

Table S1. Soil nutrient content determined by Mehlich III test method

Locality	pH	N min	P	K	Ca
Velké Bílovice (NH)	7.2	14 mg.kg ⁻¹	121 mg.kg ⁻¹	334 mg.kg ⁻¹	3046 mg.kg ⁻¹
Bavory-Mikulov (PP)	7.4	9 mg.kg ⁻¹	135 mg.kg ⁻¹	357 mg.kg ⁻¹	3311 mg.kg ⁻¹

Table S2. List of all plant species of inter-row vegetation, sorted to families, found at three evaluated vineyards and their appearance on the phytosociological survey plots in all sampling terms

FAMILY	CATEGORY	Přední hora (PH)				Nová hora (NH)				Pod Pálavou (PP)				Přední hora (PH)				Nová hora (NH)				Pod Pálavou (PP)							
		2018				2018				2018				2019				2019				2019							
		JUN	JUL	AUG	SEP	JUN	JUL	AUG	SEP	JUN	JUL	AUG	SEP	JUN	JUL	AUG	SEP	JUN	JUL	AUG	SEP	JUN	JUL	AUG	SEP				
<i>Amaranthaceae</i>	3	<i>Amaranthus retroflexus</i> L.	✓	✓	✓	✓		✓	✓					✓				✓	✓										
	3	<i>Atriplex patula</i> L.	✓	✓	✓			✓	✓					✓				✓	✓										
	3	<i>Chenopodium album</i> L.		✓	✓		✓	✓	✓					✓				✓	✓										
<i>Apiaceae</i>	1	<i>Daucus carota</i> L.	✓																							✓	✓		
	1	<i>Peucedanum alsaticum</i> L.																											
<i>Asteraceae</i>	2	<i>Achillea millefolium</i> L.																								✓	✓	✓	✓
	3	<i>Artemisia vulgaris</i> L.							✓	✓	✓														✓	✓	✓	✓	
	2	<i>Cichorium intybus</i> L.							✓																				
	3	<i>Cirsium arvense</i> (L.) Scop	✓	✓	✓									✓	✓	✓	✓	✓								✓			
	2	<i>Conyza canadensis</i> (L.) Cronquist							✓	✓	✓	✓	✓	✓				✓		✓					✓	✓	✓	✓	
	2	<i>Crepis tectorum</i> L.			✓	✓			✓	✓	✓	✓	✓												✓	✓	✓		
	2	<i>Crepis biennis</i> L.																							✓	✓	✓	✓	

2	<i>Erigeron annuus</i> (L.) Pers.			✓ ✓ ✓ ✓				✓
3	<i>Lactuca serriola</i> L.	✓ ✓ ✓	✓ ✓	✓ ✓	✓ ✓			✓ ✓
2	<i>Sonchus oleraceus</i> L.		✓					
3	<i>Taraxacum</i> <i>officinale</i> G.H. Weber ex Wiggers	✓ ✓ ✓ ✓	✓ ✓ ✓	✓ ✓	✓ ✓	✓ ✓	✓ ✓	✓ ✓
1	<i>Tragopogon</i> <i>pratinus</i> L.			✓				✓
2	<i>Tripleurospermum</i> <i>inodorum</i> (L.) Sch.Bip.	✓ ✓ ✓	✓ ✓ ✓ ✓		✓ ✓	✓ ✓ ✓ ✓		
<i>Boraginaceae</i>	1	<i>Echium vulgare</i> L.		✓ ✓ ✓				✓
<i>Brassicaceae</i>	2	<i>Capsella bursa-</i> <i>pastoris</i> (L.) Med.		✓ ✓ ✓ ✓				
<i>Caryophyllaceae</i>	1	<i>Arenaria</i> <i>serpyllifolia</i> L.		✓	✓ ✓ ✓			✓ ✓ ✓
	2	<i>Silene latifolia</i> subsp. <i>alba</i> (Miller) Greuter et Burdet			✓ ✓ ✓			✓ ✓ ✓
	1	<i>Stellaria media</i> (L.) Vill.	✓	✓ ✓	✓	✓	✓ ✓ ✓	
<i>Convolvulaceae</i>	3	<i>Convolvulus</i> <i>arvensis</i> L.	✓ ✓ ✓ ✓	✓ ✓ ✓ ✓	✓ ✓ ✓ ✓	✓ ✓ ✓ ✓	✓ ✓ ✓ ✓	✓ ✓ ✓ ✓
<i>Fabaceae</i>	1	<i>Astragalus cicer</i> L.			✓ ✓ ✓ ✓			✓ ✓ ✓ ✓
	1	<i>Astragalus</i> <i>glycyphyllos</i> L.			✓			✓ ✓
	1	<i>Lathyrus tuberosus</i> L.			✓			✓
	1	<i>Medicago lupulina</i> L.	✓ ✓					✓ ✓
	1	<i>Onobrychis</i> <i>viciifolia</i> Scop.	✓ ✓ ✓ ✓					
	1	<i>Trifolium pratense</i> L.	✓ ✓ ✓ ✓		✓			
	2	<i>Trifolium repens</i> L.	✓ ✓ ✓ ✓		✓			

