



3/4/2015



6/5/2015



21/5/2015



3/6/2015



17/6/2015



15/7/2015

Figure S1. Overview of the sown field margin with the winter mixture (WM), during plant growth and flowering.

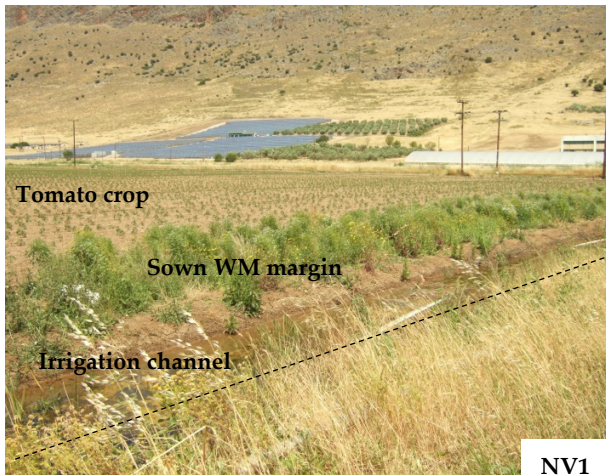


NV1



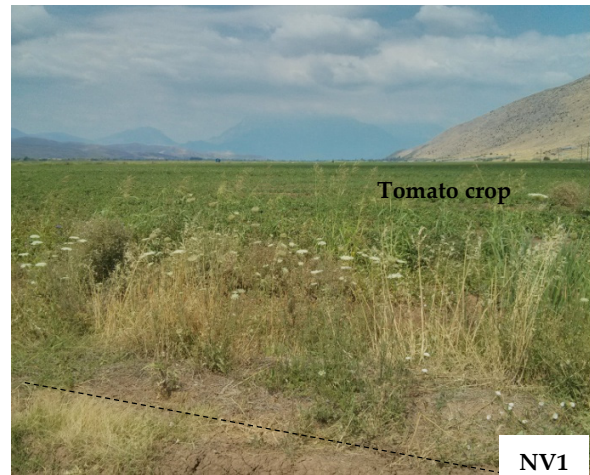
NV2

6/5/2015



NV1

3/6/2015



NV1

17/6/2015

Figure S2. Overview of the natural vegetation at the two sites (NV1 and NV2), separately and in relation to the sown margin and the crop, at different dates.

