

Appendix A-1: Insecticide Use, Cost and Impact Estimates by Crop and State

Crop	State	Acres (000)	Volume (mil lbs)	Value (mil \$)	% Treated	% Loss	Insecticide (\$/A)	Acres Treated (000)	Total Insecticide Cost (000\$/year)	Production Loss w/o Insecticides (000\$/year)	Net Return Ratio	Production Volume Loss w/o Insecticides (000 lbs)
Alfalfa	Arizona	260	4472	416	25	50	20	65	1300	52000	40.0	559000
Alfalfa	Arkansas	15	106	7	80	44	20	12	240	2464	10.3	37312
Alfalfa	California	950	13300	1383	25	50	20	238	4750	172875	36.4	1662500
Alfalfa	Colorado	820	5412	444	3	44	20	25	492	5861	11.9	71438
Alfalfa	Connecticut	9	46	6	48	20	12	4	52	576	11.1	4416
Alfalfa	Delaware	6	40	4	48	20	12	3	35	384	11.1	3840
Alfalfa	Idaho	1130	9944	1024	3	44	12	34	407	13517	33.2	131261
Alfalfa	Illinois	350	2730	205	7	44	12	25	294	6314	21.5	84084
Alfalfa	Indiana	300	2400	199	7	44	12	21	252	6129	24.3	73920
Alfalfa	Iowa	1150	8740	607	7	44	12	81	966	18696	19.4	269192
Alfalfa	Kansas	700	5740	370	7	44	12	49	588	11396	19.4	176792
Alfalfa	Kentucky	240	1200	106	20	44	12	48	576	9328	16.2	105600
Alfalfa	Maine	8	44	5	48	20	12	4	46	480	10.4	4224
Alfalfa	Maryland	45	388	37	48	20	12	22	259	3552	13.7	37248
Alfalfa	Massachusetts	8	34	5	48	20	12	4	46	480	10.4	3264
Alfalfa	Michigan	770	4466	348	14	44	12	108	1294	21437	16.6	275106
Alfalfa	Minnesota	1350	8370	561	3	44	20	41	810	7405	9.1	110484
Alfalfa	Missouri	350	2240	178	14	44	20	49	980	10965	11.2	137984
Alfalfa	Montana	1600	6080	359	3	44	20	48	960	4739	4.9	80256
Alfalfa	Nebraska	970	7664	358	3	44	20	29	582	4726	8.1	101165
Alfalfa	Nevada	270	2592	247	10	44	12	27	324	10868	33.5	114048
Alfalfa	New Hampshire	5	28	4	48	20	12	2	29	384	13.3	2688
Alfalfa	New Jersey	20	116	11	48	20	12	10	115	1056	9.2	11136
Alfalfa	New Mexico	250	2600	250	10	44	20	25	500	11000	22.0	114400
Alfalfa	New York	350	1890	169	48	20	12	168	2016	16224	8.0	181440
Alfalfa	North Carolina	8	44	5	80	44	20	6	128	1760	13.8	15488
Alfalfa	North Dakota	1660	4648	191	3	44	20	50	996	2521	2.5	61354
Alfalfa	Ohio	420	2436	233	14	44	12	59	706	14353	20.3	150058
Alfalfa	Oklahoma	310	2232	167	10	44	12	31	372	7348	19.8	98208
Alfalfa	Oregon	420	3360	357	33	44	12	139	1663	51836	31.2	487872
Alfalfa	Pennsylvania	550	3300	337	24	20	12	132	1584	16176	10.2	158400
Alfalfa	Rhode Island	1	6	1	48	20	12	0	6	96	16.7	576
Alfalfa	South Dakota	2400	11040	574	3	44	20	72	1440	7577	5.3	145728
Alfalfa	Tennessee	20	120	13	80	44	20	16	320	4576	14.3	42240
Alfalfa	Texas	130	1222	112	33	44	12	43	515	16262	31.6	177434
Alfalfa	Utah	550	4620	390	10	44	10	55	550	17160	31.2	203280
Alfalfa	Vermont	30	102	11	48	20	12	14	173	1056	6.1	9792
Alfalfa	Virginia	90	540	49	25	20	20	23	450	2450	5.4	27000

Alfalfa	Washington	410	3608	408	33	44	12	135	1624	59242	36.5	523882
Alfalfa	West Virginia	25	146	12	10	44	12	3	30	528	17.6	6424
Alfalfa	Wisconsin	1500	8100	462	3	44	20	45	900	6098	6.8	106920
Alfalfa	Wyoming	530	3074	181	3	44	12	16	191	2389	12.5	40577
Almonds	California	660	1550	2228	85	50	118	561	66198	946900	14.3	658750
Apples	California	20	330	85	69	80	150	14	2070	46920	22.7	182160
Apples	Connecticut	2	20	11	93	100	150	2	279	10230	36.7	18600
Apples	Georgia	1	12	4	93	100	150	1	140	3720	26.7	11160
Apples	Idaho	3	90	26	99	100	150	3	446	25740	57.8	89100
Apples	Illinois	3	46	16	88	100	150	3	396	14080	35.6	40480
Apples	Indiana	2	23	8	88	100	150	2	264	7040	26.7	20240
Apples	Kentucky	1	8	4	93	100	150	1	140	3720	26.7	7440
Apples	Maine	3	39	18	93	100	150	3	419	16740	40.0	36270
Apples	Maryland	2	34	8	93	100	150	2	279	7440	26.7	31620
Apples	Massachusetts	4	39	19	93	100	150	4	558	17670	31.7	36270
Apples	Michigan	36	560	121	93	100	150	33	5022	112530	22.4	520800
Apples	Missouri	2	30	8	93	100	150	2	279	7440	26.7	27900
Apples	New Hampshire	2	35	14	93	100	150	2	279	13020	46.7	32550