	1	<i>Trifolium incarnatum</i> L.	✓								
	1	<i>Vicia angustifolia</i> L.			✓						✓
<i>Geraniaceae</i>	1	<i>Eroidium cicutarium</i> (L.) L'Hér.		✓					✓		
	1	<i>Geranium pusillum</i> Burm.fil.		✓ ✓ ✓ ✓	✓	✓		✓ ✓ ✓ ✓	✓		
	2	<i>Hypericum perforatum</i> L.									✓ ✓
<i>Lamiaceae</i>	2	<i>Ballota nigra</i> L.	✓								
	1	<i>Glechoma hederacea</i> L.			✓ ✓						
	1	<i>Acinos arvensis</i> (Lam.) Dandy								✓ ✓ ✓	
<i>Malvaceae</i>	1	<i>Malva neglecta</i> Wallr.		✓ ✓ ✓							
<i>Papaveraceae</i>	2	<i>Fumaria officinalis</i> L.									✓
<i>Poaceae</i>	2	<i>Bromus arvensis</i> L.			✓ ✓						
	2	<i>Bromus hordeaceus</i> L.		✓ ✓							
	2	<i>Bromus sterilis</i> L.	✓	✓ ✓	✓ ✓ ✓		✓ ✓ ✓	✓ ✓		✓ ✓	
	2	<i>Dactylis glomerata</i> L.			✓ ✓ ✓ ✓						✓ ✓
	3	<i>Echinochloa crus-galli</i> (L.) P.B.	✓	✓ ✓							
	2	<i>Elytrigia intermedia</i> (Host) Nevski			✓ ✓ ✓ ✓						
	2	<i>Festuca pratensis</i> Huds.		✓ ✓ ✓					✓		
	2	<i>Hordeum murinum</i> L.	✓ ✓ ✓ ✓	✓ ✓ ✓			✓ ✓ ✓	✓ ✓ ✓ ✓			
	3	<i>Lolium perenne</i> L.	✓ ✓ ✓ ✓	✓ ✓ ✓ ✓	✓ ✓ ✓ ✓	✓ ✓ ✓ ✓	✓ ✓ ✓ ✓	✓ ✓ ✓ ✓	✓ ✓ ✓ ✓	✓ ✓ ✓ ✓	
	2	<i>Poa pratensis</i> L.	✓ ✓	✓ ✓ ✓	✓						
	2	<i>Poa annua</i> L.		✓							

	2	<i>Setaria pumila</i> (Poir.) Roem et Schult.		✓ ✓				✓ ✓	
	2	<i>Setaria viridis</i> (L.) P. B.			✓ ✓				✓ ✓
<i>Polygonaceae</i>	1	<i>Polygonum aviculare</i> L.	✓ ✓ ✓ ✓	✓	✓ ✓	✓ ✓ ✓ ✓	✓ ✓ ✓	✓ ✓ ✓	✓ ✓ ✓
	3	<i>Rumex crispus</i> L.		✓			✓		
<i>Portulacaceae</i>	2	<i>Portulaca oleracea</i> L.						✓ ✓	
<i>Plantaginaceae</i>	2	<i>Linaria vulgaris</i> Mill.			✓ ✓ ✓ ✓			✓ ✓ ✓ ✓	✓ ✓ ✓ ✓
	3	<i>Plantago lanceolata</i> L.	✓ ✓			✓ ✓ ✓			
	3	<i>Plantago major</i> L.	✓ ✓ ✓			✓ ✓			
	1	<i>Veronica hederifolia</i> L.			✓	✓	✓		
<i>Ranunculaceae</i>	1	<i>Clematis</i> sp.			✓ ✓ ✓ ✓				✓
<i>Rosaceae</i>	1	<i>Geum urbanum</i> L.							✓
	2	<i>Rosa</i> sp.							✓ ✓
<i>Violaceae</i>	2	<i>Viola arvensis</i> L.							✓

