

## Stats Table continued

Response	Distribution	model			Random factors	Fixed factors	Slope	X2	P	Figure/*Notes
Total cover (all)	nbinomial	2011	12	213	Plot_ID nested in Field	cover crop (cat)		19.66	<b>0.00</b>	S1A
					Column (block) nested in Field	Year (cat)		27.15	<b>0.00</b>	
					Row (block) nested in Field	Field (cat)		8.31	<b>0.00</b>	
						Year x Field		43.91	<b>0.00</b>	
Weed biomass (all)	nbinomial	1506	12	203	Plot_ID nested in Field	cover crop (cat)		4.47	<b>0.03</b>	S1B
					Column (block) nested in Field	Year (cat)		21.19	<b>0.00</b>	
					Row (block) nested in Field	Field (cat)		23.60	<b>0.00</b>	
						Year x Field		42.99	<b>0.00</b>	
White grubs (all)	Zero-inflated Poisson	577	12	213	Plot_ID nested in Field	Total Cover (con't, standardized)	-0.19	5.45	<b>0.02</b>	Fig. 1, Table1 * row block estimate is close to 0, convergence issues
					Column (block) nested in Field	Insecticide Treatment (cat)		0.68	0.71	
						Year (cat)		18.63	<b>0.00</b>	
						Field (cat)		17.53	<b>0.00</b>	
						Year*Field		14.15	<b>0.00</b>	
White grubs (2017 Corn)	Zero-inflated Poisson	153	7	35	Column (block)	Total Cover (con't)	-0.01	1.33	0.248	Table 1, S3
					Row (block)	Insecticide Treatment (cat)		0.81	0.67	
White grubs (2017 Soy)	Poisson	108	7	35	Column (block)	Total Cover (con't)	-0.01	0.43	0.512	Table 1, S3
					Row (block)	Insecticide Treatment (cat)		1.89	0.39	
White grubs (2018 Corn)	Poisson	107	7	36	Column (block)	Total Cover (con't)	-0.01	0.15	0.70	Table 1, S3
					Row (block)	Insecticide Treatment (cat)		0.29	0.86	
White grubs (2018 Soy)	Zero-inflated Poisson	111	7	36	Column (block)	Total Cover (con't)	-0.02	2.97	0.08	Table 1, S3
					Row (block)	Insecticide Treatment (cat)		0.40	0.82	
White grubs (2019 Soy)	Poisson	29	7	36	Column (block)	Total Cover (con't)	-0.15	4.73	<b>0.03</b>	Table 1, S3
					Row (block)	Insecticide Treatment (cat)		0.19	0.91	

## Stats Table continued

Response	Distribution	model AIC	df	N	Random factors	Fixed factors	Slope	X2	P	Figure/*Notes
White grubs (2019 Corn)	Poisson	106	7	35	Column (block) Row (block)	Total Cover (con't) Insecticide Treatment (cat)	-0.02	1.10 1.29	0.29 0.53	Table 1, S3
Slug population (Corn)	Zero-inflated Poisson	335	16	106	Plot_ID nested in Field Column (block) nested in Field Row (block) nested in Field	Total Cover (con't, standardized) Insecticide Treatment (cat) Year (cat)	0.17	1.38 4.48 15.72	0.24 0.11 <b>0.00</b>	
Slug population (Soy)	Zero-inflated Poisson	320	11	71	Plot_ID nested in Field Column (block) nested in Field Row (block) nested in Field	Total Cover (con't, standardized) Insecticide Treatment (cat) Year (cat)	0.09	1.44 1.18 49.65	0.23 0.56 <b>0.00</b>	*Slug populations not measured in soy in 2018
Slug population (2017 Soy)	Zero-inflated Poisson	118	7	35	Plot_ID nested in Field Column (block) nested in Field Row (block) nested in Field	Total Cover (con't, standardized) Insecticide Treatment (cat)	0.34	2.32 3.33	0.13 0.19	Table S3
Slug population (2019 Soy)	Zero-inflated Poisson	215	7	36	Plot_ID nested in Field Column (block) nested in Field Row (block) nested in Field	Total Cover (con't, standardized) Insecticide Treatment (cat)	0.09	1.18 2.01	0.28 0.37	Table S3
Slug damage (Corn)	Zero-inflated Beta distribution (link=logit)	35	11	106	Plot_ID nested in Field Column (block) nested in Field Row (block) nested in Field	Total Cover (con't, standardized) Insecticide Treatment (cat) Year (cat)	-0.15	1.72 2.34 82.61	0.19 0.31 <b>0.00</b>	Table 1, S3
Slug damage (2017 Corn)	Zero-inflated Beta distribution (link=logit)	-14	8	35	Column (block) Row (block)	Total Cover (con't, standardized) Insecticide Treatment (cat)	-0.01	1.18 2.35	0.28 0.31	Table 1, S3
Slug damage (2018 Corn)	Zero-inflated Beta distribution (link=logit)	11	8	36	Column (block) Row (block)	Total Cover (con't, standardized) Insecticide Treatment (cat)	-0.04	6.92 2.73	<b>0.01</b> 0.26	Table 1, S3