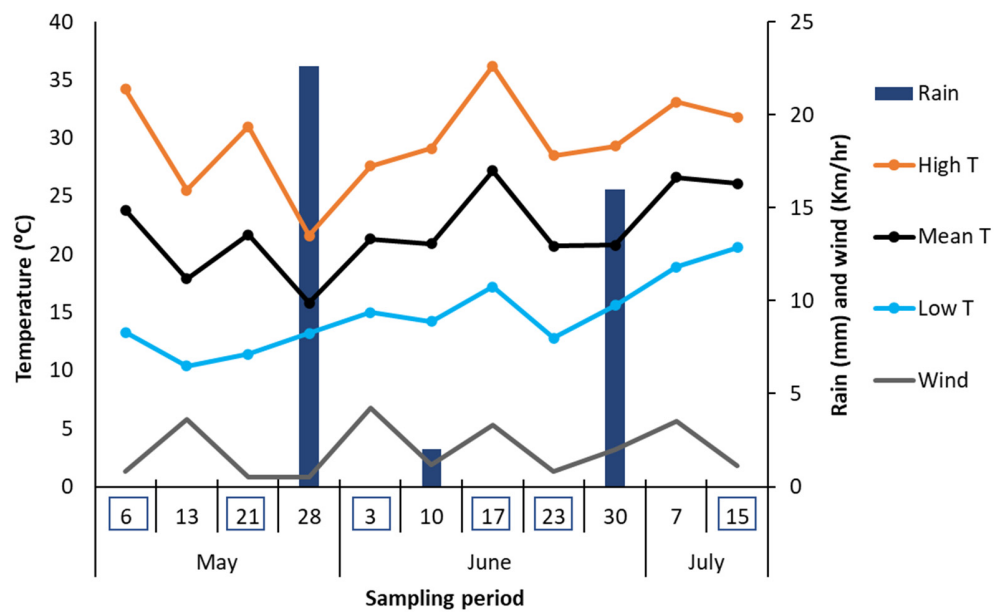


Figure S3. Climatic conditions (temperature, precipitation, wind) in the experimentation area for the year 2015, during the sampling period. The sampling dates are indicated in the x-axis.



Figure S4. Suction sampling device: A modified leaf-blower (Echo ES-2400) operating in reverse mode (suction) and fitted with a mesh bag to collect the insects.

Table S1. Mean percentage of flower cover (\pm s.e.m.) in the winter mixture (WM), the summer mixture (SM) or natural vegetation NV1 and NV2 sites, at the field margins of a processing tomato crop in five sampling dates (May-July 2015).

Mean flower cover (%)							
Field margin	WT					Mean WT/margin (6/5-15/7)	Mean WST/margin (17/6 & 15/7)
	6/5	21/5	3/6	WST			
				17/6	15/7		
WM	81,5 ±4,2 <i>Aa</i>	86 ±3,9 <i>Aa</i>	77 ±4,4 <i>Aa</i>	41,7 ±1,2 <i>Ab</i>	39 ±2,6 <i>Ab</i>	65 ±3,3	40,4 ±1,4 B
NV1	5,0 ±0,1 <i>Bb</i>	20,0 ±2,9 <i>Ba</i>	3,7 ±1,8 <i>Bb</i>	5,7 ±0,3 <i>Bb</i>	8,3 ±1,7 <i>Bb</i>	8,3 ±1,7	6,5 ±1,2 C
NV2	63,3 ±4,4 <i>Aa</i>	20,0 ±5,0 <i>Bb</i>	2,0 ±0,1 <i>Bb</i>	4,7 ±0,9 <i>Bb</i>	16,7±9,3 <i>Bb</i>	21,5 ±6,2	11,2 ±4,8 C
SM				74 ±17,7	55 ±10,8		78,3 ±6,5 A
Mean WT/date	63,8 ±4,3	61,3 ±6,9	49,2 ±27,3	28 ±7,6	29,1 ±7,2		
Mean WST/date				38,1±3 a	34,7 ±2,3 b		
WT							
2-way ANOVA	Mixture: F _{2,52} = 151.12, p < 0.0001; Date: F _{3,52} = 44.49, p < 0.0001; Mixture*Date: F _{6,52} =10.60, p < 0.0001						
WST							
2-way ANOVA	Mixture: F _{3,20} = 21.10, p < 0.0001; Date: F _{1,20} = 5.73, p = 0.0266; Mixture*Date: F _{3,20} = 1.38, p = 0.2782						

Two-way ANOVA (treatment and sampling date) on transformed data (arcsin). Capital letters indicate significant differences between treatments while small letters indicate significant differences between assessment dates. Comparison between main effects is depicted with normal letters, while comparisons among simple effects with italics (Tukey HSD).

WM: winter mixture; NV1: natural vegetation at site 1; NV2: natural vegetation at site 2; SM: summer mixture; WT: winter treatments (WM, NV1 & NV2, from 6/5 to 15/7); WST: winter and summer treatments (WM, SM, NV1 & NV2 for 23/6 & 15/7).

Table S2. Mean number (\pm s.e.m.) of Hymenoptera pollinator visits/plot/4' in the winter mixture (WM), the summer mixture (SM) or natural vegetation NV1 and NV2 sites, at the field margins of a processing tomato crop in five sampling dates (May-July 2015).

