The fact remains that by the importation of plants from foreign countries (64,652 cases were brought into the U. S. during the season of 1915-16, according to the report of the Fed. Hort. Bd. for year ending June 30, 1916) we are slowly but surely adding to the number of pests which we already have in this country, thereby increasing the burden which future generations will have to bear. And the remedy? A national quarantine of all foreign nursery stock.

### EXPLANATION OF PLATE XIV.

Fig. 1, Blaberus discoidalis, a tropical roach (natural size).

Fig. 2, Gryllotalpa gryllotalpa, the European mele cricket (natural size.)

Fig. 3, *Cholus forbesii*, a tropical orchid weevil, (after H. S. Barber), (enlarged).

# LECTOTYPES OF THE SPECIES OF HYMENOPTERA (EXCEPT APÒIDEA) DESCRIBED BY ABBÉ PROVANCHER.

BY A. B. GAHAN AND S. A. ROHWER, BUREAU OF ENTOMOLOGY, WASHINGTON, D.C.

#### Introduction.

This paper, which is a contribution from the Branch of Cereal and Forage Insects and the Branch of Forest Insects, is largely based on an examination made in May and June, 1915, of the Provancher collections located in the Museum of Public Instruction at Quebec, and in the possession of Mr. W. Hague Harrington and the Department of Agriculture at Ottawa, Canada.

This study was undertaken in order to determine in so far as possible the correct position of the Provancher species in the modern classification and obtain notes which would supplement the original descriptions, and thus facilitate recognition of the species, many of which could not be certainly identified by the original description. Notes of greater or less extent were obtained on all but a few of the species of Hymenoptera, excluding the Apoidea, especial stress being laid, however, upon the sawflies and the parasitic forms belonging to the Ichneumonoidea. In some groups our notes consisted principally of a record of the September, 1917

condition of the type. The limited time at our disposal made it impossible to attempt to secure full notes on any but the groups in which we were especially interested.

This paper is only a list of the species described by Provancher with the location, condition and designation of the type specimens, and is submitted at this time in order to establish definite premises on which to work and thus make it possible to publish in the future, systematic notes on the species with assurance that other workers will be able to use our remarks and find the same specimens we examined.

The only previous comprehensive study of the Provancher collections was made by Mr. G. C. Davis, who has published the results of his study in two reports†. Davis, however, confined himself entirely to the Ichneumonidæ. The conclusions reached by him regarding the species, in the main, agree with our own, but in a number of instances do not coincide with ours. Davis made no attempt to establish lectotypes for the species, and, therefore, it was often impossible for us to determine on what specimen he based his conclusion.

### Provancher's Life and Work.

Practically the first Canadian and in fact one of the first Americans to make a serious and comprehensive study of the Hymenoptera of Canada was Abbé Léon Provancher. Abbé Provancher was a French Canadian who was born, brought up and spent most of his life in the Province of Quebec. He died in 1892, and brief accounts of his life and work were afterward published in a number of journals.\* Some years later Abbé Huard began a more extended biography which appeared in various issues of *Le Naturaliste Canadien*,\*\*a magazine founded and edited, until shortly before his death, by Provancher. Since Provancher

<sup>†</sup>Some notes from a Study of the Provancher Collection of Ichneumonidæ, 1894, Proc. Acad. Nat. Sc. Phil., pp. 184-190.

Review of a few more Provancher types of Ichneumonidæ, 1895, Can. Ent., pp. 287-290.

<sup>\*</sup>See especially Can. Ent., Vol. 24, 1892, pp. 130-131, and Entom. News, Vol. 6, 1895, p. 209, pl. IX.

\*\*This interesting account has never been completed, but Abbé Huard told

<sup>\*\*</sup>This interesting account has never been completed, but Abbé Huard told us it was his intention to complete it and we certainly hope he finds an opportunity to do so. For the parts published, see Nat. Can., 1894, 1895, 1896, 1897, 1898.

began his work in Quebec and spent most of his life there, it is not surprising to know that a large part of his collection came from that region. But later in his life he received much material from other people so that his completed collection included species from many parts of Canada, the United States, Europe and some of the West Indian Islands.

Provancher described about 923 species and a few genera of Hymenoptera and most of this great number are valid. largest and most comprehensive work on Hymenoptera is Petite Faune Entomologique du Canada and its Additions, but besides this he published several shorter papers on Hymenoptera in which new species are described. Considering the time, lack of facilities and literature, and his comparative isolation, Provancher had a very good idea of the limits of a species. The weakest point of his hymenopterological work was his conception of genera and generic limits. Even when we consider the genera he recognized, we often find that he placed the same or closely allied species in widely different genera. Hence, we find, especially in the parasites, that Provancher was often wrong in his generic placement of the species. His descriptions are accurate, and if we remember that the diagnostic characters of that period were limited mostly to colour, they are as satisfactory as those of his contemporaries.

### Location of Collections.

Most of Provancher's types are in the Public Museum of Quebec, some are in the collection of Mr. W. Hague Harrington at Ottawa, a few are in the collection of the Canadian Department of Agriculture at Ottawa, while a few others were returned to Ashmead and Coquillett and are now in the United States National Museum. Some few types we were unable to locate. These may have been returned to the collectors.

In 1889 the College de Levis, Levis, Quebec, received a collection of insects from Provancher, and for some time it was thought to contain some of his types. Further investigation tends to prove that this collection was composed entirely of duplicates, and in certain cases these were not correctly determined.

A—Collection in the Public Museum at Quebec.

The collection in the Museum of Natural History, under the

Department of Public Instruction is now housed in the Parliamentary Building in Quebec, and is cared for by Abbé V. A. Huard and his assistant. In this Museum there are really two Provancher The first was purchased in 1877 by the Museum and is known as the 1877 collection (in this paper referred to as the first collection). The other came to the Museum (through purchase) after Provancher's death, and is known as the Dernière Provancher collection, (in this paper referred to as the second collection). Both of these collections are in the cabinets obtained from Provancher, and most fortunately are still left as arranged by him. Each collection contains species not represented in the other, but in cases where the species was found represented in both collections and there was nothing in the description or manuscript notes to prevent, we have chosen as lectotype a specimen from the second collection, because this was the collection retained and used by Provancher until his death, and we are inclined to believe, even though he was not a "type-worshipper," that he would retain the actual type for future reference. Specimens in both collections bear small, yellow labels on which a number is printed. These numbers are species numbers and refer to a catalogue prepared by Provancher. Each insect order in both collections begins with the number one. In the Hymenoptera, therefore, considering both collections as a unit, we often have two, usually widely different species under the same number. There appears to be no instance in which the same species occurs under the same number in both collections. The two collections differ in the style of name label. The name label for the 1877 collection is on blue paper, while that for the second collection is on white paper which has a double red line (the outer being the heavier) around the margin.

The catalogues prepared by Provancher are in the Public Museum, and although they are little more than lists of numbers followed by names, with an occasional mention of locality, they are of some assistance in proving the way in which Provancher-treated species reduced by him to synonymy.

A hasty examination of all the insects in both collections showed that they were in remarkably fine condition, considering that they are kept in wooden drawers unprotected by any repellant, and which are closed by glass tops which set down inside, without any overlapping flange. A careful examination of the Hymen-optera proved that they were free from pests and in good condition. At the time of our visit the Hymenoptera of the 1877 collection were in museum case 35, and those of the second collection in the left hand column of case 46 and two drawers in the left hand column of case 49.

