

Fig. S1. Distribution of *A. syriaca* relative to the focal corn field and local land use in 1 km radius around ACRE prairie.

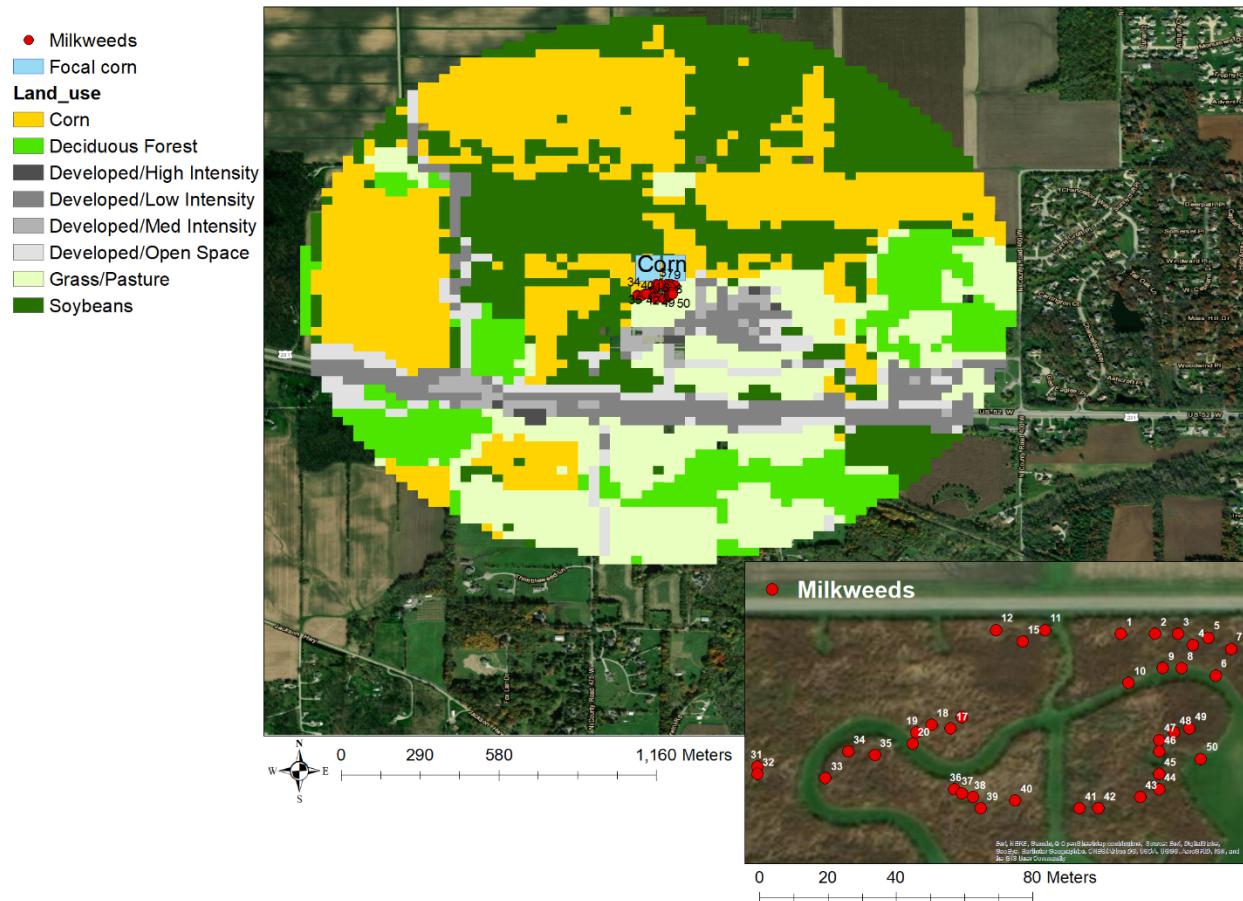


Fig. S2. Distribution of *A. syriaca* relative to the focal corn field and local land use in 1 km radius around plants at Prophetstown State Park.