Field margin	Total pollinators								Wild bees						
	WT						WT						Mean WT/margin (6/5-15/7)	Mean WST/margin (17/6 & 15/7)	
	WST					WST									
	6/5	21/5	3/6	17/6	15/7	6/5	21/5	3/6	17/6	15/7					
WM	11,8 ±2,4 <i>Aab</i>	19,6 ±3,8 <i>Aa</i>	11,4 ±2,1 <i>Aab</i>	5,4 ±1,3 <i>Abc</i>	3,6 ±1,2 <i>Ac</i>	10,4 ±1.5	4.5 ±0.9 B	4.4 ±1.8	16.2 ±2.3	10.8 ±1.9	5.4 ±1.3	3.6 ±1.2 A	8.1 ±1.2 A	4.5 ±0.9 B	
NV1	0.0 ±0.0 <i>Ba</i>	4.0 ±3,1 <i>Ba</i>	5.0 ±3,2 <i>ABa</i>	0,3 ±0,3 <i>Aa</i>	1.0 ±0,6 <i>ABa</i>	2,1 ±0,9	0.3 ±0.2 C	0.0 ±0.0	4.0 ±3.0	5.0 ±3.2	0.3 ±0.3	1.0 ±0.6 B	2.1 ±0.9 B	0.3 ±0.2 C	
NV2	12,3 ±3,8 <i>Aa</i>	3,3 ±0,3 <i>Bab</i>	0.0 ±0.0 <i>Bb</i>	3,7 ±2,7 <i>Aab</i>	0,3 ±0,3 <i>Bb</i>	3.9 ±1.4	2.3 ±1.4 BC	0.0 ±0.0	3.0 ±0.0	0.0 ±0.0	3.7 ±2.7	0.3 ±0.3 B	1.4 ±0.6 B	2.3 ±1.4 BC	
SM				34.0 ±6.3	8.0 ±1.1		21.0 ±6.5 A				33.7 ±6.6	8.0 ±1.1		20.8 ±6.4 A	
Mean WT/date	8..7 ±2.2	10.9 ±3.1	6.5 ±1.9	3.5 ±1.1	2.0 ±0.7			2.0 ±0.7B	9.3 ±2.3 a	6. ±1.8 ab	3.5 ±1.1 ab	2.2±0.7ab			
Mean WST/date				10.9 ±3.3 a	3.3 ±0.9 b						10.8 ±3.3 a	3.3 ±0.9 b			
WT 2-way ANOVA	Mixture: F _{2,40} = 32.42, p < 0.001; Date: F _{4,40} = 5.52, p=0.0012; Mixture*Date: F _{8,40} = 4.46, p=0.0006								Mixture: F _{2,40} = 31.62, p < 0.0001; Date: F _{4,40} = 6.477, p =0.0004; Mixture*Date: F _{8,40} = 1.69, p = 0.132						
WST 2-way ANOVA	Mixture: F _{3,20} = 21.10, p < 0.0001; Date: F _{1,20} = 5.73, p = 0.0266; Mixture*Date: F _{3,20} = 1.38, p = 0.2782								Mixture: F _{3,20} = 20.90 p < 0.0001; Date: F _{1,20} = 5.64, p = 0.0277; Mixture*Date: F _{3,20} = 1.38, p = 0.2893						

Two-way ANOVA (treatment and sampling date) on transformed data ($\ln(x+1)$). Capital letters indicate significant differences between treatments while small letters indicate significant differences between assessment dates. Comparisons between main effects are depicted with normal letters, while comparisons among simple main effects with italics (Tukey HSD). WM: winter mixture; NV1: natural vegetation at site 1; NV2: natural vegetation at site 2; SM: summer mixture; WT: winter treatments (WM, NV1 & NV2, from 6/5 to 15/7); WST: winter and summer treatments (WM, SM, NV1 & NV2 for 23/6 & 15/7).

Table S3. Pollinator genera and associated flowering in the sown mixtures and natural vegetation at the field margins of processing tomato crop.

