A FIRST LIST OF THE HYMENOPTEROUS FAMILIES TENTHRE-DINIDÆ, SIRICIDÆ, CHRYSIDIDÆ, PROCTOTRYPIDÆ, CYNIPIDÆ, CHALCIDIDÆ AND BRACONIDÆ COLLECTED IN NEW MEXICO.

BY T. D. A. COCKERELL, MESILLA PARK, N. M.

Read (by title) before the Academy December 30, 1898.

TENTHREDINIDÆ.

Cimbex americana, Leach. Las Vegas.

Nematoneura malvacearum, Ckll. Mesilla; Albuquerque; Santa Fé. Larvæ on Sphæralcea lobata, Wooton.

Blennocampa populifoliella, Riley MS., Twns. Mesilla Valley (Townsend). This is probably identical with the next, in which case it has priority.

Scolioneura populi, Marlatt. Mesilla Valley.

Taxonus (Strongylogaster) occidentalis, MacGillivray MS. Ruidoso Creek (E. O. Wooton).

Eriocampoides limacina, Retz. (Eriocampa cerasi, Peck). Sante Fé, introduced. Allantus occidaneus, Cress. Recorded by Cresson.

A. depressus, MacGillivray MS. Ruidoso Creek (E. O. Wooton).

Prof. C. H. T. Townsend has collected many additional species in the White Mountains, N. M.; the collection is as yet only partly worked over, and is not here included.

SIRICIDÆ.

Sirex areolatus, Cresson. Collected by Lewis in northern New Mexico. Tremex columba, L. Santa F_{ℓ} , Aug. 10.

CHRYSIDIDÆ.

Notozus versicolor, Nort. Mesilla Valley.

N. marginatus, Patton, det. Fox. At flowers of Isocoma wrightii, Mesilla Park, Sept. 12.

Omalus corruscans, Nort. Reported by Aaron.

Holopyga semirufa, Ckll. Mesilla Valley.

H. ventralis, Say, det. Fox. At flowers of Isocoma wrightii, Mesilla Park, Sept. 11.

Hedychrum violaceum, Brullé. Chaves and El Rito (Townsend). Var. wiltii, Cress., Mesilla Valley.

Chrysis mesillæ, Ckll. Mesilla Valley.

- C. cærulans, Fab., var., det. Ashm. Mesilla, June.
- C. perpulchra, Cr., det. Ashm. Mesilla, July 21.
- C. pacifica, Say. Mesilla Valley (R. R. Larkin).
- C. bigeloviæ, Ckll. Mesilla Valley.
- C. parvula, Fab., det. Ashm. Mesilla, June 6.
- C. texana, Gribodo, det. Fox. At flowers of Isocoma wrightii, Mesilla Park, Sept. 11.

Parnopes festivus, Ckll. Mesilla Valley.

PROCTOTRYPIDÆ.

Pristocera armifera, Say. Mesilla, June 21. Male, det. Ashm.

Goniozus platynotæ, Ashm. Mesilla Valley.

G. cellularis, Say, det. Ashm. Mesilla Park, June 24; also April 16, swept from Sophia halictorum.

Isobrachium rufiventre, Ashm. Las Cruces, June 4.

Trissolcus euschisti, Ashm., det. Ashm. Mesilla, under bark of apple tree, Nov. 11.

Hadronotus mesillæ, Ckll. Mesilla Valley.

Isostasius occidentalis, Ashm. MS. Las Cruces, June.

Acerota cecidomyiæ, Ashm. Las Cruces, June 4.

Platygaster obscuripennis, Ashm. Mesilla Valley (Townsend).

Polygnotus atriplicis, Ashm., det. Ashm. Mesilla Park, bred from galls of Lasioptera willistoni, Ckll.

Diapria californica, Ashm., det. Ashm. Santa Fé, July 5.

CYNIPIDÆ

Andricus howertoni, Bass., A. recticulatus, Bass., and A. ruginosus, Bass.; collected by Howerton.

A. frequens, Gillette, det. Gillette. Pinos Altos.

Holaspis maculipennis, Gill. Common in the Organ Mts.; the first specimens were collected by R. R. Larkin.

Dryophanta emoryi, Ashm. Silver City (Rusby).

Neuroterus howertoni, Bass. Recorded by Bassett in 1890.

Synergus mexicana, Gill. Mesilla Valley.

Allotria brassicæ, Ashm., det. Gillette. Common on cabbage; Mesilla Park.