## Stats Table continued

Response	Distribution	model AIC	df	N	Random factors	Fixed factors	Slope	X2	P	Figure/*Notes
Slug damage (2019 Corn)	Zero-inflated Beta distribution (link=logit)	2	8	36	Column (block) Row (block)	Total Cover (con't, standardized) Insecticide Treatment (cat) Total Cover x Incecticide Treatment	0.06   16.29	4.94   <b>0.00</b>	<b>0.03</b> <b>0.00</b> <b>0.00</b>	Table 1, S3
Slug damage (Soy 2019)	Beta distribution (link=logit)		8	36	Column (block) nested in Field Row (block) nested in Field	Total Cover (con't, standardized) Insecticide Treatment (cat)	-0.35  4.64	14.39  0.10	<b>0.00</b> 0.10	* No slug damage in 2017 or 2018 to Soy
Damage (all)	ordinal data	9798	35	5404	Plot_ID nested in Field Column (block) nested in Field Row (block) nested in Field	cover crop (cat) Insecticide Treatment (cat) Crop Year cover crop x Incecticide Treatment cover crop x Crop Insecticide Treatment x Crop cover crop x Year Insecticide Treatment x Year Crop x Year cover crop x Insecticide Treatment x Crop cover crop x Insecticide Treatment x Year cover crop x Crop x Year Insecticide Treatment x Crop x Year cover crop x Insecticide Treatment x Crop x Year	9.16 5.66 48.29 513.12 4.89 11.17 20.96 1.73 5.19 33.49 5.04 7.69 1.19 13.18 12.94	<b>0.00</b> 0.06 <b>0.00</b> <b>0.00</b> 0.09 <b>0.00</b> <b>0.00</b> 0.42 0.27 <b>0.00</b> 0.08 0.10 0.55 <b>0.01</b> <b>0.01</b>		
Damage (Corn)	ordinal data	6139	17	3254	Plot_ID nested in Field Column (block) nested in Field Row (block) nested in Field sampling location nested in Plot	cover crop (cat) Insecticide Treatment (cat) Year cover crop x Incecticide Treatment	16.02 2.70 341.36 4.88	<b>0.00</b> 0.26 <b>0.00</b> 0.09		

## Stats Table continued

Response	Distribution	model AIC	df	N	Random factors	Fixed factors	Slope	X2	P	Figure/*Notes
						cover crop x Year		0.72	0.70	
						Insecticide Treatment x Year		10.87	0.03	
						cover crop x Insecticide Treatment x Year		18.6	0.00	
Damage (Soy)	ordinal data	3488	13	2150	Plot_ID nested in Field Column (block) nested in Field Row (block) nested in Field sampling location nested in Plot	cover crop (cat) Insecticide Treatment (cat) Year		0.24 8.88 131.67	0.63 <b>0.01</b> <b>0.00</b>	Fig. 2A, Table S3
Damage (2017 Corn)	ordinal data	819	10	624	Column (block) Row (block) sampling location nested in Plot	cover crop (cat) Insecticide Treatment (cat)		4.36 2.22	<b>0.04</b> 0.33	Fig. 2B, Table S3
Damage (2018 Corn)	ordinal data		10	722	Column (block) Row (block) sampling location nested in Plot	cover crop (cat) Insecticide Treatment (cat)		7.49 5.95	<b>0.00</b> 0.05	Fig. 2C, Table S3
Damage (2019 Corn)	ordinal data	1058	5	721	Plot_ID nested in Field Column (block) nested in Field Row (block) nested in Field	cover crop (cat) Insecticide Treatment (cat) cover crop x Insecticide Treatment		2.49 0.00 8.43	0.11 1.00 <b>0.01</b>	Table S3
Damage (2017 Soy)	ordinal data	936	10	720	Column (block) Row (block) sampling location nested in Plot	cover crop (cat) Insecticide Treatment (cat)		0.87 0.96	0.35 0.62	Table S3
Damage (2018 Soy)	ordinal data	1137	9	720	Column (block) Row (block) sampling location nested in Plot	cover crop (cat) Insecticide Treatment (cat)		0.25 4.62	0.61 0.10	Table S3
Damage (2019 Soy)	ordinal data	1225	9	720	Column (block) Row (block) sampling location nested in Plot	cover crop (cat) Insecticide Treatment (cat)		0.05 5.99	0.46 0.05	Table S3

