

Appendix A Protocol details and references of projects used for exhaustive vegetation data

Land-cover type	Year	Project	Total species richness	No. species 'filtered' ¹	Protocol details	References
Grassland	2018	SEBIOPAG	108	51	Quadrats located 5 m apart, 50 m away from the field margin	Ricci et al. (2019)
	2018	BISCO			Quadrats evenly distributed, at least 5 m away from the field margin	Uroy (2020)
Winter cereal	2019	AGRIM	112	95	Quadrats evenly distributed, at least 10 m away from the field margin	Ricono (2021)
	2018	SEBIOPAG			Quadrats located 5 m apart, 50 m away from the field margin	Ricci et al. (2019)
Maize	2013-2014	FARMLAND	96	45	Quadrats located along two transects, one at 1 m away from the field margin, the other at 25 m away from the field margin	Alignier et al. (2020)
	2018	SEBIOPAG			Quadrats located 5 m apart, 50 m away from the field margin	Ricci et al. (2019)
Woodland	2018	BISCO	146	36	Quadrats evenly distributed, at least 5 m away from the field margin	Uroy (2020)
Legume-cereal	2018	DIVAG	124	63	Quadrats located 5 m apart, 25 m away from the field margin	Aviron et al. (in prep)
	2019	AGRIM			Quadrats evenly distributed, at least 10 m away from the field margin	Ricono (2021)
	2018	Berry internship			Quadrats located 5 m apart, 25 m away from the field margin	Aviron et al. (2023)
Hedgerow	2019	AGRIM	193	76	Quadrats located 5 m apart	Ricono (2021)

¹ Number of species among the 95 dicotyledon species 'filtered'. See Appendix B for details about species selection.

Alignier A, Solé-Senan X, Robleño I, Baraibar B, Fahrig L, Giralt D, Gross N, Martin, J-L, Recasens, J, Sirami C, Siriwardena G, Baillod A, Bertrand C, Carrié R, Hass A, Henckel L., Miguet P, Badenhausser I, Baudry J, Bota G, Bretagnolle V, Brotons L, Burel F, Calatayud F, Clough Y, Georges R, Gibon A, Girard J, Lindsay K, Minano J, Mitchell S, Patry N, Poulin B, Tscharrntke T, Vialatte A, Violle C, Yaverkovski N., Batáry P (2020) Configurational crop heterogeneity increases within-field plant diversity. *Journal of Applied Ecology* 57(4): 654-663

Aviron S, Berry T, Leroy D, Savary G, Alignier A (2023) Wild plants in hedgerows and weeds in crop fields are important floral resources for wild flower-visiting insects, independently of the presence of intercrops. *Agriculture, Ecosystems and Environment*, in press.