Anacharis lamyi, Ashm. (mexicana, Ashm.) Santa Fé. The name mexicana is preoccupied; so I asked Mr. Ashmead to substitute lamyi, after Archbishop Lamy, in whose garden it was found. He kindly agreed to this.

Psilodora impatiens, Say. Common in the Mesilla Valley; also at Santa Fé.

P. erythropa, Ashm., det. Ashm. Mesilla, May 1.

Hexaplasta zigzag, Riley, det. Ashm. Mesilla, May, on Sambucus mexicana.

Figitides atricornis, Ashm. Santa Fé.

F. quinquelineatus, Say.

CHALCIDIDÆ.

Spilochalcis delira, Cress., det. Ashm. Las Cruces, Aug. 24, on Solidago canadensis arizonica.

S. bioculata, Cress., det. Howard. Santa Fé, bred from Philampelus larva on grape.

S. mesillæ, Ckll. Mesilla Valley. The type is in U. S. Nat'l Museum.

Smicra torvina, Cress. Mesilla, June.

Chalcis flavipes, Fb. (ovata, Say). Mesilla Valley, common.

Phasganophora sulcata, Westw., det. Riley. Mesilla Park, on Helianthus, Sept. 8, 1893.

Acanthochalcis nigricans, Cam. Mesilla Park.

Stomatocera rubra, Ashm. Mesilla Park, on Helianthus, Sept. 8, 1893.

Podagrion mantis, Ashm., det. Ashm. Mesilla; parasitic on Stagmomantis.

Orasema mexicana, Ashm. MS. S. Augustine Ranch, Organ Mts., Aug. 29.

O. viridis, Ashm. Albuquerque.

Perilampus platygaster, Say, det. Ashm. Mesilla Park, Sept. 12, on Isocoma wrightii.

P. fulvicornis, Ashm. Mesilla Valley; Las Cruces, June, on a sunflower leaf.

P. hyalinus, Say, det. Ashm. Mesilla Park, May 8, on foliage of poplar.

Elatus sisymbrii, Ashm. Mesilla Valley.

Eurytoma bigeloviæ, Ashm. Mesilla Park, Sept., on Isocoma wrightii.

E. studiosa, Say, det. Dept. Agric. Paraje; bred in April from gall of Lasioptera ephedræ, Ckll.

Systole minuta, Ashm. Las Cruces, June; numerous on green fruits of parsnip. Bruchophagus funebris, Howard. Organ Mts. (E. O. Wooton).

B. mexicanus, Ashm. Las Cruces. (Townsend).

Monodontomerus montivagus, Ashm. Mesilla Valley, common. I have found it on a wall containing many nests of Podalirius vallorum, Ckll., and believe it is parasitic on that bee.

Torymus cyaneogaster, Ashm., det. Ashm. Mesilla Park, Sept. 11, on Isocoma wrightii.

T. rudbeckiæ, Ashm. Mesilla, June.

Syntomaspis brachyura, Ashm. MS. Santa Fé, on cherry tree, June 26.

Megastigmus nigrovariegatus, Ashm. Santa Fé.

Eupelmus quercus, Ashm. Santa Fé.

E. cyaneiceps, Ashm. Mesilla Park, Sept., on Isocoma wrightii.

E. larreæ, Ashm. MS. Mesilla Valley, on Larrea.

Aphycus ceroplastis, Howard. Mesilla Valley (Ckll.); Silver City (Rusby 1879). Bred from Ceroplastes irregularis, Ckll.

A. texanus, Howard. Mesa E. of Las Cruces, bred from Dactylopius gutierreziæ, Ckll., on Gutierrezia lucida, Greene.

A. cockerelli, Howard. Las Cruces; bred from Lecanium.

A. howardi, Ckll. Mesilla Park; bred from Eriococcus tinsleyi, Ckll.

Ageniaspis fuscipennis, Ashm. MS. Mesilla Valley, on Larrea.

A. morio, Ashm. MS. Mesilla Valley, on Larrea.

Blastothrix longipennis, Howard. Las Cruces, bred from Lecanium robiniarum, Dougl.

Encyrtus aphalaræ, Howard MS. Mesilla Park, bred from Aphalara suædæ, Schwarz MS., or Suæda.

Isodromus secundus, Howard MS. Las Cruces; bred for Chrysopa.

Dinocarsis argenteus, Ashm. MS. Mesilla Park, campus of A. & M. College, June.

Bothriothorax peculiaris, Howard. Santa Fe, bred from syrphid on hop.

B. nigripes, Howard. Mesilla Valley.

Chrysopophagus banksi, Howard. Mesilla Valley, June.

Ectroma americanum, Howard. Mesilla Valley, June.