Family	Genus	Associated flowering plants*	Number of specimens**
Andrenidae	<i>Andrena</i> spp., at least 5 morphospecies	<i>Calendula</i> sp., <i>Capsella</i> sp., Asteraceae, <i>Fagopyrum esculentum</i> , WM, SM, NV	18 (6 ♂, 12 ♀); net (11); suction (7)
Apidae	<i>Apis mellifera</i>	WM, SM	1 (♀); suction
	<i>Eucera</i> sp.	<i>Lathyrus sativus</i>	4 (♀); net
Colletidae	<i>Colletes</i> sp.	WM, SM	4 (2 ♂, 2 ♀); net (1); suction (3)
	<i>Hylaeus</i> spp., 5 morphospecies	WM, SM	5 (♀); net (1); suction (4)
	<i>Hylaeus cornutus</i>	na	1 (♀); net
Halictidae	<i>Halictus</i> spp., at least 3 morphospecies	WM, <i>Coriandrum sativum</i> , <i>Fagopyrum esculentum</i>	4 (♀); net
	<i>Lasioglossum</i> spp., at least 5 morphospecies	Asteraceae, <i>Glebionis coronaria</i> , <i>Coriandrum sativum</i> , <i>Sinapis</i> sp., <i>Anethum graveolens</i> , <i>Picris echioides</i> , WM, SM	28 (3 ♂, 25 ♀); net (11); suction (17)
	<i>Pseudapis</i> sp.	WM	2 (♂); suction
	<i>Sphecodes</i> spp., at least 3 morphospecies	<i>Coriandrum sativum</i> , WM, SM	5 (2 ♂, 3 ♀); net (2); suction (3)

* WM= winter mixture; SM= summer mixture; NV= natural vegetation; na: not available; sp. in parenthesis indicates the pollinator morphospecies.

** net= net sampling, suction = suction sampling

Table S4. Arthropod taxa recorded in 1' suction samples/plot from the sown winter mixture (WM), summer mixture (SM) or natural vegetation NV1 and NV2 sites, at the field margins of a processing tomato crop in four sampling dates (May-July 2015).

CLASS	Order	Family, Genus, Species	21/05/2015			03/06/2015			23/06/2015				15/07/2015			
			WM	NV1	NV2	WM	NV1	NV2	WM	SM	NV1	NV2	WM	SM	NV1	NV2
INSECTA	Coleoptera	Cantharidae	4	0	0	0	0	0	0	0	0	0	0	0	0	0
		Coccinellidae	2	1	3	0	4	4	8	3	1	1	1	5	2	1
		Other	39	3	37	16	3	4	15	18	20	4	14	21	3	5
	Dermapter a		0	0	0	0	0	0	0	0	22	0	0	0	0	0
	Diptera	Syrphidae	5	0	0	3	1	1	1	3	0	0	3	3	1	0
		Other beneficials	12	0	5	2	0	0	3	0	3	0	2	1	1	0
		Flies and other	57	15	12	16	57	28	52	53	83	44	48	9	10	9
	Hemiptera		7	4	1	0										
		Anthocoridae	9	0	0	16	0	1	12	9	3	0	8	6	2	0
		Aphididae	67	3	5	51	15	43	29	2	43	10	8	1	4	7
		Cicadellidae	14	13	12	1	6	5	34	10	13	15	14	49	6	10