That Provancher had no concrete idea of the value of types is shown by the fact that in no case (with possibly a few exceptions in later years) were his types labeled as such. Furthermore, it is apparent that when he discovered one of his species to be a synonym he often removed the name label from the type and pinned the specimen among others of the species to which he thought it belonged. In other instances, upon deciding that one of his species was synonymous with another not already represented in his collection he removed the original name label and replaced it with what he considered to be the correct one. For example, there is no specimen in his collections labeled Selandria flavicornis. After describing this species Provancher concluded that it was the same as Selandria halcyon, and an examination of the catalogue shows under 60 the name Selandria flavicornis with the word "flavicornis" crossed out and above it written the word "halcyon." It, therefore, appears certain that the type of Selandria flavicornis stands in the collection under the name Selandria halcyon. this case this is also proven by the fact that Provancher instead of supplying a new label just reversed the old label and wrote the name Selandria halcyon so that we find on the underside of the label for S. halcyon the original label for Selandria flavicornis. This one case is sufficient to show how Provancher worked. Many other similar cases could be mentioned. There are many cases, however, where there is no proof, either in the catalogue or in the labeling, that the types of some of Provancher's species which were later suppressed by him stand under the name of the species with which he considered them to be synonymous. In such cases we can only assume, from our knowledge of Provancher's methods, that this is what has taken place.

At no time while studying the collection did we remove any labels, and we were always very careful to put the specimens back where they came from so that the collection still stands as it was arranged by Provancher. We did not even feel justified in labeling the specimens which we believed to be the type as lectotypes, and will rely in this paper entirely on the name label and the number label for means of correctly identifying the specimens which we believe should stand as type.

### B—Harrington Collection.

The types in the Harrington collection are in good condition, and although they usually do not bear the name label in Provancher's writing we were assured by our friend Mr. W. H. Harrington that they were the identical specimens examined by Provancher as could easily be proven by a comparison of the number (they bear in addition to other labels a small, white square on which is written by Harrington a number) with the list as returned by Provancher.

C—Types in Collection of Canadian Department of Agriculture.

The types in the Department of Agriculture are in good con-

The types in the Department of Agriculture are in good condition, and have all been properly labeled as types.

D-Types in U.S. National Museum.

The types in the United States National Museum have all been accessioned and labeled with Museum type numbers.

## Plan of Paper.

In submitting this list of the species described by Provancher and presenting notes on the location and condition of the types we have considered that it was much better to arrange them alphabetically as they appear in the final index published by Provancher as a conclusion to his two more important papers on Hymenoptera. We have chosen this method largely because there will be many more changes in generic position than those already published, and also because we do not know when we shall have an opportunity to completely review our notes and definitely assign the species of the genera as at present understood. Practically throughout this paper the word "type" is used in the sense of "lectotype." There are, however, certain cases when there was only one specimen, and there is no doubt that it is the specimen examined by Provancher and is, therefore, certainly the type.

At the time of our visit the type specimens of the species placed by Provancher in the Braconid subfamilies Aphidiinæ and Opiinæ were not available and the data on these were not secured. We hope, however, to secure and present it later.

Unless otherwise stated, it is to be understood that the specimens are in good condition. The letter (s) stands for the word "script." The numbers on the yellow labels are printed. Whenever possible, we chose as type the specimen which bore the name label written in Provancher's hand.

# An Alphabetical List of Species With Designation of Lectotypes.

Acerota opaca. Type.—Yellow label 1381. 2nd Coll. Pub. Mus., Quebec. Two other specimens. Fair.

Accenites canadensis. Type.—Male, yellow label 375. 2nd Coll. Pub. Mus., Quebec. Lacks antennæ, right fore wing, hind tarsi, abdomen glued on.

Acoenites flavipes. Type.—Female, yellow label 1249. 2nd Coll. Pub. Mus., Quebec.

Acordulocera saginata. Type.—Yellow label 390. 2nd Coll. Pub. Mus., Quebec. Right fore wing gone.

Acothyreus mellipes. Type.—Yellow label 1320. 2nd Coll. Pub. Mus., Quebec. Fair.

Ægilips aciculatus. Type.—Not seen.

Agathis femorator. Type.—Female, yellow label 578. 2nd Coll. Pub. Mus., Quebec. Antennæ wanting.

**Agathis nigriceps.** Type.—Female, yellow label 1680. 2nd Coll. Pub. Mus., Quebec.

**Agathis perforator.** Type.—Female, yellow label 577. 2nd Coll. Pub. Mus., Quebec.

Agathis quæsitor. Type.—Female, yellow label 576. 2nd Coll. Pub. Mus., Quebec. Lacks head.

Agathis scrutator. Type.—Female, yellow label 1269. 2nd Coll. Pub. Mus., Quebec. Male allotype. Both glued on slips.

Agathis tibiator. Type.—Female, yellow label 579. 2nd Coll. Pub. Mus., Quebec.

**Agenia atrata.** Allotype.—Male, blue label 125(s). Yellow label 1417. 2nd Coll. Pub. Mus., Quebec.

Agenia perfecta. Type.—Male, yellow label 783. 2nd Coll. Pub. Mus., Quebec. Antennæ wanting beyond 3rd joint. Four hind tibiæ gone.

**Agenia rufigastra.** Type.—Female, blue label 122(s), yellow label 1419. 2nd Coll. Pub. Mus., Quebec.

Allantus cogitans. Type.—Female, yellow label 44. 2nd Coll. Pub. Mus., Quebec. Lacks right antenna. Two female paratypes. 1st Coll.

Allantus robustus. Type.—Female, Harrington Coll.

Allantus rubricus. Type.—Female, Harrington Coll. Lacks right antenna beyond 3rd joint.

Alomya pulchra. Type.—Not in Pub. Mus., Quebec, unless under name *Phygadeuon pubescens* Prov.

Alysia astigma. Type.—Female, yellow label 1051. 2nd Coll. Pub. Mus., Quebec. Left flagellum gone and only base of right remaining.

Same specimen used as type of Aspilata astigma.

Alysia completa. Type.—Female, yellow label 1166. 2nd Coll. Pub. Mus., Quebec.

Alysia fossulata. Type.—Cat. No. 1970, U. S. N. M.

**Alysia lucens.**—Type.—Female, yellow label 909. 2nd Coll. Pub. Mus., Quebec.

Alysia nigriceps. Type.—Female, yellow label 539. 2nd Coll. Pub. Mus., Quebec. Right flagellum and extreme apex of left gone.

Alysia rubriceps. Type.—Male, yellow label 1052. 2nd Coll. Pub. Mus., Quebec. Same specimen used as type of *Phænocarpa rubriceps* Prov.

Alyson conicus. Type.—Male, blue label 622(s), yellow label 1449. 2nd Coll. Pub. Mus., Quebec. Lacks most of left flagellum.

Alyson guignardi. Type.—Female, yellow label 1433. 2nd Coll. Pub. Mus., Quebec.

Alyson triangulifer. Type.—Male, yellow label 1450. 2nd Coll. Pub. Mus., Quebec. Lacks apices of antennæ.

Amblyopone binodosa. Type.—Yellow label 948. 2nd Coll. Pub. Mus., Quebec. Fair. (Arotropus binodosa).

