t	P	VIF
Intercept	0.013	0.005	2.69	0.007	
PC1	-0.001	0.005	-0.17	0.869	1.01
PC2	-0.003	0.005	-0.56	0.577	1.02
PC3	-0.002	0.005	-0.35	0.729	1.03
Density honeybee colonies	0.000	0.001	-0.44	0.663	1.00
Density bumblebee colonies	-0.003	0.001	-2.04	0.041	1.06
Orchard (random factor)	0.000	0.010			

Wild pollinator abundance (Gamma, log)

R^2 = 0.119 (0.191)

Predictors	Estimate	SE/SD	t	P	VIF
Intercept	-1.891	0.110	-17.24	<0.001	
PC1	0.150	0.084	1.79	0.074	1.24
PC2	0.085	0.078	1.09	0.276	1.06
PC3	-0.085	0.079	-1.08	0.283	1.09
Occurrence honeybee colonies	0.215	0.180	1.19	0.232	1.09
Occurrence bumblebee colonies	0.036	0.172	0.21	0.835	1.31
Orchard (random factor)	0.022	0.150			

Pollinator richness (Poisson, log)

R^2 = 0.106 (0.106)

Predictors	Estimate	SE/SD	t	P	VIF
Intercept	1.431	0.067	21.34	< 2e-16	
PC1	-0.146	0.055	-2.65	0.008	1.04
PC2	0.046	0.057	0.80	0.422	1.05
PC3	-0.082	0.061	-1.35	0.178	1.08
Density honeybee colonies	-0.012	0.019	-0.63	0.531	1.02
Density bumblebee colonies	0.024	0.027	0.90	0.368	1.16
Orchard (random factor)	0.000	0.000			