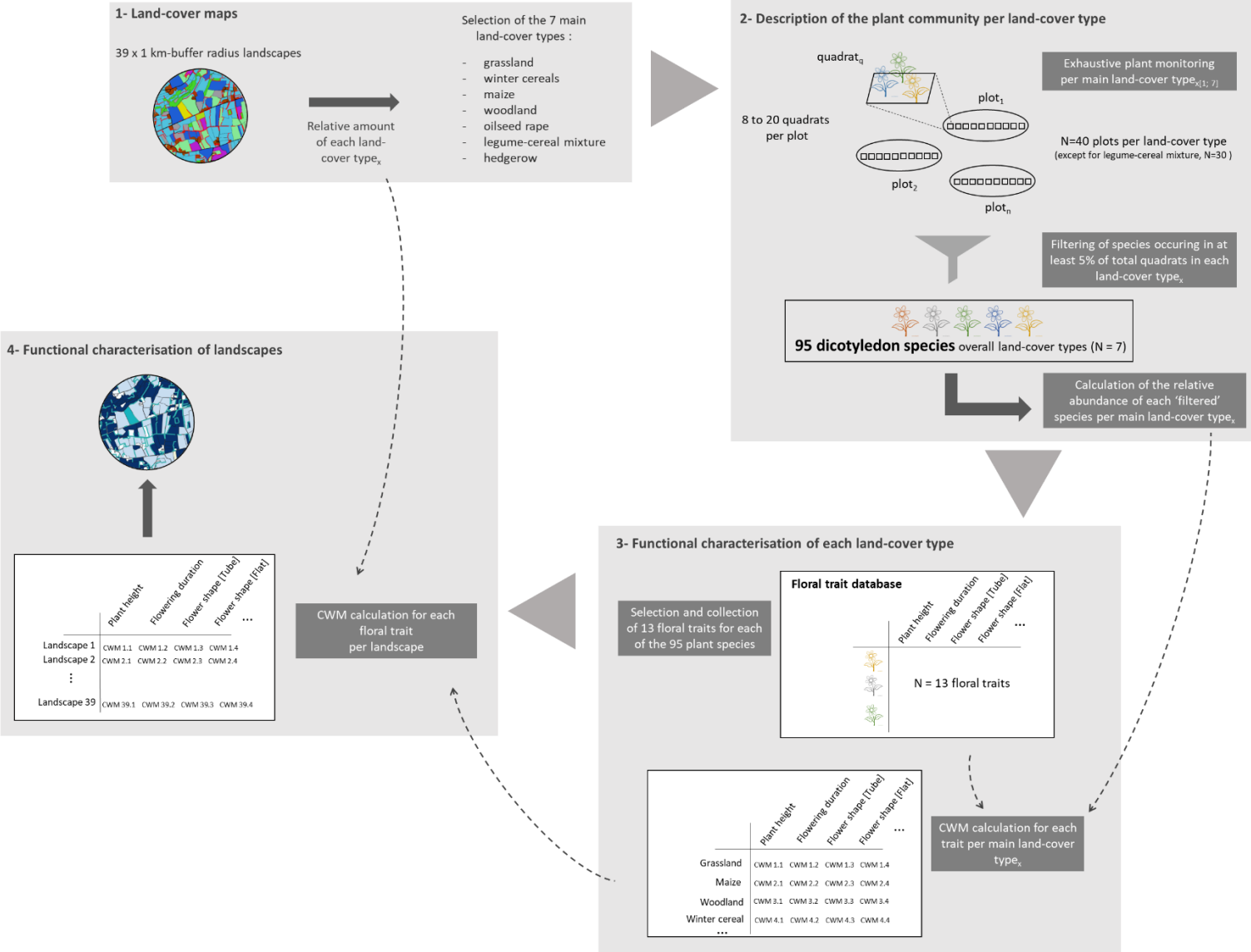
Aviron S, Berry T, Jeavons E, Le Lann C, Leroy D, van Baaren J, Alignier A (in prep) Contribution of floral resources provided by crops, weeds and wild plants in supporting wild pollinating insects in agricultural landscapes

Ricci B, Lavigne C, Alignier A, Aviron S, Biju-Duval L, Bouvier JC, Choisis JP, Franck P, Joannon A, Ladet S, Mezerette F, Plantegenest M, Savary G, Vialatte A, Petit S (2019) Local pesticide use intensity conditions landscape effects on biological pest control. *Proceedings of the Royal Society B* 286(1904) : 20182898