- Amblyteles bifasciatus. Type.—Yellow label 227. 1st Coll. Pub. Mus., Quebec.

**Amblyteles borealis.** Type.—Female, yellow label 1002. 2nd Coll. Pub. Mus., Quebec.

Amblyteles indistinctus. Type.—Female, yellow label 185. 2nd Coll. Pub. Mus., Quebec.

Amblyteles macrocephalus. Type.—Male, yellow label 1063. 2nd Coll. Pub. Mus., Quebec. Both antennæ broken, one at 1st flagellar joint, other at middle, 1 anterior, 1 median and 1 hind leg missing.

Amblyteles marginatus. Type.—Female, yellow label 700, 2nd Coll. Pub. Mus., Quebec.

Amblyteles perluctuosus. Type.—Female, yellow label 172. 2nd Coll. Pub. Mus., Quebec.

Amblyteles quebecensis. Type.—Yellow label 181. 2nd Coll. Pub. Mus., Quebec.

**Amblyteles stadaconensis.** Type.—Male, yellow label 175. 2nd Coll. Pub. Mus., Quebec.

Amblyteles superbus. Type.—Female, Harrington Coll.

Amblyteles tetricus. Type.—Female, yellow label 171. 2nd Coll. Pub. Mus., Quebec.

Anacharis marginata. Type.—Yellow label 1318. 2nd Coll. Pub. Mus., Quebec. Abdomen off but on triangle below.

Anacharis pediculata. Type.—Blue label 762(s), yellow label 1317. 2nd Coll. Pub. Mus., Quebec.

Anacharis subcompressa. Type.—White label "Quebec"; yellow label 616. 2nd Coll. Pub. Mus., Quebec. Abdomen gone.

Anacrabro constrictus. Type.—Male, tag-mounted, yellow label 1690. 2nd Coll. Pub. Mus., Quebec.

Anacrabro lævis. Type.—Female, yellow label 1691. 2nd Coll. Pub. Mus., Quebec.

Andricus gibbosus. Type.—Yellow label 609. 2nd Coll. Pub. Mus., Qubeec. Head and abdomen gone. Cynips (Andricus) gibbosa—under Cynips in list.

Aneurychus foveatus. Type.—Blue label 83; yellow label 1330. 2nd Coll. Pub. Mus., Quebec. Fair.

Aneurychus mellipes. Type.—Yellow label 1331. 2nd Coll. Pub. Mus., Quebec.

Anomalon chlamidatum. Type.—Female, yellow label 1217. 2nd Coll. Pub. Mus., Quebec. Left antenna missing beyond fourth joint and right hind leg at coxa.

Anomalon exile. Type.—Female, yellow label 329. 1st Coll. Pub. Mus., Quebec. Left antenna at 15th joint, left median and both hind legs at coxæ gone; left fore wing gone and right broken at middle.

**Anomalon filiforme.** Type.—Female, yellow label 1218. 2nd Coll. Pub. Mus., Quebec.

Anomalon nigripennis. Type.—Probably pinned under Exochilum mundum Say. 1st Coll. Pub. Mus., Quebec.

Anomalon rufulum. Type and Allotype.—Harrington Coll. Both antennæ, tarsi, except one anterior, broken and lost. Female paratype yellow label 1213, blue label 481. 2nd Coll. Pub. Mus., Quebec.

Anomalon unicolor. Type.—Female, yellow label 1216. 2nd Coll. Pub. Mus., Quebec.

**Apanteles acaudus.** Type.—Female, yellow label 1285. 2nd Coll. Pub. Mus., Quebec.

**Apanteles carpatus.** Type.—Apparently destroyed. Pin bearing yellow label 592 in 2nd Coll. Pub. Mus., Quebec.

Apanteles clavatus. Type.—Female, yellow label 642. 2nd Coll. Pub. Mus., Quebec. Badly broken and plastered up with glue. Antennæ, one median and both hind legs gone. Specimen in U. S. N. M. labeled type not type.

Apanteles cinctus. Type.—Female, yellow label 716. 2nd Coll. Pub. Mus., Quebec. Antennæ broken near middle. Faun. 529. Add. S. 388.

Apanteles crassicornis. Type.—Female, yellow label 1269. 2nd Coll. Pub. Mus., Quebec. Antennæ and hind tarsi broken.

Apanteles femur-nigrum. Type.—Male, yellow label 1578. 2nd Coll. Pub. Mus., Quebec. One antenna broken, one front and one hind leg missing.

Apanteles longicornis. Type.—Female, yellow label 1258. 2nd Coll. Pub. Mus., Quebec.

Aphæreta auripes. Type.—Specimen in Public Mus.,-Quebec, bearing name label in Provancher's hand. Other data not taken. Specimen in U. S. N. M. labeled type, not type.

Aphidaria basilaris. Type.—See Introduction:

Aphidius canadensis. Type.—See Introduction.

Aphidius nigrovarius. Type.—See Introduction.

Aphidius obscurus. Type.—See Introduction.

**Aplomerus tibialis.** Type.—Female, Ent. Branch, Dept. Agr., Ottawa. Left antenna wanting beyond 5th joint.

Arenetra quebecensis. Type.—Not in Pub. Mus., Quebec, unless under *Lampronota tegularis*.

**Arotes superbus.** Type.—Not in Pub. Mus., Quebec, unless under name *A. vicinus* Cress.

Arotropus binodosus.—See Amblyopone.

Ascogaster rufipes. Type.—Female, yellow label 1254. 2nd Coll. Pub. Mus., Quebec. Rather dirty. (This number in Prov. catalogue refers to *Chelonus rugulosus* Prov. There is no such species.

Aspilota astigma.—See Alysia astigma.

Atractodes autumnalis. Type.—Female, yellow label 706. 2nd Coll. Pub. Mus., Quebec.

Atractodes nigricoxus. Type.—Male, yellow label 984. 2nd Coll. Pub. Mus., Quebec. Left hind tarsus broken at 2nd joint.

Atractodes nitens. Type.—Male, yellow label 695. 2nd Coll. Pub. Mus., Quebec. Female not located in either collection.

Atractodes scapiphorus. Type.—Yellow label 307. 2nd Coll. Pub. Mus., Quebec. Badly broken; only thorax, coxæ in part and wings, except right fore wing, remaining.

Aulacus bilobatus. Type.—Male, yellow label 82. 2nd Coll. Pub. Mus., Quebec. Left antenna gone.

(To be continued.)

broader and more approximate on the sternal side pieces. Legs rather slender, femora not toothed, terminal joint of tarsi projecting a distance rather less than the length of the lobes of the preceding joint; claws simple.

Length 1.8 mm.; width .9 mm.

Aweme, Manitoba, Sept. 8, (Criddle).

A small species belonging to the *squamulatus* group of Dietz, in which it may best follow *persimilis*, though not agreeing closely with any species of the group. The small size and lack of true scales on the upper surface distinguishes it from all but *albopilosulus*, which differs in its erect, coarser vestiture among other characters.

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(Continued from page 336.)

Coccophagus brunneus. Type.—Yellow label 1384. 2nd Coll. Pub. Mus., Quebec. Badly glued.

Coccophagus compressicornis. Type.—Harrington Coll.

Coccophagus pallipes. Type.—Yellow label 1389; blue 783(s). 2nd Coll. Pub. Mus., Quebec. Head gone.