Explanatory notes: Category 1-non-harmfull weeds, 2-opportunistic weeds, 3-dangerous weeds

Table S3. All insects, resp. spiders, found at three evaluated localities, sorted to families and their occurrence in inter-row sampling plot (two-year average)

	Chrysomelidae	+	+	+	-	+	+	+	+	+	+	+	-
	Melyridae	+	-	-	-	+	-	-	-	+	+	-	-
	Nitidulidae	+	-	-	+	+	-	-	-	-	-	-	-
	Phalacridae	-	-	-	-	+	-	-	-	-	-	-	-
	Scarabidae	+	-	-	-	-	-	-	-	-	-	-	-
	Scirtidae	+	+	+	+	+	+	+	+	+	+	+	+
	Staphylinidae	+	-	-	-	-	-	-	-	-	-	-	-
DERMAPTERA	Forficulidae	+	+	-	-	-	-	-	-	-	-	-	-
DIPTERA	Asilidae	-	-	+	-	+	-	-	-	+	+	+	-
	Drosophilidae	+++	++	++	++	+++	+	++	++	++	++	++	++
	Chloropidae	+	+	++	+	+	+	+	+	+	++	++	+
	Micropezidae	+	-	-	-	-	-	-	-	-	-	-	-
	Muscidae	++	+	+	+	++	+	+	+	+	+	+	+
	Opomyzidae	+	-	-	-	+	-	-	-	-	-	-	-
	Pipunculidae	-	-	+	-	-	+	-	+	+	+	+	+
	Phoridae	-	-	-	+	-	-	-	+	-	-	-	-
	Sciaridae	-	-	-	-	-	-	-	+	-	-	-	-
	Stratiomyidae	-	-	-	-	+	-	+	-	-	-	-	-
	Syrphidae	+	+	+	+	+	-	+	-	+	+	-	+
	Tephritisidae	-	-	-	-	+	+	-	-	-	-	-	-
HEMIPTERA	Anthocoridae	+	+	+	+	+	+	+	-	-	-	-	-
	Aphidodea	++	+	+	+	+++	+	+	-	++	+	+	+
	Auchenorrhyncha	-	-	+	-	-	-	-	-	+	+	+	+
	Cicadellidae	+	++	+	++	++	++	++	+	++	++	++	++
	Dictopharidae	-	-	-	-	-	-	-	-	-	-	+	-
	Membracidae	-	+	-	-	-	-	-	-	-	-	-	-
	Miridae	+	+	+	+	+	+	+	-	+	+	+	+
	Nabidae	-	+	+	+	+	+	+	+	+	+	+	-
	Pentatomidae	+	+	+	-	+	-	-	-	-	+	-	-

	Psylloidea	+	-	+	-	-	+	+	-	-	-	+	+
	Pyrrocoridae	-	-	-	-	-	-	-	-	-	-	-	-
HYMENOPTERA	Apidae	-	-	-	-	-	-	-	-	-	-	-	+
	Braconidae	+	+	+	+	+	+	+	+	++	+	+	+
	Formicidae	+	+	+	+	++	+	+	+	++	++	+	+
	Chalcidoidea	-	+	-	+	+	-	-	-	+	+	-	+
	Ichneumonidae	+	+	+	+	+	-	+	+	+	-	+	+
	Tephritidae	-	-	-	-	-	-	-	-	-	+	-	-
LEPIDOPTERA	Epermeniidae	+	-	+	-	-	-	-	-	-	-	-	-
	not specified	-	+	-	-	+	-	-	-	-	+	-	-
NEUROPTERA	Hemerobiidae	-	+	-	-	-	-	-	-	-	-	-	-
ORTHOPTERA	suborder Cealifera	+	-	-	-	+	+	-	-	+	+	+	+
	suborder Ensifera	+	-	+	-	+	+	+	+	+	+	+	+
THYSANOPTERA	not specified	-	-	-	-	-	-	-	-	+	-	+	-

EXPLANATORY NOTES

- No occurrence
- + Two-year average less than 10 individuals per sampling plot
- ++ Two-year average between 10 – 50 individuals per sampling plot
- +++ Two-year average higher than 50 individuals per sampling plot