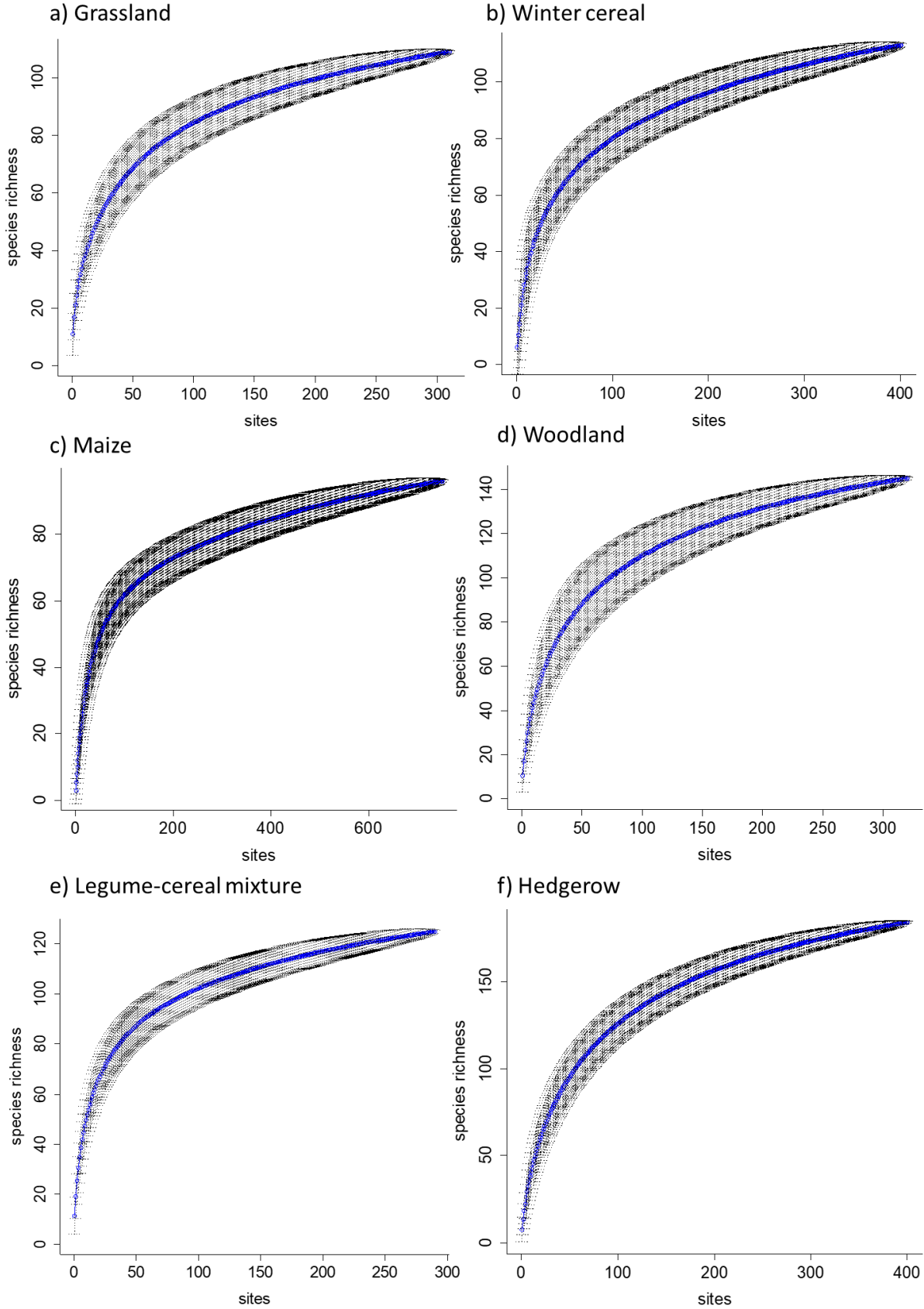
Ricono C (2021) Effets des pratiques agricoles biologiques en contexte bocager sur le microbiote du blé et ses fonctions associées. PhD Dissertation, University of Rennes

Uroy L (2020) Effet de la connectivité et de sa dynamique temporelle sur la structuration taxonomique et fonctionnelle des communautés végétales. PhD Dissertation, University of Rennes

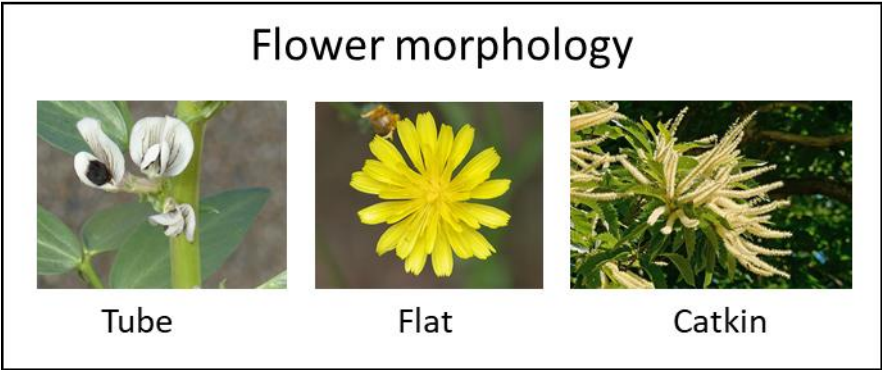
Appendix B Flowchart of the successive steps used to obtain Community Weighted Mean (CWM) values of each floral trait per landscape



Appendix C Species accumulation curves for main land-cover types



Appendix D Illustration of the three traits modalities for *Flower morphology*



Appendix E Community Weighted Mean (CWM) values of each floral trait for each main land-cover type.