**Coleocentrus mellipes.** Type.—Not located.

Coleocentrus quebecensis. Type.—Not in Pub. Mus., Quebec., unless under *C. pettiti* Cress.

Coleocentrus rufus. Type.—Female, yellow label 456. 1st Coll. Pub. Mus., Quebec.

Copelus paradoxus.—See Helorus.

Copidosoma pallipes. Type.—Harrington Coll.

Crabro aciculatus. Type.—Female, yellow label 813. 2nd Coll. Pub. Mus., Quebec. Male, allotype, without label.

Crabro niger. Type.—Female, blue-green label 852(s), yellow label 1660. 2nd Coll. Pub. Mus., Quebec.

**Crabro 4-maculatus.**—See *C. 4-punctatus*. Type the same specimen.

November, 1917

Crabro 4-punctatus. Type.—Female, yellow label 807. 2nd Coll. Pub. Mus., Quebec. See *C. 4-maculata*. See Fauna p. 654 and table 653, both names used.

**Cratospila aciculata.** Type.—No specimen. Pin with name label. 2nd Coll. Pub. Mus., Quebec. Probably returned to collector.

Cratospila brevicauda. Type.—Female, yellow label 1273: 2nd Coll. Pub. Mus., Quebec. Lacks apex of left flagellum.

Cratospila caudata. Type.—Female, yellow label 606. 2nd Coll. Pub. Mus., Quebec. Lacks flagella.

Cremastus fusiformis. Type.—Female, yellow label 306. 2nd Coll. Pub. Mus., Quebec. Antennæ broken at apex.

Cremastus longicaudus. Type. — Female, yellow label 1050. 2nd Coll. Pub. Mus., Quebec.

Cremastus mellipes. Type.—Female, yellow label 363. 1st Coll. Pub. Mus., Quebec. Antennæ broken near middle; fore wings gone; badly pinned. Female. 2nd Coll. antennæ broken.

Cremastus rectus. Type.—Yellow label 361. 1st Coll. Pub. Mus., Quebec. Left antenna at scape, left hind leg at coxa and abdomen gone.

**Cremastus royi.** Type.—Female, yellow label 674. 2nd Coll. Pub. Mus., Quebec.

**Cryptus affabilis.** Type.—Female, yellow label 258. 2nd Coll. Pub. Mus., Quebec.

Cryptus albonotatus. Type.—Not located.

**Cryptus amblytelarius.** Type.—Female, yellow label 1204. 2nd Coll. Pub. Mus., Quebec.

Cryptus annulatus. Type.—Fèmale, yellow label 291. 1st Coll. Pub. Mus., Quebec. Lacks right fore wing.

Cryptus apicatus. Type.—Female, yellow label 246. 2nd Coll. Pub. Mus., Quebec. Lacks right antenna.

**Cryptus belangeri.** Type.—Not in Pub. Mus., Quebec, unless under name *C. nuncius* Say. One specimen.

Cryptus brevicornis. Nat. Can., Vol. 7, p. 176.—See *Phygadeuon impressus*.

Cryptus brevicornis. Of index p. 432. Type.—Female, old rose label 79; yellow label 1202. 2nd Coll. Pub. Mus., Quebec.

Cryptus canadensis. Type.—Male, yellow label 248. 2nd Coll. Pub. Mus., Quebec. Lacks left antenna.

**Cryptus certus.** Type.—Not in Pub. Mus., Quebec, unless under name *C. fungor* Nort. Two damaged specimens.

Cryptus cinctus. Type.—Male, yellow label 292. 1st Coll. Pub. Mus., Quebec. Lacks apex of right antenna.

Cryptus circumcinctus. Type.—Male, yellow label 516. 2nd Coll. Pub. Mus., Quebec. Lacks antennæ.

**Cryptus collaris.** Type.—Male, blue label 121, yellow label 1206. 2nd Coll. Pub. Mus., Quebec.

**Cryptus dubius.** Type.—Not in Pub. Mus., Quebec. Probably returned to collector. (Geddes).

**Cryptus eburneifrons.** Type.—Male, yellow label 517. 2nd Coll. Pub. Mus., Quebec. Lacks most of antennæ.

Cryptus elongatus. Type.—Male, yellow label 670. 2nd Coll. Pub. Mus., Quebec. Lacks apices of antennæ and hind legs.

**Cryptus erythropygus.** Type.—Not in Pub. Mus., Quebec. Probably in Harrington Coll.

**Cryptus exilis.** Type.—Male, yellow label 283. 1st Coll. Pub. Mus., Quebec.

Cryptus flavipectus. Type.—Not in Pub. Mus., Quebec, unless under *Ichneumon scitulus* Cress.

Cryptus fletcheri. Type.—Female, white label 115; also "Cryptus Q fletcheri Prov. Type.—Victoria, V. I." in hand other than Provancher's. 2nd Coll. Pub. Mus., Quebec.

**Cryptus gracilis.** Type.—Not in Pub. Mus., Quebec. Probably in Harrington Coll.

**Cryptus ignotus.** Type.—Male, Harrington Coll. Pink label "P 423." Part of left antenna gone.

**Cryptus imitator.** Type.—Female, yellow label 296. 1st Coll. Pub. Mus., Quebec.

**Cryptus incognitus.** Type.—Blue label 39; yellow label 1205. 2nd Coll. Pub. Mus., Quebec. Lacks left flagellum.

Cryptus insignis. Type.—Not in Pub. Mus., Quebec, unless under *Phygadeuon blakei* Cress.

**Cryptus latus.** Type.—Not in Pub. Mus., Quebec, unless under *Phygadeuon occidentalis*.

**Cryptus linearis.** Type.—Male, old rose label 49. Yellow label 1207. 2nd Coll. Pub. Mus., Quebec. Part of antennæ gone.

**Cryptus longicaudus.** Type.—Female, Harrington Coll. Pink label "P. 375."

Cryptus mellicoxus. Type.—Male, yellow label 1209. 2nd Coll. Pub. Mus., Quebec. Apices of antennæ gone; abdomen glued on number label.

**Cryptus mellipes.** Type.—Female, Harrington Coll. Pink label "P. 392." Abdomen wanting, wings except left hind wanting.

Cryptus montivagus. Type.—Female, yellow label 251.
2nd Coll. Pub. Mus., Quebec. Lacks most of flagella.

Cryptus mundus. Type.—Male, yellow label 245. 2nd Coll. Pub. Mus., Quebec. Lacks part of antennæ and right hind leg.

Cryptus nigricornis. Type.—Male, yellow label 294. 1st Coll. Pub. Mus., Quebec. Lacks left antenna beyond 4th joint.

Cryptus nigricoxus. Type.—Male, yellow label 1553. 2nd Coll. Pub. Mus., Quebec.

**Cryptus notatus.** Type.—Male, yellow label 254. 2nd Coll. Pub. Mus., Quebec.

Cryptus occidentalis.—See Phygadeuon occidentalis.

Cryptus ornatus. Type.—Not in Pub. Mus., Quebec.

Cryptus osculatus. Type.—Male, yellow label 281. 1st Coll. Pub. Mus., Quebec. Lacks right flagellum.

Cryptus pentagonalis. Type.—Harrington Coll. Male, pink label 425. Female, pink label 431.

**Cryptus perditus.** Type.—Male, Harrington Coll. Pink label "P. 442." Lacks antennæ and right fore wing; other wing folded and hard to see.