	Lygaeidae	5	0	0	0	0	0	96	18	16	4	90	8	11	12
	Miridae	24	0	0	2	1	0	55	2	1	0	5	9	0	0
	Nabidae	1	0	3	0	0	0	0	1	0	3	0	1	0	0
	Reduviidae	0	0	0	0	0	0	0	0	1	0	0	0	0	0
	Pentatomidae	2	2	2	5	1	7	25	2	4	7	62	15	5	10
	Psyllidae	1	5	12	0	3	0	0	1	0	0	0	0	0	0
	Tingidae	0	0	0	0	1	0	0	0	0	0	0	0	0	0
	Other	2	1	4	8	3	8	18	2	11	8	63	5	5	6
Hymenoptera	Total parasitoids	150	31	29	26	3	12	225	20	66	38	278	14	36	59
	Total pollinators	13	0	1	19	1	1	2	7	0	0	1	0	0	0
	Formicidae	12	20	152	1	23	27	21	1	23	51	20	0	72	88
	Vespididae	0	0	0	3	0	0	1	0	0	1	1	0	0	0
Lepidoptera		2	0	1	0	0	1	3	0	9	8	4	2	0	2
Neuroptera	Chrysopidae	28	1	2	2	0	0	3	2	1	2	1	0	0	1
Odonata		2	0	1	0	0	0	1	0	0	0	0	1	0	0
Orthoptera		0	0	0	0	0	1	0	0	0	0	0	0	0	3
Psocoptera		2	0	0	0	0	0	0	0	0	0	0	0	0	0
Thysanoptera	<i>Aelothrips</i> sp.	126	0	2	49	1	1	15	37	8	3	5	5	0	0
	Other	29	2	7	14	1	28	18	10	40	2	43	2	6	1
ARACHNIDA	Araneae	15	8	5	23	6	7	70	11	28	31	83	8	21	27

Table S5. Mean number (\pm s.e.m.) of Hymenoptera parasitoids and predators in 1' suction samples/plot from the winter mixture (WM), the summer mixture (SM) or natural vegetation NV1 and NV2 sites, at the field margins of a processing tomato crop in four sampling dates (May-July 2015).

	Hymenoptera parasitoids						Predators					
Field margin	WT				Mean	Mean	WT				Mean	Mean
	WST				WT/margin	WST/margin	WST				WT/margin	WST/margin
	21/5	3/6	23/6	15/7	(21/5-15/7)	(17/6 & 15/7)	21/5	3/6	23/6	15/7	(21/5-15/7)	(17/6 & 15/7)
WM	33.8 ±6.7	5.8 ±3.1	44.6 ±8.1	56.4 ±6.8	35.1 ±5.2 A	50.5 ±5.3 A	41.8 ±8.3	13.8 ±3.2	47.2 ±8.5	59.6 ±5.8	40.6 ±4.9 A	53.4 ±5.3 A
NV1	10.3 ±3.2	1.0 ±0.6	23.0 ±7.0	12.7 ±2.0	11.7 ±2.9 B	17.8 ±4.0 B	9.0 ±2.1	4.0 ±2.3	28.3 ±3.8	13.7 ±6.4	13.6 ±3.2 B	20.7 ±4.8 B
NV2	9.7 ±3.2	4.3 ±1.2	12.7 ±2.3	19.7 ±2.9	11.6 ±2.0 B	16.1 ±2.3 B	12.0 ±0.6	7.3 ±2.7	23.3 ±5.5	16.0 ±1.1	14.7 ±2.2 B	19.7 ±3.0 B
SM			7.3 ±4.3	4.7 ±2.2		6.0 ±2.2 C			16.7 ±3.4	12.0 ±2.1		14.3 ±2.1 B
Mean WT/date	20.8 ±4.8 a	4.1 ±1.5 b	30.0 ±5.8 a	34.4 ±7.0a			24.7 ±6.1 a	9.4 ±2.1 b	35.5 ±5.2 a	35.0 ±7.7a		
Mean WST/date			25.0 ±5.3	28.1 ±6.5					31.5 ±4.6	30.1 ±6.5		
WT 2-way ANOVA	Mixture: F _{2,32} = 10.48, p = 0.0003; Date: F _{3,32} = 22.28, p < 0.0001; Mixture*Date: F _{6,32} = 1.37, p = 0.2566						Mixture: F _{2,32} = 20.44, p = 0.0001; Date: F _{3,32} = 13.61, p < 0.0001; Mixture*Date: F _{6,32} = 1.05, p = 0.4113					
WST 2-way ANOVA	Mixture: F _{3,20} = 17.72, p < 0.0001; Date: F _{1,20} = 0.05, p = 0.8187; Mixture*Date: F _{6,20} = 0.66, p = 0.5887						Mixture: F _{3,20} = 14.00, p < 0.0001; Date: F _{1,20} = 3.66, p = 0.0699; Mixture*Date: F _{6,20} = 2.64, p = 0.0778					