	Mean UV reflexion	Min size of floral unit	Max size of floral unit	Plant height [Short]	Plant height [Intermediate]	Plant height [Tall]	Flowering duration	Flower symmetry [Actino.]	Flower symmetry [Zygo.]	Flower morpho. [Catkin]	Flower morpho. [Flat]	Flower morpho. [Tube]	Empiric nectar productivity
Grassland	9.20	17.35	28.02	0.76	0.24	0.00	6.26	0.63	0.37	0.00	0.56	0.37	466.68
Woodland	10.93	24.30	41.45	0.50	0.32	0.18	3.85	0.71	0.09	0.21	0.72	0.07	405.85
Maize	13.40	14.28	23.77	0.90	0.10	0.00	6.66	0.77	0.23	0.00	0.79	0.20	67.16
Legume-crop mix	14.11	14.31	24.04	0.52	0.48	0.00	4.61	0.42	0.58	0.00	0.43	0.57	138.00
Winter cereals	14.40	11.06	18.74	0.86	0.14	0.00	6.54	0.69	0.31	0.00	0.76	0.23	170.46
Hedgerow	12.31	14.74	27.69	0.23	0.62	0.15	4.18	0.75	0.11	0.18	0.71	0.11	199.79
Oilseed rape	21.50	20.00	30.00	0.00	1.00	0.00	5.00	1.00	0.00	0.00	1.00	0.00	268.11

Appendix F Spearman correlation coefficients between Community Weighted Mean (CWM) values of each floral trait, at the field scale. Bold values indicate Spearman *rho* coefficients > |0.7|

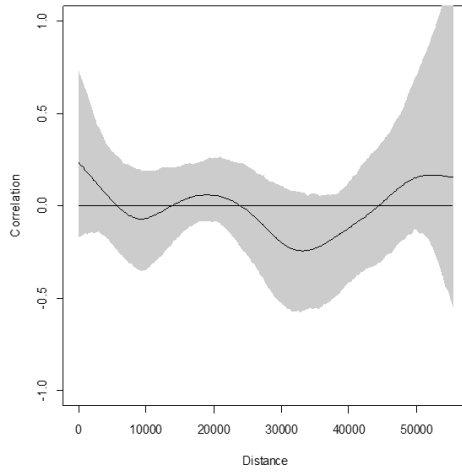
	Mean UV reflection	Min size of floral unit	Max size of floral unit	Plant height [Intermediate]	Plant height [Short]	Plant height [Tall]	Flowering duration	Flower symmetry [Actino.]	Flower symmetry [Zygo.]	Empiric nectar productivity	Flower morpho. [Catkin]	Flower morpho. [Flat]	Flower morpho. [Tube]
Mean UV reflection	1.00	0.16	0.17	0.04	-0.04	-0.16	0.10	0.25	-0.25	-0.40	-0.05	0.18	-0.18
Min size of floral unit	0.16	1.00	0.96	0.37	-0.37	0.11	-0.08	-0.01	0.00	0.15	0.27	-0.04	0.02
Max size of floral unit	0.17	0.96	1.00	0.45	-0.46	0.02	-0.24	-0.13	0.12	0.08	0.20	-0.19	0.17
Plant height [Intermediate]	0.04	0.37	0.45	1.00	-1.00	-0.26	-0.66	-0.71	0.70	0.01	-0.09	-0.67	0.66
Plant height [Short]	-0.04	-0.37	-0.46	-1.00	1.00	0.24	0.66	0.70	-0.70	-0.01	0.09	0.66	-0.66
Plant height [Tall]	-0.16	0.11	0.02	-0.26	0.24	1.00	0.41	0.32	-0.33	0.30	0.79	0.44	-0.44
Flowering duration	0.10	-0.08	-0.24	-0.66	0.66	0.41	1.00	0.75	-0.76	0.31	0.33	0.81	-0.81
Flower symmetry [Actino.]	0.25	-0.01	-0.13	-0.71	0.70	0.32	0.75	1.00	-1.00	0.13	0.26	0.92	-0.93
Flower symmetry [Zygo.]	-0.25	0.00	0.12	0.70	-0.70	-0.33	-0.76	-1.00	1.00	-0.14	-0.27	-0.93	0.93
Empiric nectar productivity	-0.40	0.15	0.08	0.01	-0.01	0.30	0.31	0.13	-0.14	1.00	0.25	0.25	-0.24
Flower morpho. [Catkin]	-0.05	0.27	0.20	-0.09	0.09	0.79	0.33	0.26	-0.27	0.25	1.00	0.34	-0.35
Flower morpho. [Flat]	0.18	-0.04	-0.19	-0.67	0.66	0.44	0.81	0.92	-0.93	0.25	0.34	1.00	-1.00
Flower morpho. [Tube]	-0.18	0.02	0.17	0.66	-0.66	-0.44	-0.81	-0.93	0.93	-0.24	-0.35	-1.00	1.00