Cryptus pubescens. Type.—Male, Harrington Coll. Pink label "P. 424."

**Cryptus quebecensis.** Type.—Not in Coll. unless under name *Ichneumon velox* Cress. Two females. 1st Coll. fair.

Cryptus rectus. Type.—Male, yellow label 1208. 2nd Coll. Pub. Mus., Quebec. Lacks left flagellum.

Cryptus ruficornis. Type.—Male, yellow label 519. 2nd Coll. Pub. Mus., Quebec. Some verdigris.

**Cryptus rufoannulatus.** Type.—Female, yellow label 286. 1st Coll. Pub. Mus., Quebec.

**Cryptus rufus.** Type.—Male, yellow label 259. 2nd Coll. Pub. Mus., Quebec. Lacks right flagellum.

**Cryptus scutellatus.** Type.—Male, yellow label 282. 1st Coll. Pub. Mus., Quebec. Lacks apices of antennæ some tarsi, and abdomen has been glued on.

**Cryptus segregatus.** Type.—Male, Harrington Coll. Pink label "P. 422."

**Cryptus sericeifrons.** Type.—Female, yellow label 515. 2nd Coll. Pub. Mus., Quebec. Most of flagellum gone. No male in Coll.

Cryptus signatus.—See Phygadeuon signatus.

**Cryptus sordidus.** Type.—Female, Harrington Coll. Pink label "P. 373." Abdomen off but glued on card.

Cryptus soriculatus. Type.—Male, yellow label 697. 2nd Coll. Pub. Mus., Quebec. Lacks right antenna.

Cryptus spissicornis. (Addit. 1886, p. 68, not suppl. p. 361). Type.—Not in Pub. Mus., Quebec, unless under *Cryptus crassicornis* of which there is one specimen agreeing with description of *spissicornis*.

**Cryptus spissicornis.** (1888, suppl. p. 361 not Addit., 1886, p. 68). Type.—Female, yellow label 1582. 2nd Coll. Pub. Mus., Quebec.

**Cryptus 3-annulatus.** Type.—Not in Pub. Mus., Quebec. Probably in Harrington Coll.

**Cryptus varius.** Type.—Not in Pub. Mus., Quebec, unless under name *Cryptus atricollaris* Walsh.

Cteniscus apicatus. Type.—Male, yellow label 341. 2nd Coll. Pub. Mus., Quebec. Lacks antennæ.

Cteniscus concolor. Type.—Female, yellow label 321. 2nd Coll. Pub. Mus., Quebec. Under name *Mesoleptus concolor* Cress. Lacks most of antennæ.

**Cteniscus crassipes.** Type.—Not in Pub. Mus., Quebec. Probably returned to collector.

**Cteniscus rufus.** Type.—Public Mus., Quebec. Data from pin not obtained.

**Ctenopelma sanguinea.** Type.—Pub. Mus., Quebec. Data from pin not obtained.

Cylloceria lemoinei. Type.—Male, yellow label 470. 2nd Coll. Pub. Mus., Quebec. Lacks apices of antennæ.

**Cyrtocentrus quebecensis.** Type.—Female, yellow label 693. 2nd Coll. Pub. Mus., Quebec. Antennæ wanting beyond third joint.

Dacnusa crassitela. Type.—Female, yellow label 1299. 2nd Coll. Pub. Mus., Quebec. Antennæ broken, right at scape, left at seventh joint.

Dacnusa spatulata. Type.—Female, yellow label 1305, blue label 669. 2nd Coll. Pub. Mus., Quebec. Antennæ broken at tips.

**Decatoma basilaris.** Type.—Not in Pub. Mus., Quebec, unless under *Isosoma hordei*.

Diastrophus piceus. Type.—White label 3(s); yellow label 1325. 2nd Coll. Pub. Mus., Quebec.

Diastrophus 5-costatus. Type.—Not located.

Dimicrostrophis nigricornis. Type.—Mica point, blue label 759(s); yellow label 1664. 2nd Coll. Pub. Mus., Quebec.

Dineura americana. Type.—Yellow label 639. 2nd Coll. Pub. Mus., Quebec. Lacks left flagellum.

Dinocamptus linearis. Type.—Yellow label 1275. 2nd Coll. Pub. Mus., Quebec. Thorax broken by pin and abdomen crushed out of shape at apex. Sex of type uncertain but believed to be female.

Dinotus acutus. Type.—Yellow label 1385. 2nd Coll. Pub. Mus., Quebec. Badly glued; another specimen in better condition.

**Dolichoderus borealis.** Type.—Yellow label 1603. 2nd Coll. Pub. Mus., Quebec.

Doryctes atripes. Type.—Female, yellow label 1262. 2nd Coll. Pub. Mus., Quebec.

**Doryctes bæticatus.** Type.—Yellow label 557. 2nd Coll. Pub. Mus., Quebec. Abdomen wanting.

**Doryctes cingulatus.** Type.—Female, yellow label 556. 2nd Coll. Pub. Mus., Quebec. Lacks flagella.

**Doryctes fartus.** Type.—Female, yellow label 558. 2nd Coll. Pub. Mus., Quebec.

**Doryctes macilentus.** Type.—Female, yellow label 559. 2nd Coll. Pub. Mus., Quebec. No male in collection.

**Doryctes pallipes.** Type.—Female, yellow label 1569. 2nd Coll. Pub. Mus., Quebec.

Echthrus canadensis. Type.—Female, yellow label 468. 2nd Coll. Pub. Mus., Quebec. Some verdigris.

**Echthrus luctuosus.** Female, yellow label 521. 1st Coll. Pub. Mus., Quebec. Lacks apex of left antenna and abdomen.

**Echthrus nigricornis.** Type.—Male, yellow label 421. 2nd Coll. Pub. Mus., Quebec. Fair.

Echthrus pediculatus. Type.—Female, yellow label 937. 2nd Coll. Pub. Mus., Quebec.

Echthrus provancheri. Type.—Female, yellow label 1143; printed name label. 2nd Coll. Pub. Mus., Quebec. Considered as Brodie's species. The description was first published by Provancher and there is no indication that it was quoted from Brodie. Provancher indicates that it is his description so the species should, unfortunately, be accredited to Provancher.

**Echthrus rubripes.** Type.—Female, yellow label 1064. 2nd Coll. Pub. Mus., Quebec. Left wings gone.

**Eclytus pleuralis.** Type.—Female, yellow label 410. 1st Coll. Pub. Mus., Quebec.

Eclytus robustus. Type.—Female, yellow label 996. 2nd Coll. Pub. Mus., Quebec. Abdomen and part of antennæ gone.

Elis dives. Type.—Female, Cat. No. 1971, U. S. Nat. Mus. Elis 4-cinctus. Type.—Male, Cat. No. 1972, U. S. Nat. Mus. Emphytus hullensis. Type.—Harrington Coll.

Emphytus nigristigma. Type.—Yellow label 1543; name label "Nematus nigristigma." 2nd Coll. Pub. Mus., Quebec. Provancher's catalogue proves this.

Emphytus pallipes. Type.—Female, yellow label 35. 1st Coll. Pub. Mus., Quebec. Specimen without label, paratype.