Apples	New Jersey	2	40	11	93	100	150	2	279	10230	36.7	37200
Apples	New York	42	1230	260	93	100	150	39	5859	241800	41.3	1143900
Apples	North Carolina	7	175	28	93	100	150	7	977	26040	26.7	162750
Apples	Ohio	7	104	41	93	100	150	7	977	38130	39.0	96720
Apples	Oregon	5	170	37	91	100	150	5	683	33670	49.3	154700
Apples	Pennsylvania	21	435	77	90	100	150	19	2835	69300	24.4	391500
Apples	Rhode Island	1	2	1	93	100	150	1	140	930	6.7	1860
Apples	South Carolina	1	7	1	93	100	150	1	140	930	6.7	6510
Apples	Tennessee	1	10	3	93	100	150	1	140	2790	20.0	9300
Apples	Vermont	3	44	20	93	100	150	3	419	18600	44.4	40920
Apples	Virginia	12	230	39	93	100	150	11	1674	36270	21.7	213900
Apples	Washington	153	6100	1669	96	100	150	147	22032	1602240	72.7	5856000
Apples	West Virginia	5	85	8	93	100	150	5	698	7440	10.7	79050
Apples	Wisconsin	5	57	28	88	100	150	4	660	24640	37.3	50160
Artichokes	California	9	119	57	99	60	350	9	3119	33858	10.9	70686
Asparagus	California	15	42	53	70	100	41	11	431	37100	86.2	29400
Asparagus	Michigan	12	26	19	95	50	20	11	228	9025	39.6	12350
Asparagus	Washington	7	27	18	84	100	41	6	241	15120	62.7	22680
Avocados	California	66	320	315	80	60	180	53	9504	151200	15.9	153600
Blueberries	Florida	3	10	52	79	80	38	2	90	32864	364.9	6320
Blueberries	Georgia	10	41	70	79	80	38	8	300	44240	147.4	25912
Blueberries	Maine	23	62	55	98	80	20	23	451	43120	95.7	48608
Blueberries	Michigan	19	110	124	98	80	20	19	372	97216	261.1	86240
Blueberries	New Jersey	8	59	82	95	80	20	8	152	62320	410.0	44840
Blueberries	North Carolina	5	28	48	98	80	38	5	186	37632	202.1	21952
Blueberries	Oregon	5	43	49	53	80	20	3	53	20776	392.0	18232
Blueberries	Washington	4	32	43	53	80	20	2	42	18232	430.0	13568

Broccoli	Arizona	11	153	58	95	80	142	10	1484	44080	29.7	116280
Broccoli	California	115	1824	650	95	80	142	109	15514	494000	31.8	1386240
Cabbage	Florida	10	343	46	99	95	180	10	1782	43263	24.3	322592
Cabbage	Georgia	7	208	26	100	95	180	7	1260	24700	19.6	197600
Cabbage	Illinois	1	12	1	80	40	110	1	88	320	3.6	3840
Cabbage	Michigan	2	67	12	80	40	110	2	176	3840	21.8	21440
Cabbage	New Jersey	2	58	8	98	40	110	2	216	3136	14.5	22736
Cabbage	New York	10	584	102	98	40	110	10	1078	39984	37.1	228928
Cabbage	North Carolina	5	125	16	97	80	110	5	534	12416	23.3	97000
Cabbage	Ohio	1	27	4	94	40	110	1	103	1504	14.5	10152
Cabbage	Pennsylvania	1	29	4	81	40	110	1	89	1296	14.5	9396
Cabbage	Texas	8	227	46	96	80	110	8	845	35328	41.8	174336
Cabbage	Virginia	1	7	1	97	40	110	1	107	388	3.6	2716
Cabbage	Wisconsin	3	71	10	100	40	110	3	330	4000	12.1	28400
Carrots	California	64	2135	515	20	15	51	13	653	15450	23.7	64050
Carrots	Michigan	5	201	18	100	50	20	5	100	9000	90.0	100500
Carrots	Texas	2	55	9	77	50	20	2	31	3465	112.5	21175
Carrots	Washington	5	288	13	85	30	20	4	85	3315	39.0	73440
Celery	California	27	1908	323	97	50	249	26	6521	156655	24.0	925380
Celery	Florida	4	123	8	100	50	200	4	800	4000	5.0	61500
Celery	Michigan	2	94	15	90	50	80	2	144	6750	46.9	42300
Cherries	California	27	166	194	80	60	289	22	6242	93120	14.9	79680
Cherries	Michigan	33	217	80	99	100	47	33	1535	79200	51.6	214830
Cherries	New York	3	11	7	94	100	47	3	133	6580	49.6	10340
Cherries	Oregon	13	55	56	96	100	76	12	948	53760	56.7	52800
Cherries	Pennsylvania	1	4	2	94	100	47	1	44	1880	42.6	3760
Cherries	Washington	34	212	297	94	100	76	32	2429	279180	114.9	199280
Cherries	Wisconsin	2	1	1	99	100	47	2	93	990	10.6	990
Corn	Alabama	235	1369	129	14	25	15	33	494	4515	9.1	47915
Corn	Arizona	15	139	14	10	10	15	2	23	140	6.2	1390
Corn	Arkansas	430	3732	290	14	15	15	60	903	6090	6.7	78372
Corn	Colorado	1080	8286	584	24	25	15	259	3888	35040	9.0	497160
Corn	Delaware	152	1064	84	21	18	15	32	479	3175	6.6	40219
Corn	Florida	35	206	17	25	25	15	9	131	1063	8.1	12875
Corn	Georgia	310	2430	199	14	25	15	43	651	6965	10.7	85050
