SUPPLEMENTARY MATERIAL

Assessing ecological indicators for remnant vegetation strips as functional biological corridors in Chilean vineyards

Javiera Díaz-Forestier, Sebastián Abades, Nélida Pohl, Olga Barbosa, Karina Godoy, Gabriella L. Svensson, María I. Undurraga, Camila Bravo, Camila García, Meredith Root-Bernstein, Juan J. Armesto and Juan L. Celis-Diez

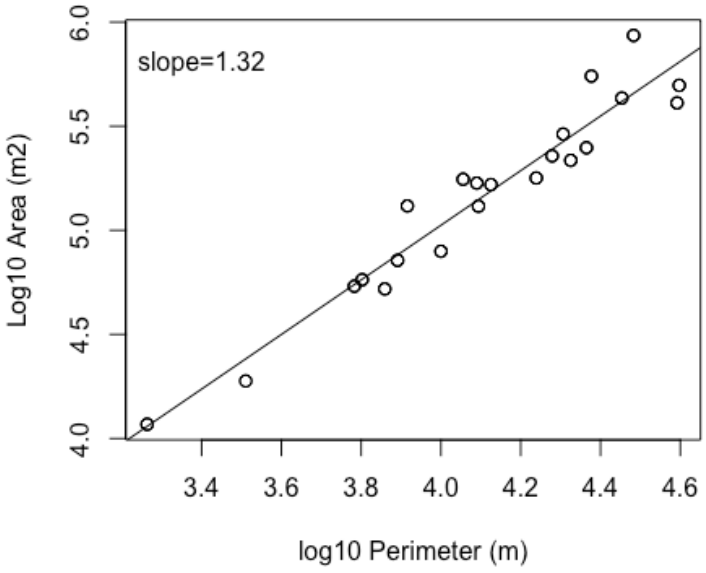

Figure S1. Relation in log scale between corridor area (m2) and perimeter (m).

Table S1. Description and characteristic of vegetation strips or corridor in the studied vineyards

		Corridors in vineyard				Sampled corridor		
Vineyard	**Type of corridors**	**total corridors area (ha)**	**cultivated area/corridor area**	**corridors perimeter/area**	**Length**	**number of branches connecting the vegetation strip to "natural areas"**	**number of branches connecting to natural areas over corridor length**	**mean width**
1	natural corridors in streams with native vegetation	86,3	3	352,5	1.085	6	180,8	20
2	natural corridors in streams with native vegetation	55	8,3	433,2	5.000	3	1.666,70	95,00
3	natural corridors in streams with native and exotic vegetation	13,1	11,1	628,7	1.225	4	306,3	44,6
4	natural corridors in streams with native and exotic vegetation	17,6	6,1	645,7	1.900	1	1.900,00	23,50
5	natural corridors in streams with native vegetation	43,2	4,6	658	2.090	5	418	24,6
6	natural corridors in streams with native and exotic vegetation	29	12,4	698	3.900	2	1.950,00	31,00
7	natural corridors in streams with native vegetation	16,9	8,5	729,4	1.635	7	233,6	25
8	natural corridors in streams with native vegetation	49,7	8,2	796,4	4.435	12	369,6	18,8
9	natural corridors in streams with native and exotic vegetation	16,6	10,5	805	2.175	13	167,3	16,8

10	natural corridors in streams with native and exotic vegetation	22,8	8,4	834,6	1.808	1	1.808,00	28,60
11	natural corridors in streams and roadside plantings with native and exotic vegetation	24,9	25,7	929,7	880	11	80	18,3
12	natural corridors in streams with native vegetation	13,1	6,5	950,8	840	2	420	43,3
13	natural corridors in streams and planted along canal and crop edges with native and exotic vegetation	40,9	15,4	955,3	2.745	3	915	23,3
14	natural corridors in streams and planted along canal and crop edges with native and exotic vegetation	17,8	8,9	971,7	1.162	1	1.162,00	22,16
15	natural corridors in streams and planted corridors, with native and exotic vegetation	21,7	6,2	975,9	1.955	4	488,8	27
16	channel edge with native and exotic vegetation	7,2	13,6	1.085,90	2.115	6	352,5	18,3
17	natural corridors in streams with native and exotic vegetation	5,8	9,9	1.096,30	1.473	3	491	16,16
18	natural corridors in streams with native and exotic vegetation	5,4	13	1.125,40	970	6	161,7	13
19	natural corridors in streams and canal edge with native and exotic vegetation.	7,9	15,6	1.261,20	380	6	63,3	10,5
20	natural corridors in streams with native vegetation	5,2	20,8	1.382,50	550	2	275	11,6
21	part of natural slopes with native vegetation	1,2	25,9	1.567,20	490	14	35	24,6
22	planted along canal and road sides with exotic vegetation	1,9	78,6	1.714,60	665	2	332,5	17

Table S2. Effects of corridor versus natural area on ecological indicators. Model for birds and woody plant coverage are zero-inflated. Parameter estimates are incidence ratios or odds ratio depending on the distributional assumption (Poisson and Binomal) and represents a difference between the corridor and natural area treatments.

	Bird species			**Tree regeneration**			**Geophytes**			**Woody plant coverage**		
Predictor	*Incidence Rate Ratios*	*std. Error*	*p*	*Odds Ratios*	*std. Error*	*p*	*Odds Ratios*	*std. Error*	*p*	*Odds Ratios*	*std. Error*	*p*
Corridor	-0.94	0.237	**<0.001**	0.55	0.386	0.149	-0.98	0.493	**0.045**	-0.36	0.358	0.304
Zero-Inflated Model												
Corridor	-1.98	46119.32	1.000							-3.49	57254.04	1.000
Random Effects												
σ^2	0.68			3.29			3.29			3.29		
τ_{00}	0.05 $_{VINA}$			0.70 $_{VINA}$			2.94 $_{VINA}$			0.00 $_{VINA}$		
Observations	128			128			128			128		

Table S3. Parameter estimates for corridor attributes obtained after applying the model selection routine to each ecological indicator. Estimates are incidence ratios or odds ratio depending on the distributional assumption of the model (Poisson and Binomal).

Predictors	**Bird species**			**Tree regenaration**			**Geophytes**			**Woody plant coverage**		
	Incidence Rate Ratios	*std. Error*	*p*	*Odds Ratios*	*std. Error*	*p*	*Odds Ratios*	*std. Error*	*p*	*Odds Ratios*	*std. Error*	*p*
Distance to natural area	-0.00127	0.00	**0.05**				-0.344	0.0854	**<0.001**	-0.0015	0.0008	0.077
Corridor area				-0.094	0.0457	**0.038**	5.621	1.522	**<0.001**			
Corridor length				-0.001	0.0005	0.059	-0.037	0.010	**<0.001**			
Corridor perimeter/area				-0.008	0.0036	**0.019**				-0.0023	0.0012	0.054
Crop/corridor area							-5.77	1.415	**<0.001**			
Random Effects												
σ^2	1.26			3.29			3.29			3.29		
τ_{00}	0.00 $_{VINA}$			2.13 $_{VINA}$			415827.57 $_{VINA}$			0.09 $_{VINA}$		
Observations	63			63			63			63		