

Summary of Insect Diagnostic Services From January to June 1999
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The Insect Diagnostic Laboratory (Bowling) processed 302 samples from 73 Kansas counties during the first half of 1999. Dr. Don Mock processed an additional 64 samples during this same period. Submissions by regions included 22 from southeast, 134 from the northeast, 66 from northwest, 114 from south central, and 25 from the southwest Kansas.

Samples processed by Bowling dealt with household, landscape, and field crop insects. Dr. Mock handles the majority of medical and veterinary related submissions. The break down (categorically) of total submissions identified by Bowling or Mock from January 1 to June 30 are as follows: household – 135 samples (37%), landscape – 130 samples (36%), medical – 57 samples (16%), field crop – 21 samples (5%), veterinary – 15 (4%), others – 8 (2%).

Table 1: Insect samples submitted to the Insect Diagnostic Laboratory from January 1 to June 30, 1999.

Order	Family	Number*	Scientific Name	Common Name
Collembola	Entomobryidae	6		Springtails
Ephemeroptera	Ephemeridae	1	<i>Hexagenia sp.</i>	Mayfly
Odonata		3		Dragonflies
Mantodea	Mantidae	2		Praying Mantis
Blattodea	Blattidae	3	<i>Blatta orientalis</i>	Oriental Cockroach
		1	<i>Parcoblatta sp.</i>	Woods Cockroach
Dermaptera		1	<i>Doru lineare</i>	Earwig
Psocoptera		1		Booklice
Isoptera	Rhinotermitidae	11	<i>Reticuletermes sp.</i>	Eastern subterranean termite
	Kalotermitidae	1		Drywood Termite
Thysanoptera		1		Thrips
Hemiptera	Pentatomidae	4		Stink Bugs
	Reduviidae	5	<i>Arilus crisatus</i>	Wheel Bug
	Thyreocoridae	1		Negro Bugs
	Cydnidae	1		Burrowing Bugs
	Miridae	1	<i>Lygus lineolaris</i>	Tarnished Plant Bug
	Miridae	2		Plant Bug
	Rhopalidae	2	<i>Leptocoris trivittatus</i>	Eastern Boxelder Bug
	Rhopalidae	4		Scentless Plant Bugs
	Tingidae	3		Lace Bugs
Homoptera	Cicadellidae	4		Leafhoppers
	Aphididae	8		Aphids
	Aphididae	1	<i>Myzus persicae</i>	Peach Potato Aphid

	Aphididae	1	<i>Coloradoa rufomaculata</i>	Chrysanthemum Aphid
	Aphididae	1	<i>Hyadaphis tataricae</i>	Honeysuckle Aphid
	Aphididae	4	<i>Eriosoma lanigerum</i>	Woolly Apple Aphid
	Aphididae	1	<i>Rhopalosiphum padi</i>	Bird Cherry Oat Aphid
	Aphididae	1	<i>Aphis spiraecola</i>	Spirea Aphid
	Aphididae	1	<i>Tinocallis ulmifolii</i>	Elm Aphid
	Aphididae	1	<i>Neartaphis bakeri</i>	Short-beaked Clover Aphid
	Diaspididae	4		Armored Scale
	Diaspididae	2	<i>Chionaspis pinifoliae</i>	Pine Needle Scale
	Diaspididae	2	<i>Unaspis euonymi</i>	Euonymus Scale
	Eriococcidae	1	<i>Gossyparia spuria</i>	European Elm Scale
	Membracidae	1		Treehoppers
	Psyllidae	3	<i>Pachypsylla celtidismamma</i>	Hackberry Nipple Gall
	Cicadidae	2		Cicadas
	Phylloxeridae	3		Phylloxerans
Neuroptera	Chrysopidae	3		Green Lacewings
	Corydalidae	2		Dobsonflies
Coleoptera	Scarabaeidae	1		Scarab Beetle
	Subfamily Melolonthinae	1		May Beetle
	Scarabaeidae	1	<i>Anomala sp.</i>	
	Scarabaeidae	1	<i>Cotinis nitida</i>	Green June Beetle
	Carabidae	1		Ground Beetle
	Dermestidae	6		Dermestids
	Dermestidae	1	<i>Crioceris asparagi</i>	Asparagus Beetle
	Cerambycidae	3	<i>Neoclytus acuminatus</i>	Red Headed Ash Borer
	Cerambycidae	2	<i>Neoclytus caprea</i>	Banded Ash Borer
	Ptinidae	3		Spider Beetles
	Elateridae	2		Click Beetles
	Chrysomelidae	1		Leaf Beetles
	Chrysomelidae	3	<i>Pyrrhalta luteola</i>	Elm Leaf Beetle
	Chrysomelidae	1	<i>Calligrapha scalaris</i>	Elm Calligrapha
	Chrysomelidae	1	<i>Harrisina sp.</i>	Grape Leaf Skeletonizer
	Chrysomelidae	1	<i>Cerotoma trifurcata</i>	Bean Leaf Beetle