Corn	Idaho	80	762	58	15	25	15	12	180	2175	12.1	28575
Corn	Illinois	11900	119285	8094	11	28	11	1309	14399	249295	17.3	3673978
Corn	Indiana	5460	48922	3276	11	28	11	601	6607	100901	15.3	1506798
Corn	Iowa	12800	122573	8645	11	28	11	1408	15488	266266	17.2	3775248
Corn	Kansas	3630	27240	2067	11	25	20	399	7986	56843	7.1	749100
Corn	Kentucky	1120	8530	617	18	15	15	202	3024	16659	5.5	230310
Corn	Louisiana	510	4113	326	14	15	15	71	1071	6846	6.4	86373
Corn	Maryland	400	2710	208	21	18	15	84	1260	7862	6.2	102438
Corn	Michigan	2140	16538	1063	14	10	15	300	4494	14882	3.3	231532
Corn	Minnesota	7200	66125	4487	12	10	15	864	12960	53844	4.2	793500

Corn	Mississippi	700	5488	451	14	15	15	98	1470	9471	6.4	115248
Corn	Missouri	2650	21370	1526	11	28	15	292	4373	47001	10.7	658196
Corn	Montana	35	267	19	10	10	15	4	53	190	3.6	2670
Corn	Nebraska	8550	78044	5435	20	25	20	1710	34200	271750	7.9	3902200
Corn	New Jersey	74	481	35	21	18	15	16	233	1323	5.7	18182
Corn	New Mexico	55	554	56	10	10	15	6	83	560	6.8	5540
Corn	New York	640	5178	396	21	18	15	134	2016	14969	7.4	195728
Corn	North Carolina	830	3625	311	17	25	15	141	2117	13218	6.2	154063
Corn	North Dakota	2300	15971	1098	5	25	15	115	1725	13725	8.0	199638
Corn	Ohio	3120	23587	1663	9	28	15	281	4212	41908	9.9	594392
Corn	Oklahoma	320	2061	165	5	10	15	16	240	825	3.4	10305
Corn	Oregon	33	370	26	20	10	15	7	99	520	5.3	7400
Corn	Pennsylvania	880	6554	439	21	18	15	185	2772	16594	6.0	247741
Corn	South Carolina	315	1147	98	15	25	15	47	709	3675	5.2	43013
Corn	South Dakota	4400	32771	2107	12	25	15	528	7920	63210	8.0	983130
Corn	Tennessee	630	4163	334	15	15	15	95	1418	7515	5.3	93668
Corn	Texas	2030	14210	1218	24	10	15	487	7308	29232	4.0	341040
Corn	Utah	23	202	15	15	10	15	3	52	225	4.3	3030
Corn	Virginia	340	2056	165	15	18	15	51	765	4455	5.8	55512
Corn	Washington	90	1038	76	20	10	15	18	270	1520	5.6	20760
Corn	West Virginia	26	189	15	21	18	15	5	82	567	6.9	7144
Corn	Wisconsin	2880	22095	1381	22	10	15	634	9504	30382	3.2	486090
Corn	Wyoming	52	390	28	24	10	15	12	187	672	3.6	9360
Cotton	Alabama	290	240	142	55	70	25	160	3988	54670	13.7	92400
Cotton	Arizona	136	193	111	74	30	53	101	5334	24642	4.6	42846
Cotton	Arkansas	620	629	349	92	60	25	570	14260	192648	13.5	347208
Cotton	California	275	377	327	90	15	30	248	7425	44145	5.9	50895
Cotton	Florida	67	59	30	85	42	23	57	1310	10710	8.2	21063
Cotton	Georgia	940	773	491	85	90	20	799	15980	375615	23.5	591345
Cotton	Louisiana	300	134	79	99	25	20	297	5940	19553	3.3	33165
Cotton	Mississippi	365	331	200	97	50	20	354	7081	97000	13.7	160535
Cotton	Missouri	306	322	172	83	20	20	254	5080	28552	5.6	53452
Cotton	New Mexico	40	36	23	50	20	20	20	400	2300	5.8	3600
Cotton	North Carolina	430	370	147	79	40	22	340	7473	46452	6.2	116920
Cotton	Oklahoma	170	125	54	50	30	20	85	1700	8100	4.8	18750
Cotton	South Carolina	135	120	77	92	25	25	124	3105	17710	5.7	27600
Cotton	Tennessee	285	257	155	94	17	20	268	5358	24769	4.6	41069
Cotton	Texas	5015	2220	1162	43	20	13	2156	28034	99932	3.6	190920
Cotton	Virginia	61	54	21	79	40	20	48	964	6636	6.9	17064
Cranberries	Massachusetts	13	217	129	95	90	60	12	741	110295	148.8	185535
Cranberries	New Jersey	3	51	25	95	90	33	3	94	21375	227.3	43605
Cranberries	Oregon	3	40	37	75	40	40	2	90	11100	123.3	12000
Cranberries	Washington	2	7	5	75	40	40	2	60	1500	25.0	2100
Cranberries	Wisconsin	18	410	248	75	40	40	14	540	74400	137.8	123000
Cucumbers	Florida	23	577	125	97	75	219	22	4886	90938	18.6	419768

Cucumbers	Georgia	11	204	67	90	50	38	10	376	30150	80.1	91800
Cucumbers	Indiana	2	14	3	63	20	12	1	15	378	25.0	1764
Cucumbers	Maryland	4	22	4	63	20	12	3	30	504	16.7	2772
Cucumbers	Michigan	35	454	56	82	10	12	29	344	4592	13.3	37228
Cucumbers	New Jersey	3	54	13	97	20	12	3	35	2522	72.2	10476
Cucumbers	New York	4	47	16	88	10	12	4	42	1408	33.3	4136