Appendix G Spearman correlation coefficients between Community Weighted Mean (CWM) values of each floral trait, at the landscape scale (i.e. 250, 500 and 1000 m). Bold values indicate Spearman ρ coefficients $> |0.7|$

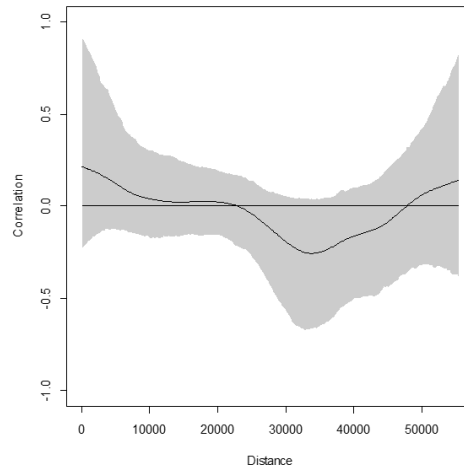
See attached excel file

Appendix H Spatial correlograms (plotting Moran's I values against distance in metres) of Generalized Linear Models residuals for each flower-visiting insect group. The 95 % confidence intervals (in grey) always encompass the zero-value, indicating the absence of spatial autocorrelation.

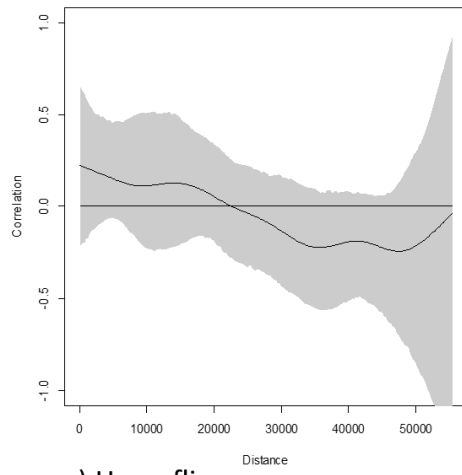
a) Wild bees < 1cm



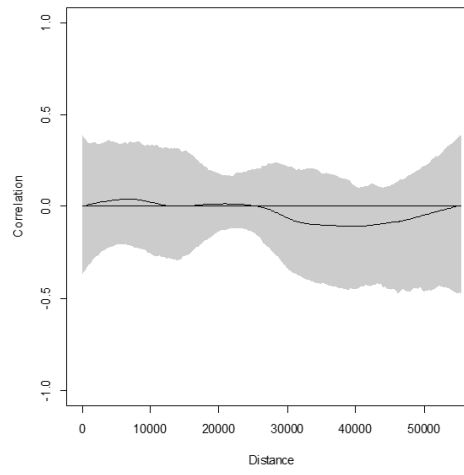
b) Wild bees > 1cm



c) Domestic bees



d) Bumblebees



e) Hoverflies

