Oklahoma Leaf Beetles of the Subfamilies
Donaciinae, Criocerinae, Clytrinae,
Chlamisinae, Eumolpinae, and Chrysomelinae
(Chrysomelidae, Coleoptera)

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The leaf beetles form a conspicuous segment of the coleopterous fauna of Oklahoma. Because no taxonomic paper on the Chrysomelidae existed for the state, the present work was inaugurated. Of the 11 subfamilies found in Oklahoma, this paper covers only the Donaciinae, Criocerinae, Clytrinae, Chlamisinae, Eumolpinae, and Chrysomelinae.

The chrysomelids are a large family of small or medium-sized beetles. They are generally host-specific and sometimes cause extensive damage to field crops and horticultural plants. However, the Donaciinae, Clytrinae, and Chlamisinae are of little economic interest. The economically important species belong to the Criocerinae, Eumolpinae, and Chrysomelinae. The larvae and adults of these feed on the foliage of plants, except the larvae of Eumolpinae which are primarily root feeders.

Approximately 140 species of Chrysomelidae are known to occur in Oklahoma. This work includes 59 species, of which seven have been recorded by Hatch and Ortenburger (1930), and Hatch (1930). The remaining records have been obtained from collections in the Entomology Museum at Oklahoma State University, the Stovall Museum at the University of Oklahoma, and from literature (Blake, 1955; Blackwelder, 1939; Blackwelder and Blackwelder, 1948; Marx, 1957; and Leng, 1920). Also used were Blatchley (1910), Brown (1943, 1956), Clavareau (1913 a and b, 1914), Crotch (1873), Dillon and Dillon (1961), Horn (1892), Schaeffer (1933), and Wilcox (1954, 1957). Arnett's work (1960) has been of particular help in the identification of genera. Synonymy is not given in this paper since it can be found in the literature cited above.
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**KEY TO THE SUBFAMILIES OF CHRYSomELIDAE**

1. Head not inflexed, mouth anterior .................................................. 2
   Head inflexed, mouth turned caudad ........................................... 10

2. Abdominal sternites two to four narrowed medially; pygidium exposed .................................................. 3
   Abdominal sternites two to four not narrowed medially; pygidium not exposed ........................................... 6

3. Prosternum with lateral antennal grooves; body contractile .................................................. Chlamisinae
   Prosternum without antennal grooves; body not contractile ........................................... 4

4. Antennae serrate, dentate, or pectinate beyond third or fourth segment .................................................. Clytrinae
   Antennae filiform or, at most, clavate ........................................... Cryptocephalinae

5. Pronotum without lateral margin .................................................. 6
   Pronotum with lateral margin .................................................. 7

6. Antennal insertions nearly approximate; first visible sternite as long as all others combined .................................................. Donaciinae
   Antennal insertions separated by entire width of front; first visible abdominal sternite no longer than the second and third together .................................................. Criocerinae

7. Antennal insertions separated by entire front .................................................. 8
   Antennal insertions nearly approximate .................................................. 9

8. Third tarsal segment bilobed; procoxae round .................................................. Eumolpinae
   Third tarsal segment not distinctly bilobed, entire; procoxae transversely oval .................................................. Chrysomelinae

9. Metafemora slender, adapted for walking .................................................. Galerucinae
   Metafemora swollen, adapted for jumping .................................................. Alticinae

10. Head exposed; pronotum and elytra without broadly expanded margins .................................................. Hispinae
    Head concealed; pronotum and elytra with broadly expanded margins .................................................. Cassidinae

**SUBFAMILY DONACIINAE**

Characteristics: Oblong; head slightly narrowed behind the eyes, antennal insertions almost approximate and extending to middle of elytra; prothorax narrower than elytra, almost as wide as head; tarsal claws simple; abdomen with first visible sternite as long as the remaining four together. Represented by a single genus, *Donacia*.

