

1—Cephalic view of female head, 2—Caudal view of female head, 3—Female antenna, 4—Right mandible of female, 5—Left mandible of female, 6—Male antenna, 7—Inner surface of female labium showing hypopharynx, 8—Labium of female, 9—First maxilla of female, 10—Tentorium of female, 11—First maxilla and labium of female, 12—Wings of female, 13—Base of fore wing of female, 14—Thorax of female, 15—Metathoracic leg of female, 16—Genitalia of female, 17—Base of hind wing of female, 18—Thoracic tergum of female—ectal surface, 19—Thoracic tergum of female—ental surface, 20—Pretarsus of female leg—outer surface, 21—Pretarsus of female leg—inner surface, 22—Aedeagus of female—half, 23—Genitalia of male—ventral surface, 24—Genitalia of male—dorsal view, 25—Thoracic sternum—ectal surface, 26—Thoracic sternum—ental surface, 27—Distal end of male abdomen, 28—Distal end of female abdomen.

LIST OF ABBREVIATIONS

a—mandibular condyle, acp—anteclypeus, acs—antecostal suture, aed—aedcagus, an—anus, anp—anterior notal wing process, ap—antennal pivot, ar—arolium, as—antennal sclerite, at—anterior arm of tentorium, atg—acrotergite, ax—axillaries, arc—axillary cord, bex—basicoxa, bp—process of 2nd valvula, bs—basisternum, c—point of articulation, C—costa, cd—cardo, Cu—cubitus, cx—coxa, da—dorsal arm of tentorium, dl—dorsal lobe, e—compound eye, ep—epipleurite, epm—epimeron, eps—episternum, es—epistomal suture, est—eusternum, eu—euplantula, f—femur, for—forum magnum, fs—furcasternum, fu—furca, ga—galea, gl—glossa, h—hamuli, hp—humeral plate, hphy—hypopharynx, hyp—hypandrium, i—median notal suture, k—unguifer, l—trans scutal suture, lbplp—labial palpus, lm—labrum, M—media, m—media cross vein, m-cu—medio-cubital cross vein, md—mandible, me—median plate, mxplp—maxillary palpus, no—convergent suture, o—ocellus, os—occipital sclerite, par—parapsidal suture, pcp—postclypeus, Pcu—postcubitus, pe—pedicel, pgl—paraglossa, ph—phragma, phb—phallobase, pis—pleural suture, pm—paramere, pmt—postmentum, pn—postnotum, pnp—postnotal wing process, poc—postocciput, pos—postoccipital suture, prmt—prementum, prs—presternum, ps—parietal suture, psc—prescutum, ptar—pretarsus, pt—posterior tentorial pit, R—radius, r-m—radio-medial cross vein, rlv—ramus of 1st valvula, r2vl—ramus of 2nd valvula, s—sternum, Sc—subcosta, scl—scutellum, scp—scape, sct—scutum, smt—submentum, soc—socius, sp—spiracle, ss—spinasternum, st—stipes, sti—stigma, t—tergum, tar—tarsus, tb—tentorial bridge, tba—tibia, tc—tarsal, tg—tegula, tor—torma, tr—trochanter, ts—transverse prescutal suture, tsr—tibial spur, ung—unguifactor, V—vanual vein, vl—valvula, vlb—ventral lobe, vlf—valvifer, vs—scutoscutellar suture, wp—wing process.

A NEW SPECIES OF PHILOPTERUS (MALLOPHAGA) FROM THE LONG-BILLED CURLEW.

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The species description presented is based on specimens taken by E. R. Tinkham from the long-billed curlew (*Numenius americanus* Wils.) collected at Presidio, Texas, May 26, 1929. The specimens are a part of the University of Minnesota collection which has been loaned to the writer for study and identification during the past few years. I am deeply indebted to Prof. C. E. Mickel for his kindness in regard to the loans from the Minnesota collections.

Osborn in 1896 reported *Philopterus testudinarius* (Denny) from *Numenius americanus*. In a recent exchange of specimens with G. B. Thompson of the British Museum of Natural History, the writer received two males of *P. testudinarius* from the type host *Numenius arquatus* (Linn.). A careful comparison of the dissected male genitalia shows that, while the specimens from *Numenius americanus* Wils. closely resemble *Philopterus testudinarius* (Denny), they should be recognized as belonging to a distinct species.

Philopterus (Cummingsiella) longirostricola sp. nov.

Female Fig. 1. Body form, proportions and chaetotaxy are best described by the figure, the outline of which is a tracing of a microprojection of the holotype. The length of the head of the specimen is .897 mm. and its width is

.850 mm. With these measurements the dimensions of any structure may be computed from the figure.

The following head measurements from specimens picked at random are an indication of the size and variability of this form.