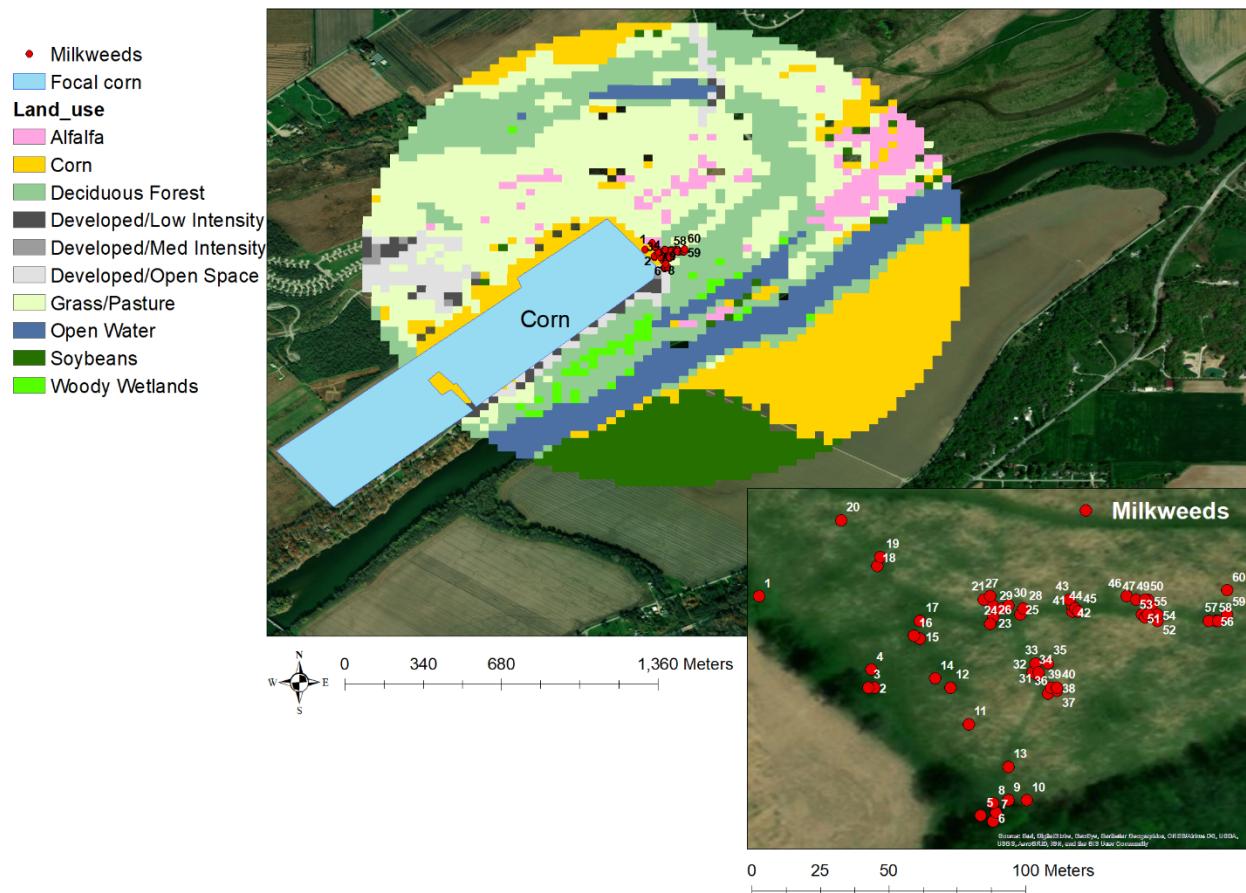


Fig. S3. Model to calculate the linear distance between a corn field and milkweeds. Acrepoints represent the plants, CornAcre is the corn at which distances were calculated and acre_mw is the layer with a table with the calculated distances.

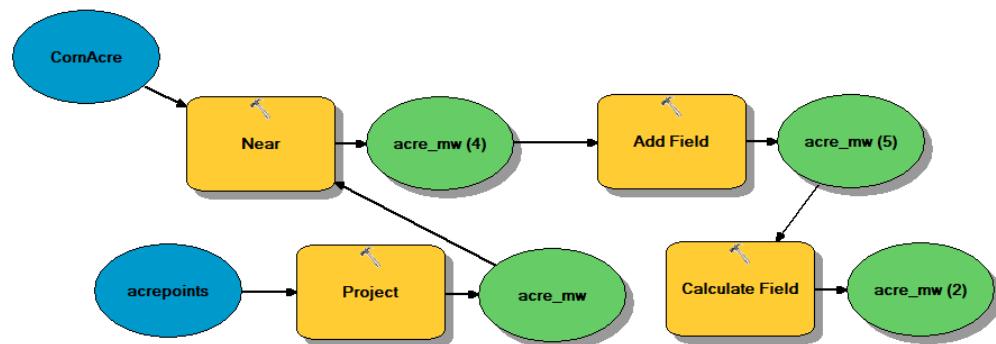


Fig. S4. Milkweed plants (red dots) inside the buffers (blue circles) around soil sample points (white dots) to look for correlations between pesticides in soil and leaf tissue.