**KEY TO THE SPECIES OF DONACIA**

1. Middle tibiae with apical, tooth-like projection on inner side near tibial spur .................................................. *Donacia piscatoria*
   Middle tibiae without apical tooth-like projection .................................................. 2

2. Pronotum distinctly alutaceous, opaque .................................................. *Donacia hypoleuca*
   Pronotum not alutaceous, shining .................................................. 3

3. Posterior femora reddish brown beneath, black area above .................................................. *Donacia cincticornis*
   Posterior femora black or metallic, reddish brown basally .................................................. 4
4. Posterior femora gradually enlarged from base, each with blunt tooth

--- Donacia aequalis

Posterior femora abruptly clavate from middle, each with sharp tooth

--- Donacia texana

Donacia piscatrix Lacordaire

Characteristics: Oblong; color variable, bronze, green or brownish yellow, shining; antennae reddish yellow with second segment about one-half length of third; pronotum quadrate, each side with two tubercles, anterior one most prominent, disk finely, sparsely, and shallowly punctate; elytral punctures coarse and in rows; length about 7.5 mm.

County records: McCurtain, Pushmataha.

Donacia hypoleuca Lacordaire

Characteristics: This species differs from the foregoing species in that the color varies from dark to light brownish yellow; pronotum alutaceous; posterior tibiae when viewed from behind are evenly and strongly bowed; length about 8.5 mm.

County records: Adair, Delaware, Le Flore, Payne.

Donacia cincticornis Newman

Characteristics: This species differs from the foregoing species in that the color is brownish yellow and strongly shining, often with greenish tinge, head and thorax darker; antennae with tips of segments almost black; hind femora swollen and armed with one to three teeth; disk of elytra with two feeble transverse impressions; length about 9.5 mm.

County records: Not recorded from Oklahoma but likely to occur here.

Donacia aequalis Say

Characteristics: This species differs from the foregoing species in that the second and third joints of the antennae are equal; length about 6.0 mm.

County records: Not recorded from Oklahoma but likely to occur here.

Donacia texana Crotch

Characteristics: This species differs from the foregoing species in that the posterior femora are abruptly clavate from the middle; length about 7.0 mm.

County record: McCurtain.

SUBFAMILY CRIOCERINAE

Characteristics: Oblong or elongate; antennae with eleven segments, inserted in front of eyes; prothorax much narrower than elytra and strongly constricted at middle; elytra with punctures in rows; first visible sternite no longer than second and third together. Represented by a single genus, Lema.

KEY TO THE SPECIES OF Lema

1. Ninth elytral striae interrupted at middle Lema sexpunctata
   Ninth elytral striae not interrupted at middle Lema sexpunctata 2
2. Metasternum black .................................. Lema nigrovittata
   Metasternum not black ................................ Lema trilineata

   Lema sexpunctata Olivier

   Characteristics: Elongate; reddish yellow; antennae black; pronotum	pale, nearly smooth with pleural areas of metathorax and legs (ex-
cept base of femora) black; each elytron with black spots on humerus,
middle, and near apex; underside usually pale (except metasternum);
length about 5.0 mm.

   County records: Alfalfa, Choctaw, Cleveland, McCurtain, Sequoyah.

   Lema nigrovittata Guerin

   Characteristics: This species differs from the foregoing species in
that black lateral pronotal spots are present; elytra with black sutural
and lateral vittae; venter black; length 5.5 mm.

   County record: Payne.

   Lema trilineata Olivier

   Characteristics: This species differs from the foregoing species in
that black spots on the pronotum are always on the disk; venter usually
pale; length about 6.0 mm.

   County records: Cherokee, Cleveland, Craig, McClain, Oklahoma,
Payne.

SUBFAMILY CLYTRINAE

   Characteristics: Shape variable, short subcylindrical; medium-sized;
antennae short, widely separated, serrate; thorax margined on both sides;
procoxae transverse, cavities closed behind; tarsal claws simple or toothed;
elytra lobed laterally.

KEY TO SPECIES OF CLYTRINAE

1. Elytra pale; sometimes reddish .......................................................... 2
   Elytra not pale or reddish ................................................................. 4

2. Pronotum pale ......................................................... Anomoea mutabilis
   Pronotum black ......................................................................