Cucumbers	North Carolina	18	157	25	64	20	35	12	403	3200	7.9	20096
Cucumbers	Ohio	3	42	9	63	10	12	2	23	567	25.0	2646
Cucumbers	South Carolina	4	54	9	93	20	35	4	130	1674	12.9	10044
Cucumbers	Texas	9	84	21	39	20	8	4	28	1638	58.3	6552
Cucumbers	Virginia	1	4	1	63	20	12	1	8	126	16.7	504
Cucumbers	Wisconsin	7	78	8	24	10	8	2	13	192	14.3	1872
Dates	California	5	35	26	95	90	490	5	2328	22230	9.6	29925
Eggplant	New Jersey	1	20	5	90	27	55	1	50	1215	24.5	4860
Grapes	California	789	13316	2912	60	58	87	473	41186	1013376	24.6	4633968
Grapes	Michigan	14	148	27	85	50	60	12	714	11475	16.1	62900
Grapes	New York	37	344	58	85	50	60	31	1887	24650	13.1	146200
Grapes	Ohio	2	11	2	85	50	60	2	102	850	8.3	4675
Grapes	Oregon	14	81	81	50	50	120	7	840	20250	24.1	20250
Grapes	Pennsylvania	14	214	27	85	50	60	12	714	11475	16.1	90950
Grapes	Washington	58	700	201	50	50	120	29	3480	50250	14.4	175000
Green Beans	Florida	38	294	172	88	50	123	33	4113	75680	18.4	129360
Green Beans	Georgia	19	93	30	71	50	30	13	405	10650	26.3	33015
Green Beans	Illinois	13	88	8	93	85	24	12	290	6324	21.8	69564
Green Beans	Indiana	5	28	3	93	85	24	5	112	2372	21.3	22134
Green Beans	Maryland	2	12	5	97	50	24	2	47	2425	52.1	5820
Green Beans	Michigan	18	121	15	99	85	24	18	428	12623	29.5	101822
Green Beans	New Jersey	3	9	4	85	50	60	3	153	1700	11.1	3825
Green Beans	New York	28	202	61	85	50	24	24	571	25925	45.4	85850
Green Beans	North Carolina	6	25	7	95	50	14	6	80	3325	41.7	11875
Green Beans	Oregon	19	224	26	88	50	24	17	401	11440	28.5	98560
Green Beans	Pennsylvania	11	74	10	97	50	24	11	256	4850	18.9	35890
Green Beans	South Carolina	1	4	2	95	50	24	1	23	950	41.7	1900
Green Beans	Tennessee	9	37	12	99	50	24	9	214	5940	27.8	18315
Green Beans	Virginia	5	16	6	95	50	24	5	114	2850	25.0	7600
Green Beans	Wisconsin	82	652	62	83	85	24	68	1633	43741	26.8	459986
Green Peas	Minnesota	75	248	62	20	50	15	15	225	6200	27.6	24800
Green Peas	New York	19	76	13	20	50	15	4	57	1300	22.8	7600
Green Peas	Oregon	19	66	9	87	50	15	17	248	3915	15.8	28710
Green Peas	Washington	42	206	31	87	50	15	37	548	13485	24.6	89610
Green Peas	Wisconsin	41	154	20	20	50	15	8	123	2000	16.3	15400
Hazelnuts	Oregon	28	64	52	90	50	34	25	857	23400	27.3	28800
Hops	Idaho	4	7	29	100	100	200	4	800	29000	36.3	7000
Hops	Oregon	6	10	38	100	100	200	6	1200	38000	31.7	10000
Hops	Washington	31	63	253	100	100	200	31	6200	253000	40.8	63000

Lettuce	Arizona	59	1901	374	99	50	175	58	10222	185130	18.1	940995
Lettuce	California	227	7159	1605	99	50	175	225	39328	794475	20.2	3543705
Mint	Idaho	15	2	25	90	60	40	14	540	13500	25.0	1080
Mint	Indiana	8	1	7	90	60	40	7	288	3780	13.1	540
Mint	Michigan	2	1	2	90	60	40	2	72	1080	15.0	540
Mint	Oregon	21	2	25	90	60	40	19	756	13500	17.9	1080
Mint	Washington	29	4	56	90	60	40	26	1044	30240	29.0	2160
Mint	Wisconsin	5	1	4	90	60	40	5	180	2160	12.0	540
Nectarines	California	31	575	105	80	80	222	25	5506	67200	12.2	368000
Olives	California	30	134	51	100	90	73	30	2190	45900	21.0	120600
Onions	Arizona	1	66	7	86	10	75	1	65	602	9.3	5676
Onions	California	47	2025	176	74	10	75	35	2609	13024	5.0	149850
Onions	Colorado	8	270	40	74	12	45	6	266	3552	13.3	23976
Onions	Georgia	12	368	108	77	12	45	9	416	9979	24.0	34003
Onions	Idaho	9	619	47	74	12	45	7	300	4174	13.9	54967
Onions	Michigan	4	101	13	95	40	70	4	266	4940	18.6	38380
Onions	New Mexico	7	330	47	86	10	75	6	452	4042	9.0	28380
Onions	New York	11	414	57	99	40	70	11	762	22572	29.6	163944
Onions	Oregon	22	1333	98	99	40	87	22	1895	38808	20.5	527868
Onions	Texas	12	268	81	90	40	45	11	486	29160	60.0	96480
Onions	Utah	2	78	4	74	12	45	1	67	355	5.3	6926
Onions	Washington	22	1268	140	92	40	87	20	1761	51520	29.3	466624
Onions	Wisconsin	2	37	6	96	40	70	2	134	2304	17.1	14208
Oranges	Arizona	4	28	2	90	30	101	4	364	540	1.5	7560