Two-way ANOVA (treatment and sampling date) on transformed data ($\ln(x+1)$). Capital letters indicate significant differences between treatments while small letters indicate significant differences between assessment dates. WM: winter mixture; NV1: natural vegetation at site 1; NV2: natural vegetation at site 2; SM: summer mixture WT: winter treatments (WM, NV1 & NV2, from 21/5 to 15/7); WST: winter and summer treatments (WM, SM, NV1 & NV2 for 23/6 & 15/7).

Table S6. Parasitoid taxa (mean number (M) and Relative Abundance %) recorded in 1' suction samples/m² from the sown winter mixture (WM), summer mixture (SM) or natural vegetation NV1 and NV2 sites, at the field margins of a processing tomato crop in four sampling dates (May-July 2015).

		21/5				3/6				23/6								15/7											
		WM		NV1		NV2		WM		NV1		NV2		WM		NV1		NV2		SM		WM		NV1		NV2		SM	
Superfamily	Family	M	%	M	%	M	%	M	%	M	%	M	%	M	%	M	%	M	%	M	%	M	%	M	%	M	%	M	%
Ceraphronoidea	Ceraphronidae	1	2	0	0	0	0	0	0	0	0	0	0	1	3	2	11	1	11	0	0	0	0	0	3	0	0	0	0
	Megaspilidae	0	0	1	7	0	3	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0
	Aphelinidae	0	0	0	0	0	0	0	0	0	0	2	42	1	2	1	3	1	11	0	5	0	0	0	0	0	0	0	0
	Encyrtidae	0	0	0	0	0	0	0	0	0	0	0	0	3	6	0	0	1	8	0	5	12	22	1	8	2	12	1	14
	Eulophidae	13	44	4	36	3	35	1	15	0	0	1	17	11	24	5	24	4	29	1	10	13	23	1	11	3	14	1	28
	Eupelmidae	0	0	0	0	0	0	0	4	0	0	0	0	1	2	0	0	0	0	0	0	3	5	0	0	0	0	0	0
Chalcidoidea	Eurytomidae	0	1	0	0	0	0	2	39	0	0	0	0	12	27	0	0	0	0	1	20	5	9	0	3	1	3	0	0
	Mymaridae	0	1	0	0	0	3	0	0	0	0	0	0	0	0	2	11	0	3	1	10	2	3	1	8	0	2	1	14
	Pteromalidae	4	12	0	0	0	0	1	12	0	0	0	8	1	2	1	5	0	0	1	10	1	1	0	0	0	0	0	0
	Tetracampidae	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Torymidae	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	2	0	0
	Trichogrammatidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	5	0	0	0	0	0	0	0	0	0	0
Cynipoidea		1	3	0	3	0	3	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0
Diapridoidea	Diapriidae	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ichneumonidea	Braconidae	2	5	1	7	1	7	0	8	0	33	0	0	1	2	2	9	1	5	0	0	3	5	0	0	0	0	1	21
	Ichneumonidae	2	7	0	0	1	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Platygastridea	Platygastridae	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	3	0	3	0	0	0	0	0	0	0	0	0	0
	Scelionidae	6	21	5	45	4	41	1	23	1	67	1	33	14	31	7	33	3	26	2	35	16	29	8	67	13	68	1	21
Total mean		30		10		10		5		1		4		45		22		13		7		56		12		20		5	