**Ephedrus completus.** Type.—See introduction (Aphidiinæ).

**Ephedrus incompletus.** Type. — See introduction (Aphidiinæ).

**Ephialtes variatipes.** Type.—Harrington Coll. teste Davis. Not in Pub. Mus., Quebec.

Epirhyssa clavata. Type.—Female, yellow label 1260. 2nd Coll. Pub. Mus., Quebec. Lacks abdomen and apices of antennæ.

**Epirhyssa crevieri.** Type.—Male, yellow label 388. 2nd Coll. Pub. Mus., Quebec.

**Epyris formicoides.** Type.—White label "Hull 25–8-84 Rus"; blue label 312; yellow label 1028. 2nd Coll. Pub. Mus., Quebec.

**Eypris prolongatus.** Type.—Yellow label 744(s). 2nd Coll. Pub. Mus., Quebec. Abdomen gone.

Eriocampa marginata.—See Selandria.

**Eriocampa superba.** Type.—Female, yellow label 1544. 2nd Coll. Pub. Mus., Quebec.

**Erronemus bedardi.** Type.—Female, yellow label 658. 2nd Coll. Pub. Mus., Quebec.

Erronemus marginatus. Type.—Female, yellow label 989. 2nd Coll. Pub. Mus., Quebec.

Erronemus tristis. Type.—Female, blue label 594. 2nd Coll. Pub. Mus., Quebec. Left antenna gone.

Eubadizon basilare. Type.—Not located.

**Eubadizon californicus.** Type.—Female, yellow label 1489. 2nd Coll. Pub. Mus., Quebec. Antennæ broken beyond middle, head broken off and mounted on tag.

**Eubadizon gracilis.** Type.—Female, yellow label 603. 2nd Coll. Pub. Mus., Quebec. One antenna and left hind tarsi broken.

**Eucerceris insignis.** Type.—Male, white label 77(s); yellow label 1626. 2nd Coll. Pub. Mus., Quebec.

• Eucharis gibbosa. Type.—Yellow label 623. 2nd Coll. Pub. Mus., Quebec. Head gone.

**Eucoila minor.** Type.—Not located.

**Eulophus ramosus.** Type.—Yellow label 924. 2nd Coll. Pub. Mus., Quebec. Fair.

**Eulophus tricladus.** Type.—Harrington Coll. Paratype, yellow label 1374; blue label 754. 2nd Coll. Pub. Mus., Quebec. Fair.

**Eumenes cinctus.** Type.—Female, round disk, yellow label 1643. 2nd Coll. Pub. Mus., Quebec. Poor condition, dirty, etc.

**Eumenes crucifera.** Type.—Female Cat. No. 1978, U. S. Nat. Mus.

**Eumenes flavopictus.** Type.—Female, round disk, yellow label 1644. 2nd Coll. Pub. Mus., Quebec.

**Eumenes impunctus.** Type.—Female, round disk, yellow label 1642. 2nd Coll. Pub. Mus., Quebec.

**Euphorus cephalicus.** Type.—Male, yellow label 1118. 2nd Coll. Pub. Mus., Quebec. One antenna gone, other showing 8 joints.Poorly tag-mounted.

**Euphorus punctatus.** Type.—Male, yellow label 991. 2nd Coll. Pub. Mus., Quebec. Badly pinned; head missing.

**Euplectrus lucens.** Type.—Yellow label 1369. 2nd Coll. Pub. Mus., Quebec. Fair.

Euplectrus mellipes. Type.—Female, Harrington Coll. Antennæ broken, one complete to fourth funicle joint. Paratype.—Yellow label 1363. 2nd Coll. Pub. Mus., Quebec. Two specimens, both badly glued.

**Euplectrus viridæneus.** Type.—Yellow label 1382; blue 771(s). 2nd Coll. Pub. Mus., Quebec. Fair.

Eurytoma conica. Type.—Harrington Coll.

Eurytoma nigricoxa. Type.—Harrington Coll.

Eustalocerus fasciatus. Type.—Female, blue label 701(s), vellow label 1281. 2nd Coll. Pub. Mus., Quebec. Lacks flagella.

**Eustalocerus longicornis.** Type.—Female, yellow label 1280. 2nd Coll. Pub. Mus., Quebec. Antennæ and hind tarsi, broken.

Eustalocerus petiolatus. Type. — Female, yellow label 1083. 2nd Coll. Pub. Mus., Quebec. Left antenna, median and posterior legs on left, missing.

**Eustalocerus tauricornis.** Type.—Female, yellow label 566. 2nd Coll. Pub. Mus., Quebec. One antenna gone.

**Euura nigra.** Type.—Yellow label 1538. 2nd Coll. Pub. Mus., Quebec. Another specimen with small, white label "161."

Euxorides vancouverensis. Type.—Female, yellow label 1556. 2nd Coll. Pub. Mus., Quebec. Lacks flagellum.

Exenterus canadensis. Type.—Not located. Allotype.—Female, yellow label 953. 2nd Coll. Pub. Mus., Quebec.

Exenterus hullensis. Type.—Male, Harrington Coll. Pink label "P. 581." Allotype.—Female, blue label 468, yellow label 1238. 2nd Coll. Pub. Mus., Quebec.

**Exetastes albitarsis.** Type.—Female, yellow label 376. 1st Coll. Pub. Mus., Quebec.

**Exetastes brevipennis.** Type.—Not in Pub. Mus., Quebec, unless under *Mesostenus promptus* Cress.

Exetastes clavatus. Type.—Not located.

**Exetastes matricus.** Type.—Female, yellow label 531. 2nd Coll. Pub. Mus., Quebec. Right antenna at scape, left before the middle, anterior and median legs on right at coxæ gone.

**Exetastes rufofemoratus.** Type.—Female, yellow label 310. 2nd Coll. Pub. Mus., Quebec.

Exetastes rufus.—See Ceratosoma.

**Exochilum nigrum.** Type.—Female, yellow label 279. 2nd Coll. Pub. Mus., Quebec. Left antenna gone, right broken at apex, hind tarsi broken at third joint.

**Exochus rufomaculatus.** Type.—Female, blue label 562. 2nd Coll. Pub. Mus., Quebec.

**Exolytus politus.** Type.—Female, yellow label 365. 1st Coll. Pub. Mus., Quebec.

**Exyston marginatum.** Type.—Not in Pub. Mus., Quebec. Probably returned to collector.

**Exyston variatus.** Type.—Male, yellow label 324. 2nd Coll. Pub. Mus., Quebec.

# LECTOTYPES OF THE SPECIES OF HYMENOPTERA (EXCEPT APOIDEA) DESCRIBED BY ABBÉ PROVANCHER.

BY A. B. GAHAN AND S. A. ROHWER, BUREAU OF ENTOMOLOGY, WASHINGTON, D. C.

(Continued from page 400.)

**Figites inermis.** Type.—Female, yellow label 619. 2nd Coll. Pub. Mus. Quebec.

Formica pallitarsis. Type.—Yellow label 925. 2nd Coll. Pub. Mus., Quebec. Fair.

Galesus quebecensis. Type.—Yellow label 912. 2nd Coll. Pub. Mus., Quebec.

Glypta californica. Type.—Female, white label 8, yellow label 1292. 2nd Coll. Pub. Mus., Quebec.

Glypta ruficornis. Type.—Male, yellow label 490. 1st Coll. Pub. Mus., Quebec. Bears name label Glypta macra Cress.

Glypta rugulosa. Type.—Yellow label 986. 2nd Coll. Pub. Mus., Quebec. Thorax and wings present.