	Chrysomelidae	1	<i>Diabrotica undecimpunctata howardi</i>	Southern Corn Rootworm
	Cantharidae	1		Soldier Beetles
	Cucujidae	1		Flat Bark Beetles
	Scolytidae	4		Bark Beetles
	Curculionidae	2		Snout Weevils
	Curculionidae	3	<i>Sitophilis oryzae</i>	Rice Weevil
	Curculionidae	1	<i>Sitophilis granarius</i>	Granary Weevil
	Lyctidae	2		Powder Post Beetles
	Anobiidae	2	<i>Stegobium paniceum</i>	Drugstore Beetle
	Buprestidae	1		Metallic Wood Boring Beetles
	Staphylinidae	2		Rove Beetles
	Tenebrionidae	2		Darkling Beetles
	Tenebrionidae	2	<i>Tribolium castaneum</i>	Red Flour Beetle
	Tenebrionidae	1	<i>Alphitobius diaperinus</i>	Lesser Mealworm
	Lucanidae	1		Stag Beetles
Lepidoptera		5		Neonates
	Saturnidae	1	<i>Hyalophora cecropia</i>	Cecropia Moth
	Cossidae	1		Carpenterworm
	Gelechiidae	3	<i>Dichomeris marginella</i>	Juniper Webworm
	Tortricidae	5	<i>Rhyacionia sp.</i>	Pine Tip Moth
	Psychidae	1		Bagworms
	Tineidae	1		Clothes Moth
	Nymphalidae	2	<i>Asterorcampa celtis</i>	Hackberry Butterfly
	Pyralidae	10	<i>Plodia interpunctella</i>	Indian Meal Moth
	Noctuidae	7	<i>Euoxa auxiliaris</i>	Army Cutworm
	Noctuidae	1		Noctuid Moths
	Noctuidae	1	<i>Papaipema nebris</i>	Common Stalk Borer
	Pyralidae	1	<i>Corcyra cephalonica</i>	Rice Moth
	Crambidae	2	<i>Achyra rantalis</i>	Garden Webworm
	Crambidae	2	<i>Ostrinia nubilalis</i>	European Corn Borer
Diptera	Otitidae	1		Picture Winged Flies
	Sarcophagidae	1		Flesh Flies
	Cecidomyiidae	2		Gall Gnats

	Chironomidae	1		Midges
	Calliphoridae	1		Blow Flies
	Psychodidae	1		Drain Flies
	Sciaridae	1		Dark-Winged Fungus Gnats
	Asteiidae	1		Asteiid Flies
	Anthomyiidae	1		Anthomyiid Flies
	Phoridae	1		Humpbacked Flies
	Bibionidae	2		March Flies
	Culicidae	1		Mosquitoes
Hymenoptera	Subfamily Xylocopinae	1		Carpenter Bee
	Tenthredinidae	7		Common Sawflies
	Formicidae	5	<i>Formica sp.</i>	
	Formicidae	10	<i>Camponotus sp.</i>	Carpenter Ants
	Formicidae	1	<i>Acanthomyops sp.</i>	
	Formicidae	2	<i>Neivamyrmex sp.</i>	
	Formicidae	2	<i>Crematogaster sp.</i>	
	Formicidae	2	<i>Tapinoma sp.</i>	
	Halictidae	1		Halictid Bees
	Andrenidae	1		Andrenid Bees
	Cynipidae	1		Cynipids
	Cynipidae	1	<i>Diplolepis rosae</i>	Spiny Rose Gall

* Total number of samples received within an insect family.

Table 2: Non-insect submittals to the Insect Diagnostic Laboratory from January 1 to June 30, 1999.