Pteroptrix flavimedia, Howard. Organ Mts.

Prospalta aurantii, Howard. Mesilla Park; bred from Mytilaspis concolor, Ckll.

Coccophagus flavoscutellum, Ashm. Greenhouse of Exper. Sta., Mesilla Park.

C. lecanii, Fitch. Organ Mts; bred from Pulvinaria marmorata, Ckll.

Tridymus cinctipes, Ashm. MS. Santa Fe, August 8.

Isocratus vulgaris, Walk., det. Howard. Mesilla Park, August 16; bred from Aphis brassicæ on cabbage.

Halticoptera drypatæ, Ashm., det. Ashm. Mesilla Park, April 25, on Sophia halictorum.

Euchrysia hyalinipennis, Ashm, det. Ashm. Mesilla Park.

Amblymerus annulipes, Ashm. MS. Las Cruces, June 4.

Pteromalus puparum, L., det. Ashm. Mesilla Valley, August 8, 1893.

Catolaccus incertus, Ashm. Mesilla, June.

C. anthonomi, Ashm. Las Cruces, June 4.

C. varicolor, Ashm. MS. S. Augustine Ranch, August 29; emerged from a bud of Chilopsis.

C. singularis, Ashm. MS. Santa Fe, end of July.

Meraporus arizonensis, Ashm., det. Ashm. Santa Fé, Aug. 22; parasite of Bruchus on Glycyrrhiza lepidota.

M. calandræ, Howard, det. Howard. Mesilla, Sept. 1.

Pachyneuron texanus, Ashm. MS. Santa Fé, Aug. 8. As the name indicates, this also occurs in Texas (Ashmead litt.).

Euplectrus comstocki, Howard, det. Howard. Mesilla Park, Aug., 1893; reared from lepidopterous larva on cultivated bean.

Solenotus metallicus, Ashm. MS. Las Cruces, June 4.

Chrysocharis vagans, Ashm. MS. Las Cruces, June.

Holcopelte producta, Ashm. Mesilla Valley (Townsend).

Entedon bigeloviæ, Ashm. Ashmead, Tr. Am. Ent. Soc., 1894, gives the locality as Las Cruces. This is an error; the insect was bred from Eurosta bigeloviæ, Ckll., collected as stated by Townsend in Canad. Entom., 1893, p. 48.

Aproctocetus americanus, Ashm. Las Cruces, June.

Note.—I will take this opportunity to record Semiotellus clisiocampæ, Fitch, det. Ashm., from El Paso, Tex., July 30, 1893.

BRACONIDÆ.

Vipio uniformis, Cress. (Bracon), det. Ashm. Mesilla Park, April 16, on Sophia halictorum.

Bracon rufovariegatus, Prov., det. Ashm. Mesilla Park, April 12, on Sophia halictorum.

- B. nuperus, Cress., det. Ashm. Mesilla Park, April 12, on Sophia halictorum.
- B. politus, Prov., det. Ashm. Mesilla Park, Sept. 12, on Isocoma wrightii.
- B. dimidiatus, Ashm. MS. Santa Fé, Aug. 1.
- B. neomexicanus, Ashm. MS. Mesilla, end of August.
- B. trifolii, Ashm., det. Ashm. Mesilla, end of August.
- B. lævithorax, Ashm., det. Ashm. Santa Fé, July 9.

Habrobracon niger, Ashm. MS. Las Cruces, at flowers of plum, April 1.

Tropidobracon mexicanus, Ashm. MS. Santa Fé, June 22.

Doryctes radiatus, Cress., det. Ashm. Santa Fé, Aug. 1.

Rhogas atricornis, Cress., det. Dept. Agr. Las Cruces, Aug. 8, on Solanum.

- R. nolophanæ, Ashm., det. Ashm. Las Cruces.
- R. cockerelli, Ashm. MS. Mesilla, July and Aug. 2. Type in U. S. Nat'l Mus.
- R. nigriceps, Ashm., det. Ashm. Mesilla, June 24.
- R. stigmator, Say. (Bracon.) Mesilla, June.
- R. lectus, Cress., det. Ashm. Bred from a larva on potato (Solanum) sent from Georgetown by O. W. Anthony. The larva had a shiny, pale ochreous head; body with black warts.
- R. intermedius, Cress., det. Ashm. Mesilla, at light, May 2.

Chelonus texanus, Cress., det. Ashm. Mesilla Park, at flowers of plum, April 9.