3. Sutural and lateral margins of elytra pale ............................... Anomoea hogeii
   Sutural and lateral margins of elytra black ................................. Anomoea laticlavia

4. Color uniform black ................................................. Eurycopa subnigra
   Color not uniform black .......................................................... 5

5. Elytra with humeral red spots only ..................................... 6
   Elytra with humeral and apical red spots ................................. Babia quadrigratata

6. Color shining blue or greenish black ...................................... Saxinis omogera
   Color not shining blue or greenish black ........................................ 7

7. Labrum pale at sides ..................................................... Coscinoptera axillaris
   Labrum black ................................................................. Megalostomis subfuscata

   Anomoea mutabilis Lacordaire

   Characteristics: Male and female often differ from each other in
form, coloration and markings of elytra. Head more or less distinctly
rugose in both sexes, either entirely red marked with black or entirely
black; antennae black, joints five to eleven serrate; pronotum entirely
black or black with apical and lateral margins pale; elytra reddish with large submedian fascia, sutural, apical and lateral margins behind the submedian fascia black; body venter black, pubescence moderately long, dense, and white; length about 7.0 mm.

County record: Kiowa.

*Anomoea hoglei* Jacoby

Characteristics: This species differs from the foregoing species in that the entire upper surface is pale; first four joints of antennae pale, remainder black.

County records: Alfalfa, Atoka, Cleveland, Cotton, Craig, Dewey, Latimer, Le Flore, Oklahoma, Payne, Sequoyah.

*Anomoea latelavla* Forester

Characteristics: This species differs from the foregoing species in that the elytra possess black fasciae or black sutural and lateral vittae.

County records: Alfalfa, Cleveland, Craig, Delaware, Le Flore, McClain, McCurtain, Oklahoma, Payne.

*Euryscopa subnigra* Schaeffer

Characteristics: Color black; head densely punctate, pubescent, labrum pale; thorax densely punctate, pubescent; legs densely pubescent; elytra shining, glabrous, punctate; body beneath densely pubescent, punctate; length about 6.0 mm.

County records: Bryan, Cimarron, Comanche, Garvin, Oklahoma.

*Babia quadriguttata* Olivier

Characteristics: Color black, shining; thorax a little narrower than elytra, sparsely punctate; each elytron with humeral and apical reddish-yellow spots; length about 3.0 mm.

County records: Dewey, Latimer, Muskogee, Oklahoma.

*Saxina omogera* Lacordaire

Characteristics: Color shining blue or greenish black; thorax as wide as elytra, finely punctate; elytra with a reddish-yellow spot on humerus; body beneath finely pubescent; length about 3.5 mm.

County records: Cleveland, Comanche, McClain, McCurtain, Oklahoma, Payne.

*Coscinoptera axillaris* Le Conte

Characteristics: Head punctate, labrum pale at sides; legs sparsely pubescent; elytra with distinct humeral red spot, and pubescent; body beneath densely punctate, pubescent; length about 4.0 mm.

County records: Cleveland, McCurtain, Pushmataha.

*Megalostomia subfasciata* (Le Conte)

Characteristics: Oblong, robust; color black; head usually densely punctate, pubescent, labrum black; pronotum moderately punctate, pubescent; elytra with basal third red, sparsely punctate, pubescent; body beneath densely pubescent; length about 4.0 mm.

County records: Not recorded from Oklahoma but likely to occur here.
SUBFAMILY CHLAMISINAE

Characteristics: Robust, ovate, cylindrical, with elevations or tubercles; head set into prothorax to the eyes; antennae widely separated, short, serrate, lying in grooves on sides of prothorax; prothorax sinuate at base, fitted closely to elytra; scutellum broad, truncate behind with a median tooth in front that fits into notch in base of thorax; pygidium exposed. Represented by a single species in Oklahoma.

*Exema pennsylvanica* Pierce

Characteristics: Oblong, robust; black; head and antennae marked with yellow; anterior portion of pronotum with yellow area, disk with a few small yellow maculae, pronotum transverse, sides strongly narrowed apically; legs yellow, femora and tibiae may be blackish; elytra with a few yellow maculae, coarsely, densely punctate, with about ten coarse tubercules scattered over disk; length about 2.5 mm.