Glypta tricincta. Type.—Not located.

Gonatopus decipiens. Type.—Yellow label 1332. 2nd Coll. Pub. Mus., Quebec. Badly glued.

Gorytes armatus. Type.—Male, old rose label 256(s), blue label 845(s), yellow label 1434. 2nd Coll. Pub. Mus., Quebec.

Gorytes eximius. Type.—Male, white label 29(s), yellow label 1436. 2nd Coll. Pub. Mus., Quebec.

Gorytes laticinctus. Type.—Not located. Probably returned to collector.

Gorytes maculatus. Type.—Male, yellow label 1726. 2nd Coll. Pub. Mus., Quebec.

Gorytes ruficornis. Type.—Female, white label 36(s), yellow label 1435. 2nd Coll. Pub. Mus., Quebec.

Haltichella viridis. Type.—Blue label 110(s); yellow, 1394. 2nd Coll. Pub. Mus., Quebec.

Hedylus politus. Type.—See Introduction (Opiinæ).

Helorus paradoxus. Type.—Female, yellow label 971.

December, 1917

2nd Coll. Pub. Mus., Quebec. Lacks head. Paratype in good condition.

Hemiteles aciculatus. Type. — Male, Harrington Coll. Pink label "P. 426." Lacks right antenna and apex of left.

Hemiteles caudatus. Type.—Female, yellow label 306. 1st Coll. Pub. Mus., Quebec. Lacks abdomen.

Hemiteles crassus. Type.—Male, yellow label 720. 2nd Coll. Pub. Mus., Quebec. Some tarsi gone.

Hemiteles debilis. Type.—Harrington Coll. One antennæ gone, other broken at apex.

Hemiteles declivus. Type. — Female, Harrington Coll. Antennæ gone. Paratype. — Old rose label 33, yellow label 1199. 2nd Coll. Pub. Mus., Quebec.

Hemiteles depressus. Type.—Not located.

Hemiteles gigas. Type.—Male, Harrington Coll. Pink label "P. 411."

**Hemiteles humeralis.** Type.—Female, yellow label 233. 2nd Coll. Pub. Mus., Quebec.

**Hemiteles longicornis.** Type.—Female, yellow label 671. 2nd Coll. Pub. Mus., Quebec.

Hemiteles mandibularis. Type.—Female, yellow label 307. 1st Coll. Pub. Mus., Quebec.

Hemiteles mucronatus. Type.—Male, blue label 213, yellow label 1198. 2nd Coll. Pub. Mus., Quebec. Lacks left fore wing.

Hemiteles nigricans. Type.—Male, yellow label 673. 2nd Coll. Pub. Mus., Quebec. Apices of antennæ gone, wings crumpled.

Hemiteles orbicularis. Type.—Not in Pub. Mus., Quebec, unless under *Stilpnus americanus* Prov.

Hemiteles ovalis. Type.—Female, yellow label 316. 1st Coll. Pub. Mus., Quebec. Lacks right and apex of left antenna. Allotype.—Not located.

Hemiteles pallipennis. Type.—Female, yellow label 672. 2nd Coll. Pub. Mus., Quebec. Lacks left antenna and apex of right. Allotype.—In good condition, without labels. 2nd Coll. Pub. Mus., Quebec.

**Hemiteles parvus.** Type.—Male, yellow label 226. 2nd Coll. Pub. Mus., Quebec. Fair.

**Hemiteles ruficoxus.** Type.—Female, yellow label 228. 2nd Coll. Pub. Mus., Quebec. Some verdigris.

Hemiteles scabrosus. Type.—Female, yellow label 225. 2nd Coll. Pub. Mus., Quebec. Lacks apex of right flagellum.

**Hemiteles semifurus.** Type.—Female, yellow label 314. 1st Coll. Pub. Mus., Quebec. Without head.

**Hemiteles sessilis.** Type —Female, yellow label 309. 1st Coll. Pub Mus., Quebec.

Hemiteles subspinosus. Type.—Female, Yellow label 232. 2nd Coll. Pub. Mus, Quebec. Lacks antennæ.

**Hemiteles tener.** Type.—Male, yellow label 311. 1st Coll. Pub. Mus., Quebec. Somewhat damaged.

**Hemiteles utilis.** Type.—See *H. depressus* Prov.

Herpestomus pyriformis. Type.—Female, yellow label 200. 2nd Coll. Pub. Mus., Quebec.

**Heteropelma longipes.**Type.—Cat. No. 1966, U. S. Nat. Mus.

Holcopelte albipes. Type.—Yellow label 1378; blue 774(s). 2nd Coll. Pub. Mus., Quebec. Fair.

**Hoplismenus impar.** Type.—Pub. Mus., Quebec. Data not obtained.

Hoplismenus scutellatus. See Ichneumon.

**Hoplismenus stygicus.** Type.—Not located, probably returned to collector.

**Hoplisus angustus.** Type.—Male, yellow label 1688. 2nd Coll. Pub. Mus., Quebec.

Hoplocampa canadensis. See Selandria.

Ichneumon absconditus. Type.—Male, yellow label 1210. Mus. Pub. Instruction, Quebec. Right antenna broken, left fore wing missing, thorax crushed but complete, hind tarsi broken, 3 basal joints of right present.

Ichneumon adjunctus. Type.—Female, blue label 93, yellow label 1189? (or one hundred and eighty-nine). 2nd Coll. Pub. Mus., Quebec.

Ichneumon æqualis. Type.—Not in Pub. Mus., Quebec, unless under Amblyteles nubivagus Cress.

Ichneumon annulatus. Type.—Male, yellow label 211. 1st Coll. Pub. Mus., Quebec. Right antenna broken off at scape.

Ichneumon approximans. Type.—Male, old rose label 31, yellow label 1193. 2nd Coll. Pub. Mus., Quebec.

**Ichnuemon aterrimus.** Type.—Not in Quebec or Ottawa. Probably returned to collector.

Ichneumon bimaculatus. Type.—Male, blue label 380, yellow label 1580. 2nd Coll. Pub. Mus., Quebec. Right antenna, front legs, left middle leg and left hind wing missing.

Ichneumon bimembris. Type.—Female, yellow label 99. Pub. Mus., Quebec.

Ichneumon calcaratus. Type.—Not in Pub. Mus., Quebec, unless under *Hoplismenus morulus* Say.

Ichneumon caudatus. Type.—Female, yellow label 139. 2nd Coll. Pub. Mus., Quebec. Verdigris.

Ichneumon cervulus. Type.—Male, yellow label 134. 2nd Coll. Pub. Mus., Quebec.

Ichneumon cinctipes. Type.—Not in Pub. Mus., Quebec, unless under *I. navus*. One specimen female, yellow label 161. 1st Coll. Pub., Mus., Quebec.

Ichneumon cinctitarsis. Type.—Male, yellow label 112. Pub. Mus., Quebec. Right antenna missing.

Ichneumon citatus. Type.—Male, yellow label 162. 1st Coll. Pub. Mus., Quebec. Lacks right antenna.

**Ichneumon citrinus.** Type.—Female, Harrington Coll. Antennæ and wings on one side gone, abdomen broken off, mounted on label.

Ichneumon clapini. Type.—Not in Pub. Mus., Quebec, unless under Ichneumon milvūs.