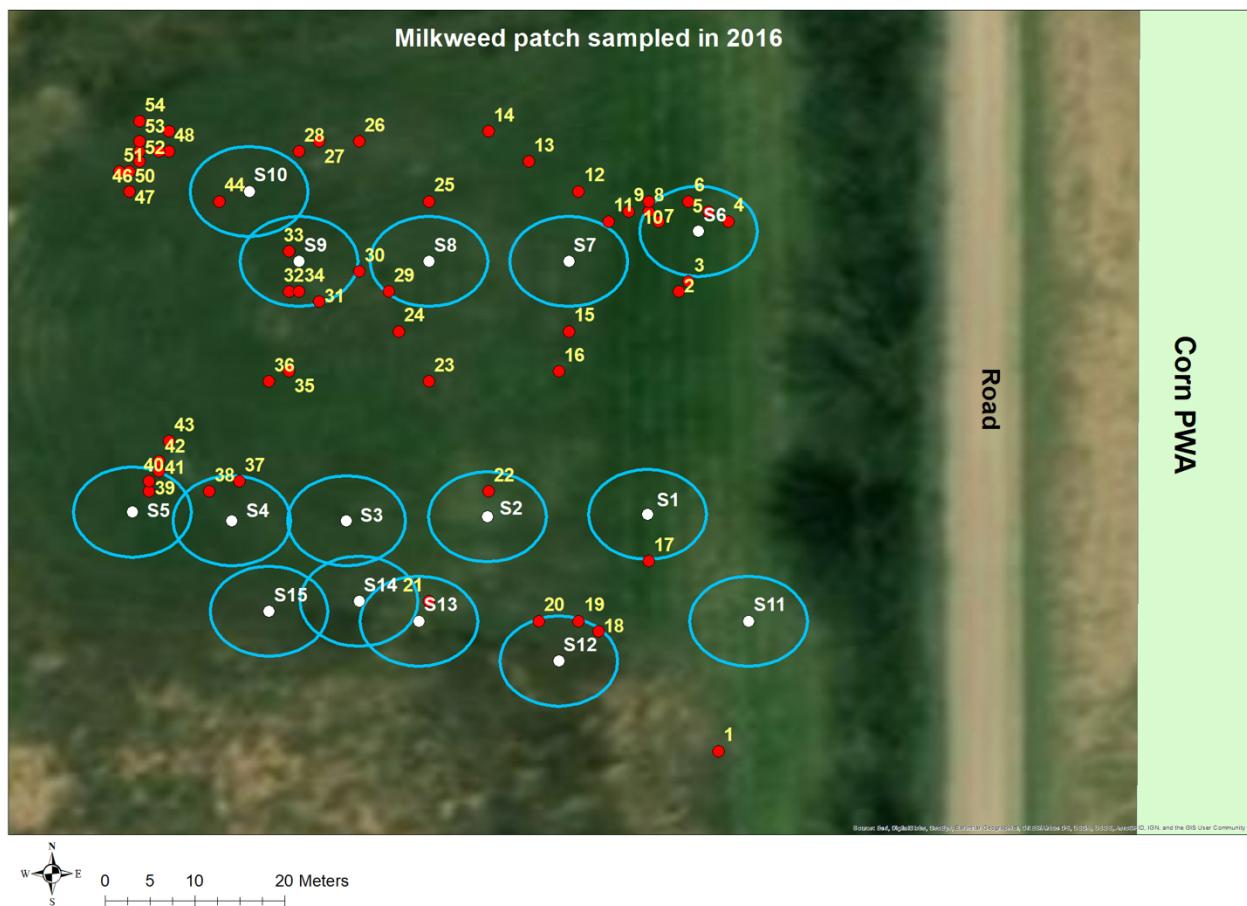


Table S1. Type of soil at milkweed sites sampled in 2016.

Site	Type of soil
Acre	Chalmers silty clay loam
Kankakee close	Tedrow loamy fine sand
Kanakakee far	Zaborosky fine sand
Prophetstown	Billet loam, gravelly substratum
Pwa	Starks-Fincastle

Table S2. Pesticides (kg) applied in corn and soybean in Tippecanoe and Newton counties.