## Stats Table continued

Response	Distribution	model AIC	df	N	Random factors	Fixed factors	Slope	X2	P	Figure/*Notes
Crop establishment	Gaussian	618	6	213	Plot_ID nested in Field	Total Cover (con't, standardized)		0.09	0.77	
					Column (block) nested in Field	Insecticide Treatment (cat)		3.66	0.16	
					Row (block) nested in Field	Year		0.02	0.99	
						Crop		0.00	0.97	
Total predators (all)	Poisson	1972	38	213	Plot_ID nested in Field	Total Cover (con't, standardized)	0.34	11.33	<b>0.00</b>	*Removed Row random effect because value so low
					Column (block)	Insecticide Treatment (cat)		0.65	0.72	
						Crop		5.87	<b>0.02</b>	
						Year		51.67	<b>0.00</b>	
						Total Cover x Insecticide Treatment		1.86	0.40	
						Total cover x Crop		0.28	0.60	
						Insecticide Treatment x Crop		0.02	0.99	
						Total Cover x Year		20.96	<b>0.00</b>	
						Insecticide Treatment x Year		14.15	<b>0.01</b>	
						Crop x Year		50.46	<b>0.00</b>	
						Total Cover x Insecticide Treatment x Crop		5.91	0.05	
						Total Cover x Insecticide Treatment x Year		70.21	<b>0.00</b>	
						Total Cover x Crop x Year		24.08	<b>0.00</b>	
						Insecticide Treatment x Crop x Year		0.77	0.94	
						Total Cover x Insecticide Treatment x Crop x Year		62.26	<b>0.00</b>	

## Stats Table continued

Response	Distribution	model		N	Random factors	Fixed factors	Slope	X2	P	Figure/*Notes
Total Predators (Corn)	Poisson	906	20	106	Plot_ID nested in Field	Total Cover (con't, standaridized)	0.15	6.29	<b>0.01</b>	
					Column (block) nested in Field	Insecticide Treatment (cat)		0.60	0.74	
						Year		60.31	<b>0.00</b>	
						Total Cover x Incecticide Treatment		1.38	0.50	
						Total Cover x Year		5.39	0.07	
						Insecticide Treatment x Year		10.23	<b>0.04</b>	
						Total Cover x Insecticide Treatment x Year		20.28	<b>0.00</b>	
Total Predators (Soy)	Poisson	947	20	107	Plot_ID nested in Field	Total Cover (con't, standaridized)		21.69	<b>0.00</b>	
					Column (block) nested in Field	Insecticide Treatment (cat)		0.45	0.80	
					Row (block) nested in Field	Year		27.92	<b>0.00</b>	
						Total Cover x Incecticide Treatment		13.89	<b>0.00</b>	
						Total Cover x Year		7.34	0.12	
						Insecticide Treatment x Year		18.41	<b>0.00</b>	
						Total Cover x Insecticide Treatment x Year		12.35	<b>0.01</b>	
Total Predators (2017 Corn)	Poisson	278	5	35	Column (block)	Total Cover (con't)	0.01	22.08	<b>0.00</b>	Fig3A, Table1
					Row (block)	Insecticide Treatment (cat)		0.00	0.99	
Total Predators (2017 Soy)	Poisson	363	5	35	Column (block)	<u>Total Cover (con't, standaridized)</u>	0.00	0.99	0.32	Fig3D, Table1
					Row (block)	Total Cover (con't)		1.40	0.24	
Total Predators (2018 Corn)	Poisson	358	8	35	Column (block)	Total Cover (con't)	0.00	0.00	0.95	Fig3B, Table1
					Row (block)	Insecticide Treatment (cat)		22.27	<b>0.00</b>	
						Total Cover x Incecticide Treatment		25.36	<b>0.00</b>	
Total Predators (2018 Soy)	Poisson	358	5	36	Column (block)	Total Cover (con't)	0.00	1.07	0.30	Fig3E, Table1
					Row (block)	Insecticide Treatment (cat)		35.10	<b>0.00</b>	