County record: Payne.

SUBFAMILY EUMOLPINAE

Characteristics: Oblong, convex, seldom rounded or oval; color usually metallic or iridescent; head slightly deflexed, visible from above; eyes more or less emarginate; antennae usually long, filiform, widely separated at base; procoxae globose, separated by prosternum, procoxal cavities closed behind, tarsi broad, third segment bilobed; elytra rounded apically, entire.

**Key to Species of Eumolpinae**

1. Anterior margin of prothorax arcuate forming postocular lobe .......................... 2
   Anterior margin prothorax without lobe ........................................................................... 10

2. Body above pubescent or scaly .............................................................................. 3
   Body above glabrous ........................................................................................................ 5

3. Pronotal margin usually dentate; protibiae toothed on inner side ................................. 6
   Pronotal margin entire; protibiae simple ........................................................................... 1

4. Vestiture of long, hair-like scales .............................................................................. 6
   Vestiture of broad, rather short scales ............................................................................ 9

5. Ocular grooves very wide above eyes; color brown or dark metallic blue, green or bronze .................................................................................................................. 1
   Ocular grooves narrow above eyes; color yellow, orange, or black, without green, blue or bronze luster ........................................................................................................ 12

6. Pronotum deeply, coarsely punctate ........................................................................... 14
   Pronotum not deeply, coarsely punctate ........................................................................... 15

7. Elytra entirely black ..................................................................................................... 17
   Elytra not entirely black ................................................................................................... 18

8. Elytra usually yellowish brown with black spot at base, one at apical third, and small one on margin behind humerus .......................... *Paria fragariae*
   Elytra usually yellowish brown without spot on margin behind humerus, may be entirely black except for base and suture .......................... *Paria quadriguttata*

9. Elytral punctures in distinct regular rows .......................... *Typophorus viridicyaneus*
   Elytral punctures irregular or confused ............................................................................ *Chrysochus auratus*

10. Pronotum with distinct margins ................................................................................. 19
    Pronotum without distinct margins .................................................................................. 20
11. Color metallic green or bronze ......................................................... 12
   Color not metallic green or bronze ........................................... 16
12. Front femur with minute tooth .................................................. 18
   Front femur without minute tooth .......................................... 14
13. Clypeus emarginate ................................................................. Graphops curtipennis
   Clypeus not emarginate ........................................................... Graphops pubescens
14. Clypeus with rounded emargination ........................................ Graphops marcasitla
   Clypeus with emargination not rounded, usually angular .............. 15
15. Clypeus with deep angular emargination .................................. Graphops simplex
   Clypeus with wide-angle emargination ...................................... Graphops smaragdula
16. Pronotum transverse; profemora each with a small tooth; third antennal segment not longer than second .......... Xanthonia villosula
   Pronotum cylindrical; profemora unarm ed; third antennal segment longer than second .................................................. 17
17. Piceous or nearly black .............................................................. Fidia longipes
   Reddish to brown ................................................................. Fidia viticida
18. Head with distinct grooves above eyes ..................................... 19
   Head without distinct grooves above eyes ................................ 20
19. Elytra dull yellow, each with two oblong dark spots .................... 21
   Elytra dull yellow to black without spots ................................ Metachroma interrupta
20. Pronotal margin irregular or undulating .................................... 21
   Pronotal margin regular and entire ........................................ 24
21. Prosternum narrow and contracted between coxae .......................... 22
   Prosternum wide, nearly parallel-sided ................................... Rhabdopterus picipes
22. Color pale brown ....................................................................... Colaspis brunnea
   Color not pale brown ................................................................ 23
23. Color purplish black; thorax very closely, deeply and somewhat irregularly punctate ........................ Colaspis nigrocyanea
   Color metallic green, blue, or bronze; thorax with evenly arranged, not very deep or coarse punctures ......................... Colaspis favosa
24. Pronotum with basal marginal line ............................................ 25
   Pronotum without basal marginal line ....................................... Chrysodina globosa
25. Clypeus broad between insertions of antennae ............................. Nodonota tris tis
   Clypeus contracted between insertions of antennae ...................... Nodonota clypealis

Myochrous denticollis (Say)

Characteristics: Oblong, convex; color brown, bronze; pronotum wider than long with three blunt teeth on margin, protiblae strongly toothed below middle; elytra with rows of closely, deeply impressed punctures; vestiture of small scales white and brown intermixed; length about 4.5 mm.