- C. cautus, Cress., det. Ashm. Mesilla Park, April 12, on Sophia halictorum.
- C. electus, Cress., det. Ashm. Mesilla Park, Sept. 12, on Isocoma wrightii; Mesilla, June 24.
- C. mesillæ, Ashm. MS. Mesilla, June 24.
- C. lævifrons, Cress. Las Cruces, June.
- C. sericeus, Say. Continental Divide, Tenaja (Townsend).
- C. filicornis, Cam. Recorded in Cresson's Catalogue of Hymenoptera.

Apanteles neomexicanus, Ashm. MS. Mesilla, end of August.

- A. theclæ, Riley, det. Ashm. Mesilla, June, reared from a Lycænid larva.
- A. hyphantriæ, Riley, det. Ashm. Mesilla, Sept., parasitic in great numbers on Hyphantria cunea on Populus fremontii. It was observed to attack immature larvæ.

Urogaster carpatus, Say (Apanteles), det. Ashm. Mesilla, end of October.

Protapanteles monticola, Ashm., det. Ashm. Mesilla, May, on Sambucus mexicana.

Microplitis ceratominæ, Riley. Mesilla Valley.

- M. mamestræ, Weed. Las Cruces, June 4.
- M. nigripennis, Ashm., det. Ashm. Lone Mountain, July 7.

Microdus fulvescens, Cress., det. Ashm. Mesilla Valley; Santa Fé.

M. divisus, Cress., det. Ashm. Mesilla Park, April 16, on foliage of Populus.

Orgilus flaviceps, Ashm. MS. Mesilla, June 24.

Cremnops vulgaris, Cresson. Santa Fé; Mesilla Valley; San Augustine Ranch. Agathis tibiator, Prov., det. Ashm. Mesilla Park, Sept. 12, on Isocoma wrightii. Agathirsia neomexicana, Ashm. MS. Mesilla, Aug. 26, hovering over Sphæralcea lobata, Wooton.

Meteorus politus, Prov., det. Howard. Las Cruces, in winter.

M. agrotidis, Ashm. MS. (type from California). Mesilla, June 6, at light.

M. indagator, Riley, det. Ashm. Santa Fé, Aug. 1.

M. vulgaris, Cress., det. Ashm. Mesilla, May; Santa Fé, Sept., bred from Halisidota maculata cocoons.

M. communis, Cress., det. Ashm. Mesilla, April 22, at light.

Aspidogonus (Diospilus) alfalfæ, Ashm. MS. Mesilla, end of August; Las Cruces, September.

Opius nanellus, Ashm., det. Ashm. Las Cruces, August.

Phædrotoma sanguinea, Ashm., det. Ashm. Mesilla; reared from fruit of Solanum elæagnifolium.

Nosopæa polita, Ashm. MS. Las Cruces, June 4.

Lysiphlebus eragrostaphidis, Ashm. Mesilla Park, on Helianthus, Sept. 8, 1893. Lipolexis rapæ, Curtis, det. Ashm. Santa Fé, July 16.

In addition, the following genera have been taken in New Mexico, but the species have not yet been identified, and are doubtless mostly undescribed: Blacus, Iphiaulax, Scelio, Inostemma, Telenomus, Caloteleia, Labeo, Mesitius, Tetrastichus, Metopon, Liothorax, Metapachis, Decatoma, Trigonura, Leucospis, Ceroptres, Solenaspis, Ptenus.

SOME NOTES ON THE BIRDS OF SOUTHERN KANSAS.

BY J. R. MEAD, WICHITA.

Read before the Academy October 27, 1897.

The writer has observed a rapid decrease in bird life in southern Kansas. Both migratory and summer-resident species, particularly those used for food, are included in this statement, the most noted exceptions being blackbirds and orioles.

At the time of the early settlement of south-central Kansas the great abundance of bird life was a noted feature of the landscape, especially in springtime. Several varieties very numerous in their northward journey were never seen on the return trip. Such was the case with the Eskimo curlew, of which millions passed northward to their nesting grounds, while none ever returned this way. The first birds to appear in the spring were ducks, canvasbacks and redheads coming with the first thaw in February. A little later came gray geese and other ducks; and when the grass had started white geese came in great numbers, a sign that spring would stay. Beautiful white swans also came our way, in both the spring and fall migrations. Then the family of Anatidæ were so numerous that they destroyed whole fields of wheat, and parties of hunters would kill a wagon load in a day, while now they are rarely seen.

Prairie-hens, quite common before the settlement of the country, rapidly increased for a few years, until the building of railroads brought the market hunters. They are now almost exterminated. A migratory movement of both prairie-chickens and quail was noticed.