## Stats Table continued

<b>Response</b>	<b>Distribution</b>	<b>model</b>		<b>N</b>	<b>Random factors</b>	<b>Fixed factors</b>	<b>Slope</b>	<b>X2</b>	<b>P</b>	<b>Figure/*Notes</b>
Total Predators (2019 Corn)	Poisson	369	8	35	Column (block)	Total Cover (con't)	0.03	24.79	<b>0.00</b>	Fig3C, Table1
					Row (block)	Insecticide Treatment (cat)		26.20	<b>0.00</b>	
						Total Cover x Insecticide Treatment		17.30	<b>0.00</b>	
Total Predators (2019 Soy)	Poisson	74	5	36	Column (block)	Total Cover (con't)	-0.01	0.20	0.66	Fig3F, Table1
					Row (block)	Insecticide Treatment (cat)		0.36	0.84	
Predation rates: early season (all)	Binomial	2448	39	1944	Plot_ID nested in Field	cover crop (cat)		1.09	0.30	
					Column (block) nested in Field	Insecticide Treatment (cat)		15.98	<b>0.00</b>	
					Row (block) nested in Field	Crop		0.12	0.73	
						Year		0.48	0.79	
						cover crop x Insecticide Treatment		8.23	<b>0.02</b>	
						cover crop x Crop		0.07	0.79	
						Insecticide Treatment x Crop		15.59	<b>0.00</b>	
						cover crop x Year		0.59	0.75	
						Insecticide Treatment x Year		19.93	<b>0.00</b>	
						Crop x Year		6.29	<b>0.04</b>	
						cover crop x Insecticide Treatment x Crop		11.49	<b>0.00</b>	
						cover crop x Insecticide Treatment x Year		16.42	<b>0.00</b>	
						cover crop x Crop x Year		0.86	0.65	
Predation rates: early season (Corn)	Binomial	3327	21	2916	Plot_ID nested in Field	Insecticide Treatment x Crop x Year		25.85	<b>0.00</b>	
						cover crop x Insecticide Treatment x Crop x Year		11.87	<b>0.02</b>	
					Column (block) nested in Field	cover crop (cat)		1.36	0.24	
						Insecticide Treatment (cat)		14.30	<b>0.00</b>	
					Row (block) nested in Field	Year		0.36	0.83	
						cover crop x Insecticide Treatment		5.70	0.06	
						cover crop x Year		0.54	0.76	
						Insecticide Treatment x Year		16.03	<b>0.00</b>	
						cover crop x Insecticide Treatment x Year		10.38	<b>0.03</b>	