Year	Pesticide type	Compound	Tippecanoe		Newton	
			Corn	Soybean	Corn	Soybean
2015	Insecticides	Deltamethrin	0.8	0.4	1.0	0.3
		Thiamethoxam	0.0	0.2	0.0	0.1
		Clothianidin	0.0	0.0	0.0	0.0
	Herbicides	Atrazine	38847.4	0.0	46536.0	0.0
		Acetochlor	23475.4	1146.8	28121.6	899.2
		S-metolachlor	14421.8	3465.6	17276.1	2717.5
	Fungicides	Pyraclostrobin	535.7	115.7	641.7	90.7
		Azoxystrobin	238.2	103.3	285.4	81.0
		Propiconazole	237.4	29.6	284.3	23.2
		Trifloxystrobin	218.0	54.6	261.2	42.8
		Difenoconazole	0.0	35.5	0.0	27.8
2016	Insecticides	Deltamethrin	0.0	*	0.0	8.0
		Thiamethoxam	0.0	*	0.0	0.0
		Clothianidin	0.0	*	0.0	0.0
	Herbicides	Atrazine	37454.5	*	42860.3	0.0
		Acetochlor	16244.1	*	18588.7	909.3
		S-metolachlor	15515.8	*	17755.2	3315.9
	Fungicides	Pyraclostrobin	280.7	*	321.2	218.7
		Azoxystrobin	102.3	*	117.1	126.4
		Propiconazole	121.2	*	138.7	52.4
		Trifloxystrobin	142.3	*	162.8	85.9
		Difenoconazole	0.0	*	0.0	17.1

*Data unavailable

Table S3. Pesticides, and their active ingredients, applied to the crops immediately adjacent to milkweed sampling sites.

Sites	Trade name 2015	Active ingredients 2015	Trade name 2016	Active ingredients 2016
TPAC	Makaze	glyphosate		
	Lexar	mesotrione, s-metolachlor, atrazine	Site not sampled in 2016	Site not sampled in 2016
	Liberty	glufosinate		
Meigs	Bravo Weatherstik	chlorothalonil		
	Previcur Flex	propamocarb, hydrochloride		
	Assail	acetamiprid	Site not sampled in 2016	Site not sampled in 2016
	Asana	esfenvalerate		
ACRE	Champ Formula	copper hydroxide		
	Bicep II Magnum	atrazine, s-metolachlor	Bicep II Magnum	atrazine + s-metolachlor
	Round up	glyphosate	Round up	glyphosate
		2,4-D		2,4-D
	Liberty	glufosinate	Fusilade	fluazifop-p-Butyl
PWA	Callisto	mesotrione	InterLock	adjuvant
	Princep	simazine		
	InterLock	adjuvant		
	Round up	glyphosate	Round up	glyphosate
Kankakee	Kamba master	2,4-D	Banvel	dicamba
	Round-up	glyphosate	Touchdown	glyphosate
	Kamba Master	2,4-D	Salvan	2,4-D
	Ledger	S-metolachlor, Metribuzin	Ledger	s-metolachlor, Metribuzin
	Flexstar	fomesafen	Flextar	fomesafen
	Zidua	pyroxasulfone	Volunteer	clethodim
	Fusion	fluazifop-p-Butyl, Fenoxyprop	Zidua	pyroxasulfone
Prophetstown		Site not sampled in 2015	Data unavailable	

Table S4. Logistic regression mixed model results for differences in pesticide frequency between years and among months within the years.