County records: Cleveland, Coal, Comanche, Logan, McCurtain, Muskogee, Ottawa, Wagoner.

Glyptoscellis albida Le Conte

Characteristics: Oblong, oval; grayish black; eyes deeply emarginate opposite base of antennae; pronotum distinctly broader than long,
not narrowed at base; elytra moderately punctate with long hair-like white or brownish pubescence; length about 8.0 mm.

County records: Oklahoma, Pawnee, Washington.

_Glyptoscelis squamulata_ Crotch

Characteristics: This species differs from the foregoing species in that the pubescence is of broad white or brownish scales; length about 7.0 mm.

County records: Latimer, Oklahoma, Pawnee.

_Paria sexnotata_ (Say)

Characteristics: Oblong, short; yellowish red; head coarsely punctate, frontal suture not impressed; pronotum coarsely, deeply punctate; front and hind femur with distinct tooth, posterior tarsal claws with inner lobe short, one half length of outer lobe; elytra coarsely, deeply punctate, striate, each elytron with three black spots, two near center may be confluent or may be joined to basal spot; aedeagus with lateral apical lobes small with a distinct notch between lateral and median lobes; length about 1.5 mm.

County records: Cleveland, Comanche.

_Paria thoracica_ (Melsheimer)

Characteristics: This species differs from the foregoing species in that the color is entirely black; head and pronotum may be yellowish, punctation fine or absent; front femur without tooth, posterior claws with inner lobe long, three-quarters length of outer lobe; elytra moderately punctate, entirely black; aedeagus with lateral lobes large, nearly as long as median lobe, median lobe moderately broad; length about 3.5 mm.

County records: Cleveland, Comanche, McClain.

_Paria fragariae_ Wilcox

Characteristics: This species differs from the foregoing species in that the color is usually yellowish brown; front and hind femora each with small tooth, posterior claws with inner lobe short, one-half length of outer lobe; each elytron usually with black spot at base, one on the apical third and a small spot on margin behind humerus (may lack spots completely); aedeagus long, narrowed at apex, median lobe long, lateral lobes reduced; length about 3.0 mm.

County record: Cleveland.

_Paria quadriguttata_ Le Conte

Characteristics: This species differs from the foregoing species in that the elytral punctures are fine, close, striae not impressed, pattern of elytra quite variable, may be entirely black with base and suture yellow, may be yellowish brown with basal spot and two spots at apical third, spot on margin behind humerus lacking; aedeagus long, narrower at apex, median lobe broad, lateral apical lobes very much reduced; length about 4.0 mm.

County records: Oklahoma, Payne.

_Typhophorus viridicyaneus_ (Crotch)

Characteristics: Oblong, oval; bluish green; antennae red, second segment distinctly shorter than third; elytra punctate, striate; length about 7.0 mm.
County records: Adair, Cleveland, Craig, Delaware, Okmulgee, Washington.

*Chrysochus auratus* (Fabricius)

Characteristics: Oblong, convex; brilliant metallic green; head and pronotum with sparse, coarse, deep punctures intermingled with fine punctures; elytra finely, irregularly punctate; length about 9.5 mm.


*Graphops curtipennis* (Melsheimer)

Characteristics: Oblong, oval; usually black with metallic bronze luster or copper; eyes prominent, clypeus slightly emarginate; pronotum with punctures in transverse lines forming wrinkles, profemur with small inconspicuous tooth; pubescence usually in lines converging towards suture at apex; body with short inconspicuous white pubescence; length about 3.0 mm.

County record: Beckham.