Head length	.874	.937	.920	.874	.860	.910	.920	.963	.924	.924
Head width	.858	.874	.874	.831	.831	.884	.871	.911	.858	.897

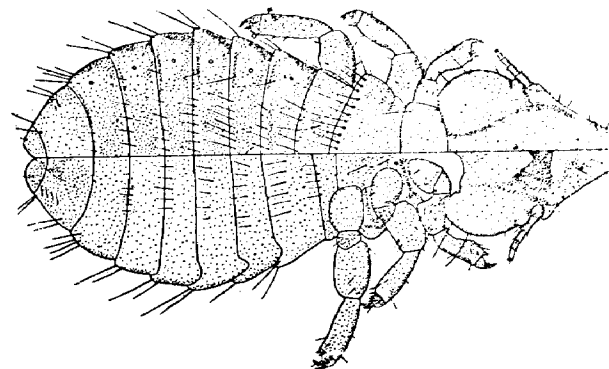


Figure 1. Female of *Philopterus longirostricola* sp. nov. 78X. The upper side shows the dorsal surface and the lower the ventral surface.

Male. The male although smaller, resembles the female closely in body proportions and chaetotaxy. Ventral median blotches, over one half the width of the segment in which they are located, are conspicuous on segments 2-6 inclusive. Such blotches are not noticeable in the female. The terminal segment of the abdomen is broadly and evenly rounded. The penultimate segment has a shorter lateral margin than does any one of the other abdominal segments.

The following head measurements of males give an indication of size and variability.

Head length	.850	.858	.821	.884	.841	.858	.818	.851	.831	.831
Head width	.818	.818	.818	.821	.805	.818	.792	.818	.818	.805

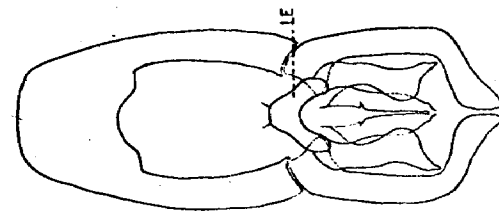


Figure 2. Ventral view of the male genitalia. 150X. LE is the lower endomere.

Male Genitalia Fig. 2. Differs from the copulatory apparatus of *P. testudinarius* in the absence of the median splint and the presence of two lateral barbs on the penis. The posterior tips of the lower endomere are bluntly rounded whereas the lower endomere of *P. testudinarius*, not clearly shown by Cummings 1916, is crescent shaped with the posterior tips acutely pointed. The penis of *testudinarius* tapers evenly whereas in *longirostricola* the penis narrows abruptly posterior to the barbs.

The nomenclature used in describing the male genitalia is, for the sake of ready comparison, that used by Cummings 1916 in describing the genitalia of *P. testudinarius*.

Holotype and allotype and seventeen paratypes have been deposited in the University of Minnesota collection.

It is the opinion of the writer that type specimens should be distributed as widely as the number of specimens permits so that they will be as available as possible to present and future taxonomic workers. Thus the seventeen paratypes allotted to the writer are deposited in the following entomological collections.

United States National Museum, Washington, D. C.; Canadian National Collection, Ottawa Can.; British Museum of Natural History, London; Stanford University, California; Tulane University of Louisiana, New Orleans. Herbert Osborn, Columbus, Ohio; G. A. H. Bedford, Onderstepoort, Union of South Africa. The remaining paratypes are in the Cornell University collection.

REFERENCES

Cummings, B. F. 1916. Studies on the Anoplura and Mallophaga. Proc. Zool. Soc. London pp. 643-693.

Osborn, H. 1896. Insects affecting domestic animals. U. S. Dept. of Agr. Bull. No. 5, New Series.

MYIASIS IN THE FOOT OF A RAT BY *WOHLFAHRTIA MEIGENII* SCHINER. (DIPTERA, METOPIIDAE).

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Cases of human myiasis have been recorded, on various occasions, from a number of widely scattered localities in Alberta. In several instances the causative larvae have been placed in alcohol and sent to this department for identification.

Unfortunately, with two exceptions, these were all in the first instar and were, therefore, too immature for this to be possible.

In 1933, a second instar larva, taken from the head of an Indian girl in an Edmonton hospital, was forwarded to Dr. E. M. Walker at Toronto University. He suggested that it might be *Wohlfahrtia meigenii* Schin. Again, in January 1934, a first instar larva was received from a child at Claresholm. The clinical history of the case had been as follows. The right knee was observed to be swollen. This subsided in a few days, when another swelling appeared in the region of the mid-thigh. On the following day a similar swelling was observed in the lumbar region. At this time a doctor was called in to examine the case. He did not observe further symptoms at the sites of the swellings but found the temperature to be 99.30. The swellings had subsided by the following day but a new one, which appeared to be more inflamed, had appeared on the right lower chest. A small vesicle could be seen in its center. On the following