Oranges	California	180	4837	625	90	80	165	162	26730	450000	16.8	3482640
Oranges	Florida	464	15318	1509	98	80	150	455	68208	1183056	17.3	12009312
Oranges	Texas	9	147	24	90	60	234	8	1895	12960	6.8	79380
Peaches	Alabama	2	14	6	100	100	151	2	302	6000	19.9	14000
Peaches	Arkansas	1	9	5	100	100	151	1	151	5000	33.1	9000
Peaches	California	56	1704	292	100	40	182	56	10192	116800	11.5	681600
Peaches	Georgia	10	56	19	100	100	151	10	1510	19000	12.6	56000
Peaches	Illinois	2	17	9	99	100	100	2	198	8910	45.0	16830
Peaches	Maryland	1	8	4	94	100	130	1	122	3760	30.8	7520
Peaches	Michigan	4	28	9	99	100	100	4	396	8910	22.5	27720
Peaches	Missouri	2	12	11	99	100	100	2	198	10890	55.0	11880
Peaches	New Jersey	6	68	24	98	100	130	6	764	23520	30.8	66640
Peaches	New York	2	11	5	99	100	100	2	198	4950	25.0	10890
Peaches	North Carolina	1	11	5	93	100	130	1	121	4650	38.5	10230
Peaches	Ohio	1	13	9	99	100	100	1	99	8910	90.0	12870
Peaches	Pennsylvania	4	42	21	94	100	100	4	376	19740	52.5	39480
Peaches	South Carolina	14	120	50	95	100	151	13	2008	47500	23.7	114000
Peaches	Virginia	1	6	3	98	100	130	1	127	2940	23.1	5880
Peaches	West Virginia	1	11	3	98	100	100	1	98	2940	30.0	10780
Peanuts	Alabama	195	637	128	90	70	15	176	2633	80640	30.6	401310
Peanuts	Florida	150	448	88	90	70	15	135	2025	55440	27.4	282240

Peanuts	Georgia	690	2329	475	95	70	15	656	9833	315875	32.1	1548785
Peanuts	New Mexico	8	26	5	15	40	12	1	14	300	20.8	1560
Peanuts	North Carolina	98	359	68	90	70	44	88	3881	42840	11.0	226170
Peanuts	Oklahoma	19	63	14	15	40	12	3	34	840	24.6	3780
Peanuts	South Carolina	71	265	60	90	70	15	64	959	37800	39.4	166950
Peanuts	Texas	257	860	186	25	40	12	64	771	18600	24.1	86000
Peanuts	Virginia	24	79	13	90	70	44	22	950	8190	8.6	49770
Pears	California	15	480	113	95	90	321	14	4574	96615	21.1	410400
Pears	Oregon	16	394	93	95	90	321	15	4879	79515	16.3	336870
Pears	Washington	24	725	171	95	90	321	23	7319	146205	20.0	619875
Pecans	Alabama	22	7	9	80	80	80	18	1408	5760	4.1	4480
Pecans	Arizona	19	16	24	63	80	29	12	347	12096	34.8	8064
Pecans	Arkansas	11	1	1	75	80	80	8	660	600	0.9	600
Pecans	Florida	9	2	3	80	80	80	7	576	1920	3.3	1280
Pecans	Georgia	128	67	101	80	80	80	102	8192	64640	7.9	42880
Pecans	Louisiana	13	5	5	75	80	80	10	780	3000	3.8	3000
Pecans	Mississippi	13	1	1	80	80	80	10	832	640	0.8	640
Pecans	New Mexico	38	45	65	63	80	29	24	694	32760	47.2	22680
Pecans	Oklahoma	86	8	7	57	80	29	49	1422	3192	2.2	3648
Pecans	Texas	180	30	42	57	80	29	103	2975	19152	6.4	13680
Pistachios	California	118	278	539	80	80	42	94	3965	344960	87.0	177920
Potatoes	Colorado	61	2279	328	57	25	68	35	2364	46740.0	20	324758
Potatoes	Delaware	2	42	6	99	50	147	2	291	2970	10.2	20790
Potatoes	Florida	28	795	131	99	75	150	28	4158	97268	23.4	590288
Potatoes	Idaho	305	11480	815	65	25	68	198	13481	132438	9.8	1865500
Potatoes	Illinois	6	209	16	99	50	150	6	891	7920	8.9	103455
Potatoes	Kansas	5	153	26	57	50	68	3	194	7410	38.2	43605
Potatoes	Maine	56	1477	136	91	50	150	51	7644	61880	8.1	672035
Potatoes	Maryland	2	75	7	99	50	150	2	297	3465	11.7	37125
Potatoes	Massachusetts	3	65	9	99	50	150	3	446	4455	10.0	32175
Potatoes	Michigan	43	1487	156	97	50	150	42	6257	75660	12.1	721195
Potatoes	Minnesota	50	2040	174	97	50	150	49	7275	84390	11.6	989400
Potatoes	Missouri	7	123	9	99	50	150	7	1040	4455	4.3	60885
Potatoes	Montana	11	346	47	57	25	68	6	426	6698	15.7	49305
Potatoes	Nebraska	20	834	80	57	50	68	11	775	22800	29.4	237690
Potatoes	New Jersey	2	46	5	99	50	150	2	297	2475	8.3	22770
Potatoes	New York	18	569	94	99	50	150	18	2673	46530	17.4	281655
Potatoes	North Carolina	14	252	26	99	50	150	14	2079	12870	6.2	124740
Potatoes	North Dakota	82	2268	161	76	50	68	62	4238	61180	14.4	861840
Potatoes	Ohio	2	68	12	99	50	150	2	297	5940	20.0	33660
Potatoes	Oregon	35	1867	211	83	25	180	29	5229	43783	8.4	387403