*Graphops pubescens* (Melsheimer)

Characteristics: This species differs from the foregoing species in that the clypeus is not emarginate; pronotum lacks transverse wrinkles formed by punctures, lightly pubescent; elytra with punctuation not coarse, basal half of elytra with finer punctures in intervals, towards apex punctuation becomes faint; length about 4.0 mm.

County records: Cleveland, Pawnee.

*Graphops marcessuta* (Crotch)

Characteristics: This species differs from the foregoing species in that the emargination of clypeus is rounded; profemur without tooth; length about 3.0 mm.

County records: Not recorded from Oklahoma but likely to occur here.

*Graphops simplex* Le Conte

Characteristics: This species differs from the foregoing species in that the color is usually metallic green; clypeus has deep angular emargination.

County records: Not recorded from Oklahoma but likely to occur here.

*Graphops emaragdula* (Le Conte)

Characteristics: This species differs from the foregoing species in that the color above is metallic green to blue-green and bronzish or copperish beneath with the legs also bronzish; clypeus with round emargination; length about 4.0 mm.

County record: Delaware.

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1 The tooth is located antero-ventrally toward the apex of the femur and is very easily overlooked because of its location and inconspicuousness. We have found that observation of the outline of the femur against a light background helps to make its detection easier.
Characteristics: Oblong, pale yellow or darker; head usually darker than elytra, antennae dull yellow; pronotum finely and densely punctate on disk, usually darker than elytra, legs dull yellow; elytra with close-set rows of fine punctures, erect hairs in single row on each elytral interval; body covered with reddish-yellow pubescence; length about 3.0 mm.

County records: Adair, McCurtain.

_Fidia longipes_ (Melshemer)

Characteristics: Oblong; piceous or nearly black; base of antennae pale; thorax narrower than elytra and longer than wide; tibiae and base of femora pale; elytra densely punctured; body densely clothed with gray pubescence; length about 3.5 mm.

County record: Adair.

_Fidia viticida_ Walsh

Characteristics: This species differs from the foregoing species in that the color is dull reddish brown and the pubescence is grayish yellow.

County records: Caddo, Choctaw, Delaware, Le Flore, Major, Pawnee.

_Metachroma interrupta_ (Say)

Characteristics: Oblong; pale reddish brown; head sparsely punctate, distinct frontal impression; pronotum wider than long, sparsely punctate; each elytron with humeral sutural line and two oblong discal spots, piceous; length about 6.0 mm.

County record: Oklahoma.

_Metachroma angustulum_ Crotch

Characteristics: This species differs from the foregoing species in that the elytra do not have spots.

County record: Cleveland.

_Rhabdopterus pictipes_ (Olivier)

Characteristics: Oblong, convex; dark brown to black, shining; head coarsely, sparsely punctate; antennae reddish yellow with apex often brown; pronotum wider than long, finely punctate; legs yellow; elytra coarsely and somewhat irregularly punctate; length about 5.0 mm.

County records: Bryan, Cherokee, Cleveland, McCurtain, Murray.

_Colaspis brunnea_ (Fabricius)

Characteristics: Oblong, oval; yellowish and not shining; head not coarsely punctate, distinct medial frontal impression present; pronotum not coarsely, deeply punctate; elytra with irregular rows of coarse, deep punctures; length about 5.0 mm.

County records: Adair, Cherokee, Delaware, Latimer, Osage, Payne.

_Colaspis nigrocyanea_ Crotch

Characteristics: This species differs from the foregoing species in that the color is purplish black; head and pronotum coarsely and deeply punctate.

County record: Kiowa.
Characteristics: This species differ from the foregoing species in that the color is metallic green.

County records: Cleveland, Comanche.

Chrysodina globosa (Olivier)

Characteristics: Ovate, convex; dark blue or black, shining; antennae pale; pronotum with apex only half as wide as base, finely punctate; elytra finely, evenly and densely punctate; length about 3.0 mm.

County records: Cleveland, Comanche, Grady, Murray.