Order	Family	Number*	Scientific Name	Common Name
Araneae	Loxoscelidae	2	<i>Loxosceles sp.</i>	Brown Spiders
	Thomisidae	1		Crab Spider
	Clubionidae	3		
	Theridiidae	1		Comb-Footed Spiders
	Lycosidae	6		Wolf Spiders
Opiliones		1		Daddy-Long-Legs
Pseudoscorpionida		1		Pseudoscorpions
Acarina		14		Mites
Acarina	Tetranychidae	4	<i>Bryobia praetiosa</i>	Clover Mite
Acarina	Eriophyidae	1		Eriophyid Mites
Acarina	Trombiculidae	1		Chigger
Acarina	Ixodidae	1	<i>Dermacentor variabilis</i>	American Dog Tick
Acarina	Ixodidae	3	<i>Amblyomma americanum</i>	Lone Star Tick
Scutigermorpha	Scutiggeridae	1		House Centipede
Scolopendromorpha		2		Centipede
Various Orders		3		Millipedes
Mouse Nest		2		
Frog Eggs		1		
Not Arthropod Related		8		

* Total number of samples received within a family.

Tick activity began a bit late this year, but this has been a good year for tick populations, especially lone star ticks, Gulf Coast ticks, and winter ticks (*Amblyomma americanum*, *Amblyomma maculatum*, and *Dermacentor albipictus*).

Table 3. Tick Samples Identified in Extension Work by Mock, Jan. 1 through June 30, 1999 (on Diagnostic Lab Forms).

Area	Answer Date	County	Record Number	Identification*	Medical	Veterinary
NW	19 Jan.	Rawlins	RA-11364	2 n – <i>Dermacentor albipictus</i>		Horses
NE	1 April	Shawnee	SN-11410	1 m – <i>Amblyomma americanum</i> ¹	X	
NE	9 April	Riley	RL-11421	1 n – <i>Amblyomma americanum</i>	X	
NW	15 April	Smith	SM-11434	1 m – <i>Dermacentor variabilis</i>	X	
NE	22 April	Shawnee	SN-11447	1 m – <i>Amblyomma americanum</i>	X	
NE	22 April	Shawnee	SN-11450	1 n – <i>Amblyomma americanum</i> ²	X	
NE	22 April	Nemaha	NM-11451	1 n – <i>Amblyomma americanum</i>	X	
NE	22 April	Wyandotte	WY-11452	1 f – <i>Ixodes scapularis</i>		Dog
SC	30 April	Sedgwick	SG-11468	1 m – <i>Dermacentor variabilis</i>	X	
NE	30 April	Riley	RL-11469	1 m – <i>Amblyomma americanum</i>	X	
NE	4 May	Pottawattomie	PT-11474	11 n – <i>Amblyomma americanum</i>	X	
SC	7 May	Sedgwick	SG-11481	1 f – <i>Dermacentor variabilis</i>	X	
NE	17 may	Shawnee	SN-11497	1 n – <i>Amblyomma americanum</i>	X	
SC	17 May	Reno	RN-11498	1 m – <i>Dermacentor variabilis</i>	X	
NE	24 may	Clay	CY-11515	1 f – <i>Amblyomma americanum</i> ³	X	
NE	28 may	Riley	RL-11529	1 n – <i>Amblyomma americanum</i>	X	
SC	1 June	Reno	RN-11531	1 n – <i>Amblyomma americanum</i> ⁴	X	
SE	3 June	Franklin	FR-11550	1 n – <i>Amblyomma americanum</i>	X	
NW	11 June	Phillips	PL-11589	2 f – <i>Dermacentor variabilis</i>		Dog
NW	11 June	Sherman	SH-11596	1 m – <i>Dermacentor variabilis</i>	X	
NE	15 June	Brown	BR-11599	1 n – <i>Dermacentor variabilis</i>		Cat
NE	17 June	Clay	CY-11616	1 n – <i>Amblyomma americanum</i>	X	
NW	21 June	Ellis	EL-11626	1 n – <i>Amblyomma americanum</i> ⁵	X	
NE	22 June	Riley	RL-11642	1 n – <i>Amblyomma americanum</i>	X	

* n = nymph; f = female; m = male

¹ Tick acquired from Missouri.

² Tick acquired in Atchison County.