Pesticide type	Active ingredient	year	Month	Estimate	Std. Error	Z	p value
Insecticides	Clothianidin	2015-2016 (a)		0.94	0.29	3.22	0.0012 **
			Jun-Jul			4.82	p<0.001 ***
	Thiamethoxam	2015-2016		8.08	0.91	8.80	p<0.001 ***
		2015	Jun-Jul	0.16	0.55	0.30	0.945 ns
			Jun-Jul	0.42	0.26	1.58	0.25 ns
	Deltamethrin	2016	Jun-Aug	2.64	0.26	10.10	p<0.001 ***
			Jul-Aug	2.21	0.23	9.26	p<0.001 ***
			absent in 2015				
	Acetochlor	2015-2016	Jun-Jul	24.91	341.34	0.07	1.00 ns
			Jun-Aug	26.98	341.33	0.08	1.00 ns
			Jul-Aug	2.07	1.09	1.90	0.11 ns
Herbicides	Atrazine	2015-2016		-1.68	0.29	-5.80	p<0.001 ***
			Jul-Aug	1.59	0.29	5.56	p<0.001 ***
		2016	Jun-Jul	0.71	0.62	1.15	0.48 ns
			Jun-Aug	1.00	0.68	1.47	0.30 ns
			Jul-Aug	0.29	0.77	0.38	0.92 ns
	S-metolachlor	2015-2016		0.50	0.24	2.11	0.0349 *
			Jun-Jul	1.37	0.21	6.40	p<0.001 ***
			Jun-Aug	2.75	0.32	8.60	p<0.001 ***
		2016	Jul-Aug	1.38	0.33	4.15	p<0.001 ***
			Jun-Jul	-0.70	1.23	-0.57	0.99111 ns
			Jun-Aug	4.74	0.74	6.41	p<0.001 ***
	Propiconazole	2015-2016	Jul-Aug	5.44	1.02	5.32	p<0.001 ***
				-1.47	0.34	-10.64	p<0.001 ***
			Jun-Jul	1.57	0.26	6.09	p<0.001 ***
		2015	Jun-Aug	3.97	0.27	14.47	p<0.001 ***
			Jul-Aug	2.39	0.21	11.54	p<0.001 ***
			Jun-Jul	2.62	0.28	9.28	p<0.001 ***
Fungicides	Pyraclostrobin	2015-2016	Jun-Aug	3.96	0.36	11.05	p<0.001 ***
			Jul-Aug	1.34	0.35	3.88	0.00139 **
		2015	Jun-Jul	0.00	1.02	0.00	1 ns
			Jun-Aug	1.55	0.82	1.88	0.143 ns
	Trifloxystrobin	2015-2016	Jul-Aug	1.55	0.82	1.88	0.143 ns
				-1.11	0.16	-7.12	p<0.001 ***
			Jun-Jul	-3.03	0.23	-13.12	p<0.001 ***
		2015	Jun-Aug	-2.25	0.22	-10.47	p<0.001 ***
			Jul-Aug	0.78	0.20	3.99	p<0.001 ***
		2016	Jul-Aug	-3.81	0.31	-12.17	p<0.001 ***
			Jun-Jul	-0.37	0.17	-2.12	0.033 *
	Flutriafol	2015-2016	Jul-Aug	-0.41	0.17	-2.38	0.0175 *
		2015	Jun-Jul	0.00	1.42	0.00	1 ns
			Jun-Aug	-8.31	1.11	-7.48	p<0.001 ***
		2016	Jul-Aug	-8.31	1.11	-7.48	p<0.001 ***

*** p<0.001, ** p<0.01, * p<0.05, . P< 0.1, ns= not significant

Table S5. Relationship between percent of corn and soybean planted in 1 km radius around field sites and percent of milkweed plants with pesticide residues.

Year	pesticide type	Active ingredient	Multiple R ²	Adjusted R ²	F(1,4)	p-value	significance
2015	Insecticides	Clothianidin	0.38	0.23	2.46	0.19	ns
		Thiamethoxam	0.47	0.34	3.54	0.13	ns
	Herbicides	Acetochlor	0.15	-0.06	0.73	0.44	ns
		Atrazine	0.34	0.18	2.09	0.22	ns
	Fungicides	Metolachlor	0.00	-0.25	0.01	0.94	ns
		Propiconazole	0.16	-0.05	0.77	0.43	ns
		Pyraclostrobin	0.68	0.60	8.61	0.04	*
		Trifloxystrobin	0.02	-0.23	0.08	0.79	ns
2016	Insecticides	Clothianidin	0.31	0.08	1.35	0.33	ns
		Deltametrhin	0.27	0.08	-0.22	0.64	ns
		Thiamethoxam	0.45	0.26	2.44	0.22	ns
	Herbicides	Acetochlor	0.35	0.14	1.65	0.29	ns
		Atrazine	0.50	0.33	2.95	0.18	ns
	Fungicides	Metolachlor	0.05	-0.26	0.17	0.71	ns
		Propiconazole	0.32	0.09	1.40	0.32	ns
		Pyraclostrobin	0.10	-0.21	0.31	0.61	ns
		Trifloxystrobin	0.05	-0.26	0.16	0.71	ns

* p<0.05, ns= not significant