Nodona tristis (Olivier)

Characteristics: Ovate, convex; bluish or bluish green, shining; clypeus broad between antennae, antennae pale at base, outer joints piceous; elytra with irregular, coarse punctuation; length about 3.5 mm.

County records: Delaware, Kiowa, Le Flore, McIntosh, Ottawa, Pawnee, Payne, Sequoyah.

Nodona clypealis Horn

Characteristics: This species differs from the foregoing species in that the clypeus is contracted between the antennal insertions; punctuation less distinct and more sparse.

County record: McCurtain.

SUBFAMILY CHRYSOMELINAE

Characteristics: Oval, convex; usually brightly colored; head inserted into prothorax to eyes, antennae widely separated at base, apical segments somewhat enlarged, eyes slightly emarginate; prothorax with side margins well defined, procoxae transverse, widely separated, third tarsal segment entire instead of bilobed; elytra convex, covering entire abdomen.

KEY TO THE SPECIES OF CHRYSOMELINAE

1. Maxillary palpi with apical segment cylindrical or oval, attenuate toward apex; third tarsal segment usually bilobed or emarginate, sometimes simple ..................................................13
   Maxillary palpi with apical segment subquadranular or dilated, broadly truncate at apex; third tarsal segment entire or scarcely emarginate ..................................................2

2. Claws connate, parallel and contiguous ..............................................3
   Claws divergent or at least separated at base .....................................6

3. Pronotum brown with anterior angles pale ...........................................
   Pronotum entirely brown ......................................................................4
   First and second interstices brown, forming a sutural vitta....................
   First and second interstices not forming a sutural vitta ......................5

5. Second vitta twice interrupted, fourth vitta represented by a spot........
   Second vitta once interrupted may be united with third vitta at apex,
   fourth vitta united with third at base ..............................................Zygogramma disrupta

6. Maxillary palpi with apical segment shorter than preceding segment ....
Maxillary palpi with apical segment not shorter than preceding one .................................................. 8

7. Mesosternum forming blunt tubercle between mesocoxae; profemora of male strongly toothed Labidomera clinicolis
Mesosternum without tubercle between mesocoxae; profemora of male simple ........................................... 9

8. Elytra vittate Leptinotarsa decemlineata
Elytra uniform in color Leptinotarsa haldmani

9. Sides of pronotum not thickened; elytra dark without markings, margins may be pale Chrysolina auripennis
Sides of pronotum thickened; elytra pale with dark markings .......................................................... 10

10. Elytra with regular vittae ...................................... 11
Elytra maculate or with poorly defined vittae .................................. 12

11. Pronotum brown with pale margins Calligrapha praecelsis
Pronotum entirely brown Calligrapha bidenticola

12. Thorax at least partly pale Calligrapha multipunctata bigsbyana
Thorax entirely dark Calligrapha scalaris

13. Elytra with spots ........................................... 14
Elytra without spots ............................................. 15

14. Each elytron with a pattern of seven dark spots of which two are median, never elongate, often joined together and to the suture to produce irregular transverse band; rarely entirely pale, sometimes with only the two median spots present on each elytron, may be more or less fused .......................................................... 15
Each elytron with a pattern of seven dark spots of which three are median, always elongate, never joined to produce transverse band; rarely with median and posterior spots lacking Chrysomela scripta

15. Each elytron with the basal spots usually joined, the median spots often joined and nearly always reaching the suture, posterior markings usually joined reaching the suture Chrysomela interrupta
Each elytron with the basal and posterior markings usually lacking, median spots may be fused Chrysomela knabi

Zygogramma exclamationis (Fabricius)

Characteristics: Oval; brown; pronotum brown with anterior angles pale; elytra pale with vittae; length about 8.0 mm.


Zygogramma suturalis (Fabricius)

Characteristics: This species differs from the foregoing species in that the pronotum is entirely brown; elytra with first and second interstices brown, forming sutural vitta, length about 6.0 mm.

County records: Cleveland, Comanche, Craig, Dewey, Harper, Noble, Oklahoma, Okmulgee, Payne, Pawnee, Sequoyah.