³ Tick acquired in Geary County.

⁴ Tick acquired in Riley County.

⁵ Tick acquired in Dickinson County.

Table 4. Tick Samples Identified in Extension Work by Mock, Jan. 1 through June 30, 1999 (not on Diagnostic Lab Forms).

Area	Answer Date	County	Identification*	Medical	Veterinary
NE	14 January	Riley	1 f, 2 m – <i>Aponomma sp.</i>		Python
NE	2 March	Riley	1 m – <i>Amblyomma americanum</i>	X	
NE	25 March	Clay	10 f, 4 m – <i>Dermacentor albipictis</i>		Elk
NE	6 April	Riley	1 m – <i>Amblyomma americanum</i>	X	
SE	19 April	Crawford	62 f, 50 m – <i>Amblyomma americanum</i>		White-tailed Deer
SE	22 April	Franklin	1 f – <i>Ixodes scapularis</i>	X	
SC	23 April	Barber	8 f, 13 m – <i>Dermacentor variabilis</i>		Feral Pig
NE	27 April	Johnson	1 f – <i>Amblyomma americanum</i>	X	
NE	29 April	Wabaunsee	1 m – <i>Amblyomma americanum</i>	X	
SW	4 May	Ford	1 f, 1 m – <i>Rhipicephalus sanguineus</i>		Dog
SE	5 May	Osage/Frank.	2f, 1 m – <i>Amblyomma americanum</i> 1 m – <i>Dermacentor variabilis</i>		Canadian Lynx
NE	10 May	Riley	1 m – <i>Amblyomma americanum</i>	X	
NE	14 May	Riley	1 m – <i>Amblyomma americanum</i>	X	
NE	14 May	Riley	2 n – <i>Amblyomma americanum</i>	X	
MO	19 May	---	1 f – <i>Amblyomma americanum</i>	X	
NE	20 May	Riley	1 m – <i>Amblyomma americanum</i> 1 f – <i>Dermacentor variabilis</i>		Dog
NE	26 May	Shawnee	2 f – <i>Amblyomma americanum</i>	X	
SE	27 May	Osage	1 n – <i>Amblyomma americanum</i>	X	
SC	1 June	Marion	1 m – <i>Amblyomma americanum</i>	X	
NE	3 June	Shawnee	1 m – <i>Dermacentor variabilis</i>	X	
NE	3 June	Shawnee	3 m – <i>Amblyomma americanum</i>	X	
SC	4 June	Sedgwick	1 n – <i>Amblyomma americanum</i>	X	
SC	9 June	Cowley	7 f, 1 n – <i>Amblyomma americanum</i> 5 f, 6 m – <i>Amblyomma maculatum</i>		Cattle

NE	9 June	Geary	1 n – <i>Amblyomma americanum</i>	X	
NJ	21 June	---	1 n – <i>Ixodes scapularis</i>	X	
NJ	21 June	---	1 m – <i>Dermacentor variabilis</i>	X	
TN	21 June	---	1 m – <i>Amblyomma americanum</i>	X	

* n = nymph; f = female; m = male

Table 5. Non-tick Samples Identified by Mock, for Extension, Jan. 1 through June 30, 1999 (on Diagnostic Lab Forms).

Area	Answer Date	County	Record No.	Identification	Medical
MO	12 January	---	---	Cockroach leg from ear	X
SC	19 February	Reno	RN-11389	Scatophagidae	X
NE	25 March	Jefferson	JF-11402	Delusions	X
SC	28 April	Sedgwick	SG-11437	Delusions	X
NW	18 June	Osborne	OB-11622	Parasitic Mites	X
NE	21 June	Douglas	DG-11638	Cimicidae	X

Table 6. Non-tick Samples Identified by Mock, for Extension, Jan. 1 through June 30, 1999 (not on Diagnostic Lab Forms).

Area	Answer Date	County	Identification	Household	Medical	Veterinary
NE	29 January	Johnson	Indian Meal Moth	X		
SC	5 April	Sedgwick	Fungus Gnats		X	
SC	3 May	Dickinson	Trap Door Spider		X	
TN	4 May	---	Pubic Lice		X	
NE	20 May	Riley	Brown Recluse Spider		X	
NE	4 June	Riley	Brown Recluse Spider		X	
SW	18 June	Greeley	Pseudoscorpion			Dog