Ichneumon cressoni. Type.—Not in Pub. Mus., Quebec, unless under I. velox Cress.

Ichneumon decoratus. Type.—Male, yellow label 135. 2nd Coll. Pub. Mus., Quebec. Right antenna broken.

Ichneumon erythropygus. Type.—Not in Pub. Mus., Quebec, unless under *Platylabus thoracicus* Cress.

Ichneumon fortis. Type.—Not in Pub. Mus., Quebec, unless under Ichneumon centrator Say.

Incheumon hæsitans. Type.—Not in Pub. Mus., Quebec, unless under *Ichneumon funestus* Cress.

Ichneumon humilis. Type.—Female, yellow label 138. 2nd Coll. Pub. Mus., Quebec. Antennae gone.

Ichneumon lachrymans. Type.—Male, yellow label 136. 2nd Coll. Pub. Mus., Quebec.

Ichneumon lividulus. Type.—Female, yellow label 144. 2nd Coll. Pub. Mus., Quebec.

Ichneumon lobatus. Type.—Not in Pub. Mus., Quebec, unless under Ichneumon duplicatus Say.

Ichneumon magdalensis. Type.—Not located.

Ichneumon marianapolitanensis. Type.—Not in Pub. Mus., Quebec, unless under Amblyteles rufizonatus Cress.

Ichneumon mellicoxus. Type. — Not in Pub. Mus., Quebec, unless under *Ichneumon puerilis* Cress.

Ichneumon mucronatus. Type.—Male, yellow label 214. 1st Coll. Pub. Mus., Quebec. Antennæ, left front wing, hind legs, median tarsus on right leg, left anterior tibiæ and tarsi missing.

Ichneumon nigripes. Type.—Male, yellow label 987. 2nd Coll. Pub. Mus., Quebec. Antennæ broken near middle.

Ichneumon nigrovariegatus. Type.—Female yellow label 137. 2nd Col'. Pub. Mus., Quebec. Right antenna except scape gone, left antenna broken off near middle, abdomen glued on.

**Ichneumon nitidus.** Type.—Not in Pub. Mus., Quebec, unless under *Amblyteles electus* Cress.

Ichneumon ontariensis. Type.—Male, yellow label 1191, pink label 30. Pub. Mus., Quebec.

**Ichneumon paradoxus.** Type.—Not located.

Ichneumon pilosulus. Type.—Female, yellow label 168. 1st Coll. Pub. Mus., Quebec. Antennæ broken (one at 4th joint and one at middle) and left hind leg gone.

**Ichneumon placidus.** Type.—Male, yellow label 142. 2nd Coll. Pub. Mus., Quebec.

Ichneumon pomilius. Type.—Male, yellow label 123. 2nd Coll. Pub. Mus., Quebec.

Ichneumon proximus. Type.—Female, yellow label 163. 2nd Coll. Pub. Mus., Quebec.

**Ichneumon quadripunctatus.** Type.—Not located. Probably overlooked in Harrington Coll.

Ichneumon saguenayensis. Type.—Not located.

Ichneumon scutellatus. Type.—Male, yellow label 167. 2nd Coll. Pub. Mus., Quebec. Right antenna and right hind tarsus gone.

Ichneumon similaris. Type.—Male, yellow label 113. 2nd Coll. Pub. Mus., Quebec.

Ichneumon stygicus. Type.—Yellow label 167. 1st Coll. Pub. Mus., Quebec.

Ichneumon trizonatus. Type.—Male, yellow label 118. 2nd Coll. Pub. Mus., Quebec.

Ichneumon ustus. Allotype.—Male, yellow label 510. 2nd Coll. Pub. Mus., Quebec.

Ichneumon vagans. Type.—Yellow label 170. 1st Coll. Pub. Mus., Quebec. Apex of right antenna gone.

**Ichneumon vancouverensis.** Type.—Ent. Branch, Dept. Agr., Ottawa.

Ichneumon varipes. Type.—Not in Pub. Mus., Quebec, unless under Ichneumon w-album Cress.

Ichneumon vescus. Type.—Male, yellow label 122. 2nd Coll. Pub. Mus., Quebec.

Iphiaulax americanus. Type.—Female, yellow label 1566. 2nd Coll. Pub. Mus., Quebec. Left fore wing loose.

Iphiaulax ornatus. Type.—Female, yellow label 542. 2nd Coll. Pub. Mus., Quebec.

Ischnus impressus. See Phygadeuon.

**Ischnus lentus.** Type.—Not in Pub. Mus. of Quebec unless under *Cryptus limatus* Cress.

Ischnus parvus. See Hemiteles.

Ischnus placidus. Type.—Not in Coll. Pub. Mus., Quebec, unless under *Phygadeuon rectus* Prov.

Ischnus pyriformis. See Herpestomus.

Ischnus ruficornis. See Phygadeuon.

Ischnus scutellatus. See Platylabus.

Ischnus variegatus. Type.—Not in Pub. Mus., Quebec, unless under Ichneumon w-album Cress.

Isostasius canadensis. Type.—Not located.

Joppa canadensis. Type.—Not in Pub. Mus., Quebec, unless under *Ichneumon insolens* Cress.

Labidia columbiana. Type.—Pin with yellow label 1152. 2nd Coll. Pub. Mus., Quebec. Specimen has been destroyed.

Lampronota albifacies. Type.—Yellow label 409. Name label Lampronota pleuralis. Cress. 2nd Coll. Pub. Mus., Quebec. Proved by Prov. catalogue.

Lampronota humeralis. Type.—Male, yellow label 417. 2nd Coll. Pub. Mus., Quebec. Lacks antennæ.

• Lampronota marginata. Type.—Female, yellow label 954. 2nd Coll. Pub. Mus., Quebec.

Lampronota nigricornis. Type.—Female, yellow label 501. 1st Coll. Pub. Mus., Quebec. Lacks apical half of right antenna.

**Lampronota nigripes.** Type.—Not in Pub. Mus., Quebec. Probably returned to collector.

Lampronota rufipes. Type.—Provancher did not describe this as a new species. Two females, Pub. Mus., Quebec. One, yellow label 503, 1st Coll.; other, yellow label 532, 2nd Coll. Both under name label *Lampronota rufipes* Cress.

Larra minor. Type.—Male, blue label 77(s), yellow label 1430. 2nd Coll. Pub. Mus., Quebec.

Larra quebecensis. Type.—Not located.

Larra rufipes. Type.—Female, white label 99(s); yellow label 1715. 2nd Coll. Pub. Mus., Quebec.

Leptobates canadensis. Type.—Not in Pub. Mus., Quebec, unless under *Phygadeuon signatus* Prov.

Leptothorax canadensis. Type.—Not located.

Limneria argentea. Type.—Female, yellow label 471. 2nd Coll. Pub. Mus., Quebec. Antennæ broken at tip, median and hind legs on left gone at coxæ.

Limneria basilaris. Type.—Male, yellow label 449. 2nd Coll. Pub. Mus., Quebec. Right antenna and left median leg missing.

Limneria brevicauda. Type.—Female, blue label 252 (apparently, blotted), yellow label 1221. 2nd Coll. Pub. Mus., Quebec. Left antenna gone at scape.

Limneria clavata. Type.—Female, yellow label 301. 2nd Coll. Pub. Mus., Quebec. Lacks left antenna at scape, right at apex, anterior and median legs on left.

(To be continued)