Zygogramma heterotheca Linell

Characteristics: This species differs from the foregoing species in that the second vitta is twice interrupted; length about 5.0 mm.

County records: Alfalfa, Canadian, Cleveland, Grady, Grant, Hughes, McCurtain, Osage, Payne, Washita.
Zygogramma disrupta Rogers

Characteristics: This species differ from the foregoing species in that the second vitta is interrupted once; length about 6.5 mm.

County records: Alfalfa, Cleveland, Cimarron, Comanche, Grady, Grant, Harper, McClain, Oklahoma, Payne, Texas, Woodward.

Labidomera clivicollis (Kirby)

Characteristics: Oval, convex; bluish black; pronotum about three times as wide as long; elytral punctures fine, arranged in irregular double rows; length about 9.0 mm.

County records: Cleveland, Payne.

Leptinotarsa decemlineata (Say)

Characteristics: Broadly oblong, convex; dull yellow; elytral vittae delimited by irregular rows of punctures; length about 8.0 mm.


Leptinotarsa haldmani (Rogers)

Characteristics: This species differs from the foregoing species in that the color is uniform blue or green; elytra lacking vittae.

County records: Payne.

Chrysolina auripennis (Say)

Characteristics: Oblong oval, convex; head, pronotum and appendages deep blue or violet with elytra varying from cupreous to bright green; head sparsely punctate; pronotum almost twice as wide as long, lateral grooves deep with coarse punctures at bottom of groove, disk finely, sparsely punctate; elytra coarsely, irregularly punctured; length about 8.0 mm.

County records: Beckham, Choctaw, Comanche, Garfield, Greer, Harmon, Kay, McCurtain, Payne, Roger Mills, Tillman.

Calligrapha praecelsius (Rogers)

Characteristics: Broadly oval, convex; brown with pronotal apical and lateral margins yellowish white, with suture and broad discal stripe brown; length about 7.0 mm.

County record: Osage.

Calligrapha bidenticola Brown

Characteristics: This species differs from the foregoing species in that the entire pronotum is brown; length about 6.5 mm.

County records: Dewey, McIntosh, Okmulgee, Ottawa, Pittsburg.

Calligrapha multipunctata bigebyana (Kirby)

Characteristics: This species differs from the foregoing species in that the color is green with the antennae and legs reddish, margins of pronotum and most of elytra pale yellow usually with poorly defined vittae, length about 7.0 mm.
County records: Cleveland, Oklahoma, Sequoyah.

*Calligrapha scalaris* (Leconte)

Characteristics: This species differs from the foregoing species in that the pronotum is entirely green; length about 8.5 mm.

County records: Garfield, Kay, Payne, Woodward.

*Gastrophysa cyanea* Melsheimer

Characteristics: Oblong oval, convex; dark blue to violet; head and pronotum finely, moderately punctate; elytra finely, densely punctate; length about 5.0 mm.

County records: Carter, Cleveland, Comanche, Grady, Mayes, McIntosh, Murray, Payne, Sequoyah.

*Chrysomela scripta* Fabricius

Characteristics: Oblong oval; dull reddish to yellow, dark areas with greenish reflection; pronotum dark, very finely punctate with margins yellow, coarsely and sparsely punctate; elytra coarsely, moderately punctate with each containing three median elongated spots; length about 7.0 mm.

County records: Alfalfa, Bryan, Cherokee, Cleveland, Grady, McIntosh, Payne, Pushmataha, Washington.

*Chrysomela interrupta* Fabricius

Characteristics: This species differs from the foregoing species in that each elytron contains two median spots, not elongated, usually fused; length about 8.5 mm.

County records: Canadian, Cleveland, Comanche, Ellis, Grady, Greer, Kiowa, Lincoln, McClain, Murray, Oklahoma, Osage, Payne, Woodward.

*Chrysomela knabi* Brown

Characteristics: This species differs from the foregoing species in that each elytron contains only two median spots, basal and posterior spots lacking; length about 7.5 mm.

County records: Canadian, Carter, Cleveland, Oklahoma.

LITERATURE CITED