Potatoes	Pennsylvania	10	252	35	99	50	150	10	1485	17325	11.7	124740
Potatoes	Rhode Island	1	14	2	99	50	150	1	149	990	6.7	6930
Potatoes	Virginia	6	125	24	99	50	150	6	891	11880	13.3	61875
Potatoes	Washington	155	9300	739	97	25	150	150	22553	179208	7.9	2255250

Potatoes	Wisconsin	63	2573	293	97	50	150	61	9167	142105	15.5	1247905
Raspberries	California	3	58	179	80	80	172	2	413	114560	277.5	37120
Raspberries	Oregon	3	8	13	95	50	20	3	57	6175	108.3	3800
Raspberries	Washington	10	55	92	95	50	20	10	190	43700	230.0	26125
Rice	Arkansas	1401	9293	1459	40	30	10	560	5604	175080	31.2	1115160
Rice	California	519	4303	830	33	45	3	171	514	123255	239.9	638996
Rice	Louisiana	470	2704	443	40	30	10	188	1880	53160	28.3	324480
Rice	Mississippi	230	1569	259	40	30	10	92	920	31080	33.8	188280
Rice	Missouri	200	1317	204	40	30	10	80	800	24480	30.6	158040
Rice	Texas	175	1187	195	40	30	10	70	700	23400	33.4	142440
Sorghum	Colorado	150	252	16	13	40	5	20	98	832	8.5	13104
Sorghum	Kansas	2750	12012	691	20	40	5	550	2750	55280	20.1	960960
Sorghum	Missouri	80	435	30	11	40	5	9	44	1320	30.0	19140
Sorghum	Nebraska	210	1070	61	13	40	5	27	137	3172	23.2	55640
Sorghum	New Mexico	80	193	13	13	40	5	10	52	676	13.0	10036
Sorghum	Oklahoma	310	781	43	20	40	5	62	310	3440	11.1	62480
Sorghum	South Dakota	115	412	20	20	40	5	23	115	1600	13.9	32960
Sorghum	Texas	3050	8882	648	20	40	5	610	3050	51840	17.0	710560
Soybeans	Alabama	360	735	116	30	40	20	108	2160	13920	6.4	88200
Soybeans	Arkansas	3300	7410	1092	12	40	20	396	7920	52416	6.6	355680
Soybeans	Delaware	195	318	48	30	40	10	59	585	5760	9.8	38160
Soybeans	Florida	32	66	9	15	40	20	5	96	540	5.6	3960
Soybeans	Georgia	430	747	114	34	40	20	146	2924	15504	5.3	101592
Soybeans	Illinois	9200	25662	3999	9	40	6	828	4968	143964	29.0	923832
Soybeans	Indiana	5450	14661	2272	9	40	6	491	2943	81792	27.8	527796
Soybeans	Iowa	9750	26689	4292	9	40	6	878	5265	154512	29.3	960804
Soybeans	Kansas	3300	7215	1034	6	40	6	198	1188	24816	20.9	173160
Soybeans	Kentucky	1390	2815	415	2	40	6	28	167	3320	19.9	22520
Soybeans	Louisiana	1050	1881	291	44	40	20	462	9240	51216	5.5	331056
Soybeans	Maryland	495	873	127	30	40	10	149	1485	15240	10.3	104760
Soybeans	Michigan	1900	4196	643	42	40	6	798	4788	108024	22.6	704928
Soybeans	Minnesota	7050	15846	2535	30	40	6	2115	12690	304200	24.0	1901520
Soybeans	Mississippi	2000	4704	686	26	40	20	520	10400	71344	6.9	489216
Soybeans	Missouri	5200	11468	1720	8	40	6	416	2496	55040	22.1	366976
Soybeans	Nebraska	4900	13559	2124	5	40	6	245	1470	42480	28.9	271180
Soybeans	New Jersey	92	157	22	30	40	10	28	276	2640	9.6	18840
Soybeans	New York	230	624	86	18	40	10	41	414	6192	15.0	44928
Soybeans	North Carolina	1690	3307	476	11	40	20	186	3718	20944	5.6	145508
Soybeans	North Dakota	3800	6317	958	30	40	6	1140	6840	114960	16.8	758040
Soybeans	Ohio	4500	9677	1548	9	40	6	405	2430	55728	22.9	348372
Soybeans	Pennsylvania	435	1032	150	9	40	10	39	392	5400	13.8	37152
Soybeans	South Carolina	540	1018	147	16	40	20	86	1728	9408	5.4	65152
Soybeans	South Dakota	4100	8282	1249	13	40	6	533	3198	64948	20.3	430664
Soybeans	Tennessee	1490	2978	434	15	40	6	224	1341	26040	19.4	178680
Soybeans	Virginia	580	1094	158	23	40	10	133	1334	14536	10.9	100648

Soybeans	West Virginia	19	44	6	18	40	10	3	34	432	12.6	3168
Soybeans	Wisconsin	1610	3339	512	4	40	6	64	386	8192	21.2	53424
Spinach	Arkansas	1	15	2	86	20	94	1	81	344	4.3	2580
Spinach	California	33	498	139	80	20	31	26	818	22240	27.2	79680
Spinach	Oklahoma	1	15	2	86	20	94	1	81	344	4.3	2580
Spinach	Texas	6	95	11	86	20	94	5	485	1892	3.9	16340
Strawberries	California	38	2267	1545	100	60	580	38	22040	927000	42.1	1360200
Strawberries	Florida	7	179	249	100	25	559	7	3913	62250	15.9	44750
Strawberries	Michigan	1	5	6	100	80	72	1	72	4800	66.7	4000
Strawberries	New York	1	4	7	75	10	72	1	54	525	9.7	300