## Stats Table continued

<b>Response</b>	<b>Distribution</b>	<b>model AIC</b>	<b>df</b>	<b>N</b>	<b>Random factors</b>	<b>Fixed factors</b>	<b>Slope</b>	<b>X2</b>	<b>P</b>	<b>Figure/*Notes</b>
Predation rates: early season (Soy)	Binomial	2960	9	2916	Plot_ID nested in Field	cover crop (cat)		2.57	0.11	
					Column (block) nested in Field	Insecticide Treatment (cat)		2.54	0.28	
					Row (block) nested in Field	Year		168.45	<b>0.00</b>	
Predation rates: early season (2017 Soy)	Binomial	415	7	324	Plot_ID	cover crop (cat)		0.03	0.86	Fig4D, Table1
					Column (block) nested in Field	Insecticide Treatment (cat)		1.60	0.21	
					Row (block) nested in Field	cover crop x Insecticide Treatment		4.98	<b>0.03</b>	
Predation rates: early season (2017 Corn)	Binomial	405	7	324	Plot_ID	cover crop (cat)		3.60	0.06	Fig4A, Table1
					Column (block) nested in Field	Insecticide Treatment (cat)		13.51	<b>0.00</b>	
					Row (block) nested in Field	cover crop x Insecticide Treatment		7.26	<b>0.01</b>	
Predation rates: early season (2018 Corn)	Binomial	422	9	324	Plot_ID	cover crop (cat)		0.73	0.39	Fig4B, Table1
					Column (block)	Insecticide Treatment (cat)		4.29	0.12	
					Row (block)					
Predation rates: early season (2018 Soy)	Binomial	331	7	324	Plot_ID	cover crop (cat)		2.12	0.15	Fig4E, Table1
					Column (block)	Insecticide Treatment (cat)		4.34	0.11	
					Row (block)					
Predation rates: early season (2019 Corn)	Binomial	433	7	324	Plot_ID	cover crop (cat)		0.25	0.62	Fig4C, Table1
					Column (block)	Insecticide Treatment (cat)		3.28	0.19	
					Row (block)					
Predation rates: early season (2019 Soy)	Binomial	440	7	324	Plot_ID	cover crop (cat)		0.72	0.40	Fig4F, Table1
					Column (block)	Insecticide Treatment (cat)		4.18	0.12	
					Row (block)					
Predation rates: mid-season (all)	Binomial	1062	12	1944	Plot_ID nested in Field	cover crop (cat)		0.22	0.64	Fig 4G
					Column (block) nested in Field	Insecticide Treatment (cat)		2.36	0.31	
					Row (block) nested in Field	Year		35.26	<b>0.00</b>	
						Crop		9.53	<b>0.00</b>	
						Year x Crop		31.64	<b>0.00</b>	



## Stats Table continued

<b>Response</b>	<b>Distribution</b>	<b>model AIC</b>	<b>df</b>	<b>N</b>	<b>Random factors</b>	<b>Fixed factors</b>	<b>Slope</b>	<b>X2</b>	<b>P</b>	<b>Figure/*Notes</b>
Predation rates: late-season (all)	Binomial	1359	12	1944	Plot_ID nested in Field	cover crop (cat)		6.38	<b>0.01</b>	Fig 4H
					Column (block) nested in Field	Insecticide Treatment (cat)		0.17	0.92	
					Row (block) nested in Field	Year		34.54	<b>0.00</b>	
						Crop		66.74	<b>0.00</b>	
						Year x Crop		105.74	<b>0.00</b>	
Yield (all)	Gaussian	3682	13	216	Plot_ID nested in Field	cover crop (cat)		0.087	0.77	
					Column (block) nested in Field	Insecticide Treatment (cat)		1.728	0.42	
					Row (block) nested in Field	Year		153.7	0.00	
						Crop		337.6	0.00	
						Crop x Year		52.77	0.00	
Yield (Soy)	Gaussian	1581	13	108	Column (block)	cover crop (cat)		3.636	0.06	*Plot_ID removed, close to 0
					Row (block)	Insecticide Treatment (cat)		5.504	0.06	
						Year		86.73	0.00	
						Insecticide Treatment x Year		12.63	0.01	
Yield (Corn)	Gaussian	1914	9	108	Column (block)	cover crop (cat)		0.001	0.97	*Plot_ID removed, close to 0
					Row (block)	Insecticide Treatment (cat)		1.057	0.59	
						Year		78.98	0.00	
Yield (2017 Soy)	Gaussian	550	6	36	Column (block)	cover crop (cat)		0.11	0.74	Fig 5D
					Row (block)	Insecticide Treatment (cat)		3.51	0.06	
Yield (2017 Corn)	Gaussian	665	6	36		cover crop (cat)		0.08	0.77	Fig 5A *Block and row removed b/c estimates too small
						Insecticide Treatment (cat)		0.58	0.45	
Yield (2018 Soy)	Gaussian	495	7	36	Column (block)	cover crop (cat)		0.97	0.33	Fig 5E
					Row (block)	Insecticide Treatment (cat)		2.02	0.36	