Strawberries	North Carolina	2	21	21	70	20	660	1	924	2940	3.2	2940
Strawberries	Ohio	1	4	7	95	35	72	1	68	2328	34.0	1330
Strawberries	Oregon	2	24	17	100	20	72	2	144	3400	23.6	4800
Strawberries	Pennsylvania	1	7	15	98	50	72	1	71	7350	104.2	3430
Strawberries	Washington	2	14	10	90	65	72	2	130	5850	45.1	8190
Strawberries	Wisconsin	1	5	7	95	11	72	1	68	732	10.7	523
Sugarbeets	Colorado	34	1516	27	30	10	25	10	255	810	3.2	45480
Sugarbeets	Idaho	131	7238	210	30	10	25	39	983	6300	6.4	217140
Sugarbeets	Minnesota	440	19710	517	80	40	25	352	8800	165440	18.8	6307200
Sugarbeets	Montana	32	1646	45	30	10	25	10	240	1350	5.6	49380
Sugarbeets	Nebraska	45	1686	42	30	10	25	14	338	1260	3.7	50580
Sugarbeets	North Dakota	208	10204	264	80	40	25	166	4160	84480	20.3	3265280
Sugarbeets	Wyoming	30	1328	26	30	10	25	9	225	780	3.5	39840
Sugarcane	Louisiana	405	23490	354	75	30	24	304	7290	79650	10.9	5285250
Sunflowers	Minnesota	40	51	16	100	60	22	40	880	9600	10.9	30600
Sunflowers	North Dakota	155	182	56	100	60	22	155	3410	33600	9.9	109200
Sunflowers	South Dakota	50	79	20	100	60	22	50	1100	12000	10.9	47400
Sweet Corn	Alabama	2	4	1	98	100	150	2	294	980	3.3	3920
Sweet Corn	California	25	423	100	89	50	150	22	3338	44500	13.3	188235
Sweet Corn	Colorado	7	124	19	98	25	25	7	172	4655	27.1	30380
Sweet Corn	Connecticut	4	33	12	89	25	25	4	89	2670	30.0	7343
Sweet Corn	Delaware	9	85	12	89	50	25	8	200	5340	26.7	37825
Sweet Corn	Florida	45	664	157	99	100	150	45	6683	155430	23.3	657360
Sweet Corn	Georgia	25	391	82	98	100	150	25	3675	80360	21.9	383180
Sweet Corn	Illinois	7	69	15	69	50	50	5	242	5175	21.4	23805
Sweet Corn	Indiana	6	38	12	69	50	50	4	207	4140	20.0	13110
Sweet Corn	Maine	2	11	5	69	25	25	1	35	863	25.0	1898
Sweet Corn	Maryland	11	133	13	89	50	50	10	490	5785	11.8	59185
Sweet Corn	Massachusetts	5	42	18	89	50	25	4	111	8010	72.0	18690
Sweet Corn	Michigan	9	72	17	82	30	51	7	376	4182	11.1	17712
Sweet Corn	Minnesota	128	1754	105	83	15	25	106	2656	13073	4.9	218373
Sweet Corn	New Hampshire	2	13	8	69	15	25	1	35	828	24.0	1346
Sweet Corn	New Jersey	7	53	16	81	50	25	6	142	6480	45.7	21465
Sweet Corn	New York	24	516	83	89	30	25	21	534	22161	41.5	137772
Sweet Corn	North Carolina	7	65	12	89	50	50	6	312	5340	17.1	28925

Sweet Corn	Ohio	16	112	36	85	50	50	14	680	15300	22.5	47600
Sweet Corn	Oregon	23	408	34	79	25	25	18	454	6715	14.8	80580
Sweet Corn	Pennsylvania	16	124	44	73	50	25	12	292	16060	55.0	45260
Sweet Corn	Rhode Island	1	7	3	69	25	25	1	17	518	30.0	1208
Sweet Corn	Texas	3	16	4	69	25	10	2	21	690	33.3	2760
Sweet Corn	Vermont	1	5	3	69	25	25	1	17	518	30.0	863
Sweet Corn	Virginia	3	12	4	89	50	25	3	67	1780	26.7	5340
Sweet Corn	Washington	78	1462	141	68	13	15	53	796	12464	15.7	129241
Sweet Corn	Wisconsin	97	1356	96	55	13	25	53	1334	6864	5.1	96954
Sweet Peppers	California	23	855	312	85	45	230	20	4497	119340	26.5	327038
Sweet Peppers	Florida	19	526	267	100	80	522	19	9918	213600	21.5	420800
Sweet Peppers	Georgia	4	61	21	100	80	186	4	744	16800	22.6	48800
Sweet Peppers	Michigan	2	40	12	96	45	52	2	100	5184	51.9	17280
Sweet Peppers	New Jersey	3	112	33	90	45	76	3	205	13365	65.1	45360
Sweet Peppers	North Carolina	3	34	10	99	45	76	3	226	4455	19.7	15147
Sweet Peppers	Ohio	2	38	17	87	45	76	2	132	6656	50.3	14877
Sweet Peppers	Texas	1	2	1	97	45	76	1	74	437	5.9	873
Sweet Potatoes	Alabama	3	44	5	90	50	85	3	230	2250	9.8	19800
Sweet Potatoes	Louisiana	15	110	20	90	50	188	14	2538	9000	3.5	49500
Sweet Potatoes	Mississippi	20	335	69	90	50	85	18	1530	31050	20.3	150750
Sweet Potatoes	North Carolina	47	874	159	90	50	85	42	3596	71550	19.9	393300
Sweet Potatoes	South Carolina	1	4	1	90	50	85	1	77	450	5.9	1800
Sweet Potatoes	Texas	2	21	4	90	50	85	2	153	1800	11.8	9450
Tomatoes	Alabama	1	48	12	100	95	80	1	80	11400	142.5	45600
Tomatoes	Arkansas	1	28	14	100	95	80	1	80	13300	166.3	26600