## Stats Table continued

Response	Distribution	model AIC	df	N	Random factors	Fixed factors	Slope	X2	P	Figure/*Notes
Yield (2018 Corn)	Gaussian	595	7	36	Column (block) Row (block)	cover crop (cat) Insecticide Treatment (cat)		1.25 0.59	0.26 0.74	Fig 5B
Yield (2019 Soy)	Gaussian	513	7	36	Column (block)	cover crop (cat) Insecticide Treatment (cat)		23 38.49	<b>0.00</b> <b>0.00</b>	Fig 5F *Row removed because estimate too small
Yield (2019 Corn)	Gaussian	526	7	36	Column (block) Row (block)	cover crop (cat) Insecticide Treatment (cat)		0.11 2.25	0.74 0.32	Fig 5C
Centipedes (all)	Poisson	347	11	213	Plot_ID nested in Field Column (block) nested in Field Row (block) nested in Field	Total Cover (con't, standardized) Insecticide Treatment (cat) Year Crop		0.72 0.56 16.58 0.89	0.40 0.75 <b>0.00</b> 0.35	Table S4
Spiders (all)	Zero-inflated Poisson	1368	40	213	Plot_ID nested in Field Column (block) nested in Field Row (block) nested in Field	Total Cover (con't, standardized) Insecticide Treatment (cat) Crop Year Total Cover x Insecticide Treatment Total cover x Crop Insecticide Treatment x Crop Total Cover x Year Insecticide Treatment x Year Crop x Year Total Cover x Insecticide Treatment x Crop Total Cover x Insecticide Treatment x Year	0.67	13.05 0.25 10.29 0.83 4.05 6.35 3.68 13.53 0.90 11.35 0.05 12.31	<b>0.00</b> 0.88 <b>0.01</b> 0.36 0.13 <b>0.01</b> 0.16 <b>0.00</b> 0.92 <b>0.00</b> 0.97 <b>0.02</b>	*Row block removed because too close to zero to estimate

## Stats Table continued

Response	Distribution	model AIC	df	N	Random factors	Fixed factors	Slope	X2	P	
						Total Cover x Crop x Year		10.68	<b>0.00</b>	
						Insecticide Treatment x Crop x Year		3.93	0.42	
						Total Cover x Insecticide Treatment x Crop x Year		11.04	<b>0.03</b>	
Spiders (2017 Corn)	Poisson	192	6	35	Column (block)	Total Cover (con't)		7.93	<b>0.00</b>	Table S4,S5
						Insecticide Treatment (cat)		2.55	0.11	
						Total Cover x Insecticide Treatment		3.98	<b>0.05</b>	
Spiders (2017 Soy)	Zero-inflated Poisson	236	6	35	Column (block)	Total Cover (con't)	-0.01	0.51	0.48	Table S4,S5
					Row (block)	Insecticide Treatment (cat)		0.41	0.52	
Spiders (2018 Soy)	Poisson	272	9	36	Column (block)	Total Cover (con't)	0.01	3.24	0.07	Table S4,S5
					Row (block)	Insecticide Treatment (cat)		11.79	<b>0.00</b>	
						Total Cover x Insecticide Treatment		18.09	<b>0.00</b>	
Spiders (2018 Corn)	Poisson	189	7	36	Column (block)	Total Cover (con't)	0.01	1.23	0.27	Table S4,S5
					Row (block)	Insecticide Treatment (cat)		5.00	0.08	
Spiders (2019 Corn)	Poisson	216	6	35	Column (block)	Total Cover (con't)	0.00	0.66	0.42	Table S4,S5
					Row (block)	Insecticide Treatment (cat)		0.84	0.66	
Spiders (2019 Soy)	Poisson	291	7	36	Column (block)	Total Cover (con't)	0.01	4.57	<b>0.03</b>	Table S4,S5
					Row (block)	Insecticide Treatment (cat)		23.15	<b>0.00</b>	
Harvestmen (all)	Zero-inflated Poisson	1072	13	213	Plot_ID nested in Field	Total Cover (con't, standardized)	0.05	1.39	0.24	
					Column (block) nested in Field	Insecticide Treatment (cat)		14.76	<b>0.00</b>	
					Row (block) nested in Field	Crop		0.06	0.80	
						Year		64.71	<b>0.00</b>	
						Crop x Year		19.96	<b>0.00</b>	
Harvestmen (2017 Corn)	Zero-inflated Poisson	150	5	35	Column (block)	Total Cover (con't)	0.01	1.31	0.25	Table S4,S5
						Insecticide Treatment (cat)		0.04	0.84	

## Stats Table continued

<b>Response</b>	<b>Distribution</b>	<b>model</b>		<b>N</b>	<b>Random factors</b>	<b>Fixed factors</b>	<b>Slope</b>	<b>X2</b>	<b>P</b>	<b>Figure/*Notes</b>
Harvestmen (2017 Soy)	Zero-inflated Poisson	153	6	35	Column (block)	Total Cover (con't)	-0.01	0.74	0.39	Table S4,S5
					Row (block)	Insecticide Treatment (cat)		4.32	<b>0.04</b>	
Harvestmen (2018 Soy)	Zero-inflated Poisson	272	9	36	Column (block)	Total Cover (con't)	-0.07	10.99	<b>0.00</b>	Table S4,S5
					Row (block)	Insecticide Treatment (cat)		10.42	<b>0.01</b>	
						Total Cover x Insecticide Treatment		9.97	<b>0.01</b>	
Harvestmen (2018 Corn)	Poisson	179	6	36	Column (block)	Total Cover (con't)	0.01	0.92	0.34	Table S4,S5
					Row (block)	Insecticide Treatment (cat)		29.46	<b>0.00</b>	
Harvestmen (2019 Corn)	Poisson	215	6	35	Row (block)	Total Cover (con't)	0.00	0.10	0.76	Table S4,S5
						Insecticide Treatment (cat)		11.72	<b>0.00</b>	
Harvestmen (2019 Soy)	Poisson	235	6	36	Column (block)	Total Cover (con't)	-0.01	0.76	0.38	Table S4,S5
						Insecticide Treatment (cat)		11.95	<b>0.00</b>	
Ants (all)	Poisson	1830	36	213	Plot_ID nested in Field	Total Cover (con't, standardized)	-0.21	1.36	0.24	
					Column (block) nested in Field	Insecticide Treatment (cat)		1.66	0.44	
					Row (block) nested in Field	Crop		41.19	<b>0.00</b>	
						Year		11.96	<b>0.00</b>	
						Total Cover x Insecticide Treatment		1.42	0.49	
						Total cover x Crop		12.96	<b>0.00</b>	
						Insecticide Treatment x Crop		0.51	0.77	
						Total Cover x Year		15.02	<b>0.00</b>	
						Insecticide Treatment x Year		7.56	0.11	
						Crop x Year		92.96	<b>0.00</b>	
						Total Cover x Insecticide Treatment x Crop		8.00	<b>0.02</b>	
						Total Cover x Insecticide Treatment x Year		36.82	<b>0.00</b>	
						Total Cover x Crop x Year		18.54	<b>0.00</b>	
						Insecticide Treatment x Crop x Year		11.89	<b>0.02</b>	
						Total Cover x Insecticide Treatment x Crop x Year		40.13	<b>0.00</b>	

## Stats Table continued

<b>Response</b>	<b>Distribution</b>	<b>model AIC</b>	<b>df</b>	<b>N</b>	<b>Random factors</b>	<b>Fixed factors</b>	<b>Slope</b>	<b>X2</b>	<b>P</b>	<b>Figure/*Notes</b>
Ants (2017 Corn)	Poisson	261	7	36	Column (block)	Total Cover (con't)	0.01	23.19	<b>0.00</b>	Table S4,S5
					Row (block)	Insecticide Treatment (cat)		0.54	0.46	
Ants (2017 Soy)	Poisson	309	7	35	Column (block)	Total Cover (con't)	0.01	3.95	<b>0.05</b>	Table S4,S5
					Row (block)	Insecticide Treatment (cat)		0.61	0.43	
Ants (2018 Corn)	Poisson	381	8	36	Column (block)	Total Cover (con't)	-0.01	1.65	0.20	Table S4,S5
					Row (block)	Insecticide Treatment (cat)		24.30	<b>0.00</b>	
						Total Cover x Insecticide Treatment		20.58	<b>0.00</b>	
Ants (2018 Soy)	Poisson	259	7	36	Column (block)	Total Cover (con't)	0.00	3.00	0.08	Table S4,S5
					Row (block)	Insecticide Treatment (cat)		22.73	<b>0.00</b>	
Ants (2019 Corn)	Poisson	379	9	36	Column (block)	Total Cover (con't)	0.05	20.09	<b>0.00</b>	Table S4,S5
					Row (block)	Insecticide Treatment (cat)		14.27	<b>0.00</b>	
						Total Cover x Insecticide Treatment		7.22	<b>0.03</b>	
Ants (2019 Soy)	Poisson	238	7	36	Column (block)	Total Cover (con't)	0.00	0.38	0.54	Table S4,S5
					Row (block)	Insecticide Treatment (cat)		13.76	<b>0.00</b>	
Rove beetles (all)	Zero-inflated Poisson	947	12	213	Plot_ID nested in Field	Total Cover (con't, standaridized)	0.42	40.30	<b>0.00</b>	
					Column (block) nested in Field	Insecticide Treatment (cat)		7.14	<b>0.03</b>	
					Row (block) nested in Field	Crop		25.38	<b>0.00</b>	
						Year		41.65	<b>0.00</b>	
						Total cover x Crop		20.56	<b>0.00</b>	
Rove beetles (2017 Corn)	Poisson	137	6	35	Column (block)	Total Cover (con't)	0.02	17.25	<b>0.00</b>	Table S4,S5
					Row (block)	Insecticide Treatment (cat)		0.03	0.85	
Rove beetles (2017 Soy)	Poisson	110	6	35	Column (block)	Total Cover (con't)	0.01	0.07	0.79	Table S4,S5
					Row (block)	Insecticide Treatment (cat)		0.15	0.70	