Tomatoes	California	319	24809	1284	90	60	45	287	12920	693360	53.7	13396860
Tomatoes	Florida	32	1045	622	100	70	547	32	17504	435400	24.9	731500
Tomatoes	Georgia	4	84	27	100	100	250	4	1000	27000	27.0	84000
Tomatoes	Indiana	10	512	39	99	40	80	10	792	15444	19.5	202752
Tomatoes	Maryland	1	26	13	100	30	80	1	80	3900	48.8	7800
Tomatoes	Massachusetts	1	6	6	100	15	80	1	80	900	11.3	900
Tomatoes	Michigan	5	259	35	60	30	80	3	240	6300	26.3	46620
Tomatoes	New Jersey	3	62	27	100	45	80	3	240	12150	50.6	27900
Tomatoes	New York	3	51	43	100	15	80	3	240	6450	26.9	7650
Tomatoes	North Carolina	4	109	34	100	75	250	4	1000	25500	25.5	81750
Tomatoes	Ohio	11	377	79	60	20	80	7	528	9480	18.0	45240
Tomatoes	Pennsylvania	2	35	20	100	20	80	2	160	4000	25.0	7000
Tomatoes	South Carolina	3	49	32	100	75	250	3	750	24000	32.0	36750
Tomatoes	Tennessee	4	112	38	100	35	80	4	320	13300	41.6	39200
Tomatoes	Texas	1	13	8	85	50	80	1	68	3400	50.0	5525
Tomatoes	Virginia	5	132	51	100	50	230	5	1150	25500	22.2	66000
Wheat	Alabama	240	852	85	8	40	5	19	96	2720	28.3	27264
Wheat	Arizona	163	945	130	10	40	5	16	82	5200	63.8	37800
Wheat	Arkansas	1070	3352	327	10	40	5	107	535	13080	24.4	134080
Wheat	California	820	3017	350	5	40	5	41	205	7000	34.1	60340

Wheat	Colorado	2190	3482	389	11	40	5	241	1205	17116	14.2	153208
Wheat	Delaware	80	365	36	5	40	5	4	20	720	36.0	7300
Wheat	Georgia	480	1344	134	10	40	5	48	240	5360	22.3	53760
Wheat	Idaho	1400	5890	646	4	40	5	56	280	10336	36.9	94240
Wheat	Illinois	1200	4416	401	3	40	5	36	180	4812	26.7	52992
Wheat	Indiana	580	2318	230	3	40	5	17	87	2760	31.7	27816
Wheat	Iowa	40	101	10	3	40	5	1	6	120	20.0	1212
Wheat	Kansas	9600	21360	2545	7	40	5	672	3360	71260	21.2	598080
Wheat	Kentucky	580	1960	186	8	40	5	46	232	5952	25.7	62720
Wheat	Louisiana	400	1317	121	8	40	5	32	160	3872	24.2	42144
Wheat	Maryland	255	788	85	5	40	5	13	64	1700	26.7	15760
Wheat	Michigan	730	2939	277	11	40	5	80	402	12188	30.4	129316
Wheat	Minnesota	1925	6266	714	10	40	5	193	963	28560	29.7	250640
Wheat	Mississippi	520	1804	167	8	40	5	42	208	5344	25.7	57728
Wheat	Missouri	1250	3341	309	8	40	5	100	500	9888	19.8	106912
Wheat	Montana	5740	9884	1091	5	40	5	287	1435	21820	15.2	197680
Wheat	Nebraska	1750	4409	492	5	40	5	88	438	9840	22.5	88180
Wheat	Nevada	21	66	8	3	40	5	1	3	96	30.5	792
Wheat	New Jersey	35	121	13	5	40	5	2	9	260	29.7	2420
Wheat	New Mexico	430	252	28	10	40	5	43	215	1120	5.2	10080
Wheat	New York	130	461	50	5	40	5	7	33	1000	30.8	9220
Wheat	North Carolina	820	2592	250	13	40	5	107	533	13000	24.4	134784
Wheat	North Dakota	9230	18672	2298	5	40	5	462	2308	45960	19.9	373440
Wheat	Ohio	1120	4447	430	5	40	5	56	280	8600	30.7	88940
Wheat	Oklahoma	5600	9990	1082	15	40	5	840	4200	64920	15.5	599400
Wheat	Oregon	960	3156	340	7	40	5	67	336	9520	28.3	88368
Wheat	Pennsylvania	195	710	72	5	40	5	10	49	1440	29.5	14200
Wheat	South Carolina	220	664	66	13	40	5	29	143	3432	24.0	34528
Wheat	South Dakota	3661	10352	1175	5	40	5	183	915	23500	25.7	207040
Wheat	Tennessee	620	1966	198	8	40	5	50	248	6336	25.5	62912
Wheat	Texas	5800	5940	737	7	40	5	406	2030	20636	10.2	166320
Wheat	Utah	150	345	42	6	40	5	9	45	1008	22.4	8280
Wheat	Virginia	310	1193	121	5	40	5	16	78	2420	31.2	23860
Wheat	Washington	2260	7052	754	4	40	5	90	452	12064	26.7	112832
Wheat	West Virginia	11	29	3	2	40	5	0	1	24	21.8	232
Wheat	Wisconsin	373	1381	133	10	40	5	37	187	5320	28.5	55240
Wheat	Wyoming	163	257	31	10	40	5	16	82	1240	15.2	10280
Sources (See Case Studies for Specific Citations):												
Acres: USDA, NASS (2008)												
Volume: USDA, NASS (2008)												
Value: USDA, NASS (2008)												
% Treated: USDA, NASS, CALDPR, Commodity Groups												
% Loss: USDA, AFBF, Commodity Groups												
Insecticide Cost: CES Crop Production Budgets												