## Stats Table continued

<b>Response</b>	<b>Distribution</b>	<b>model</b>		<b>N</b>	<b>Random factors</b>	<b>Fixed factors</b>	<b>Slope</b>	<b>X2</b>	<b>P</b>	<b>Figure/*Notes</b>
Rove beetles (2018 Corn)	Zero-inflated Poisson	134	7	36	Column (block)	Total Cover (con't)	0.03	12.06	<b>0.00</b>	Table S4,S5
					Row (block)	Insecticide Treatment (cat)		9.51	<b>0.01</b>	
Rove beetles (2018 Soy)	Poisson	217	7	36	Column (block)	Total Cover (con't)	0.00	0.76	0.38	Table S4,S5
					Row (block)	Insecticide Treatment (cat)		6.44	<b>0.04</b>	
Rove beetles (2019 Corn)	Poisson	171	9	35	Column (block)	Total Cover (con't)	0.03	2.63	0.10	Table S4,S5
					Row (block)	Insecticide Treatment (cat)		6.19	<b>0.05</b>	
						Total Cover x Insecticide Treatment		7.88	<b>0.02</b>	
Rove beetles (2019 Soy)	Zero-inflated Poisson	151	7	36	Column (block)	Total Cover (con't)	0.04	6.20	<b>0.01</b>	Table S4,S5
					Row (block)	Insecticide Treatment (cat)		4.39	0.11	
Carabids (all)	Poisson	853	13	213	Plot_ID nested in Field	Total Cover (con't, standardized)	0.45	43.97	<b>0.00</b>	
					Column (block) nested in Field	Insecticide Treatment (cat)		2.29	0.32	
						Crop		0.13	0.72	
						Year		13.87	<b>0.00</b>	
						Total cover x Crop		38.00	<b>0.00</b>	
						Crop x Year		31.11	<b>0.00</b>	
Carabids (2017 Corn)	Poisson	147	6	35	Column (block)	Total Cover (con't)	0.04	8.17	<b>0.00</b>	Table S4,S5
					Row (block)	Insecticide Treatment (cat)		5.50	<b>0.02</b>	
Carabids (2017 Soy)	Poisson	132	6	35	Column (block)	Total Cover (con't)	0.01	1.06	0.30	Table S4,S5
					Row (block)	Insecticide Treatment (cat)		0.73	0.39	
Carabids (2018 Corn)	Poisson	115	7	36	Column (block)	Total Cover (con't)	0.04	4.22	<b>0.04</b>	Table S4,S5
					Row (block)	Insecticide Treatment (cat)		2.04	0.36	
Carabids (2018 Soy)	Poisson	200	7	36	Column (block)	Total Cover (con't)	-0.01	2.89	0.09	Table S4,S5
					Row (block)	Insecticide Treatment (cat)		1.03	0.60	
Carabids (2019 Corn)	Poisson	132	7	35	Column (block)	Total Cover (con't)	0.02	1.91	0.17	Table S4,S5

Stats Table continued

Response	Distribution	model			Random factors	Fixed factors	Slope	X2	P	Figure/*Notes
		AIC	df	N						
Carabids (2019 Soy)	Poisson	129	8	36	Row (block)	Insecticide Treatment (cat)		9.83	<b>0.01</b>	Table S4,S5 *Column Block removed because estimate so small
					Row (block)	Total Cover (con't)	-0.14	4.85	<b>0.03</b>	
						Insecticide Treatment (cat)		2.09	0.35	
						Insecticide Treatment x Total Cover		4.67	0.10	