كلية الاداب والعلوم

متحف لتاريخ الطبيعي ليزاقي نشرة دقم ١١

# ستة براغيث جديدة من العراق

بقلم **سی ۰ انْدُ**رس**ون هابرد** ( د ۰ ف )

تيكارد \_ اوريكؤن ( الولايات المتحدة الاميركية )

قدمه باللغة العربية بشير اللوس (م٠ع٠) مدير متحف التاريخ الطبيعي ببغداد



تاريخ النشر: ۲۰ كانون الاول ١٩٥٦

مطبعة الرابطة - بغداد

# موتدمه

# بقلم : بشير اللوس مدير متحف التاريخ الطبيعي

يسرنا ان نستهل هذه المقدمة بالتعريف بالمؤلف الدكتور « اندرسن هابرد » فهو أحد اساتذة علم الحيوان في جامعة Oregon الاميركية ومن الاختصاصيين المعروفين في علم الحشرات ولا سيما مجموعة البراغيث ، وله في هذا الموضوع مقالات علمية وكتاب معروف عنوانه « براغيث الولايات المتحدة الغربية » يعتبر من المراجع المهمة للباحثين •

وفى أواخر عام ١٩٥٢ جاء الى العراق موفدا من مؤسسة فولبرايت (Fulbright) التى منحته زمالة مدتها ٦ أشهر لاجراء البحوث والتحريات عن أنواع البراغيث التى توجد فى العراق والمضايف التى تتطفل عليها ومعرفة الانواع التى لها علاقة بنقل وباء الطاعون فى أقطار الشرق الاوسط • وقد اتخذ مقره فى متحف التاريخ الطبيعى العراقى حيث وجد الامكانيات والتسهيلات الكفيلة بنجاح مهمته •

وفى فترة مكونه فى العراق قام بمفرده أو بالاشتراك مع بعض موظفى المتحف بسفرات متعددة فى انحاء القطر جمع فى خلالها أنواعا من اللبائن الحية بمصائده الخاصة ليستخلص البراغيث المتطفلة على جسمها وهكذا تكونت لديه مجموعة من البراغيث أولاها الدرس والتمحيص فى المتحف البريطانى والمتحف الوطنى فى واشنطون حيث توجد نماذج للمقارنة •

وقد تمخضت هذه الدراسة عن اكتشاف ستة براغيث جديدة ، اربعة منها في مرتبة الانواع (Species) واثنان في مرتبة الضروب (Subspecies) وقد وصفت في هذه النشرة وصفا علميا دقيقا وعززت الاوصاف بالرسوم

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التوضيحية اللازمة وذلك لفائدة العلماء والمختصين في هذا الموضوع • واحياء لذكرى العراق والذين عاضدوا المؤلف اثناء اشتغاله في المتحف فقد اطلق على معظم تلك البراغيث اسماء عراقية وذلك ليعبر عن اعترافه بالمساعدات التي قدمت له في العراق على الاخص •

وها تندا أذكر فيما يلى أسماء البراغيث الجديدة التي وصفت في هذه الرسالة لاول مرة:

#### (1) Coptopsylla smiti.

وهو نوع جديد أسماء المؤلف على شرف الدكتور فرانس سميت الخبير بالبراغيث في المتحف البريطاني في ترنك (Tring) بانكلترة ٠

#### (2) Ctenopthalmus congener allousei.

وهو ضرب جديد اسماه المؤلف على شرف السيد بشير اللوس مدير متحف التاريخ الطبيعي في بغداد ٠

#### (3) Chiropteropsylla brockmani johnsoni.

وهو ضرب جديد آخر أسماه المؤلف على شرف المستر جونسون المحنط في متحف التاريخ الطبيعي في بغداد •

#### (4) Nosopsyllus pringlei.

وهو نوع جديد اسماه المؤلف على شرف الدكتور كوردن برينكل الخبير الفنى فى معهد الامراض المتوطنة التابع لكلية الطب الملكية العراقية فى بغداد .

# (5) Nosopsyllus durii.

وهو نوع جديد أسماه المؤلف على شرف الدكتور عبدالعزيز الدورى عميد كلية الا داب والعلوم ٠

#### (6) Nosopsyllus bunnii.

وهو نوع جديد أسماه المؤلف على شرف السيد منير بنى أحد مساعدى مدير المتحف سابقا والذى يدرس الان فى جامعة مشيكان الاميركية للحصول على درجة الدكتوراه •

ونود ان نشير أخيرا الى ان المؤلف قد أعد تقريرا شاملا للبراغيث في العراق والعالم العربي مع نبذة عن وباء الطاعون في الشرق الاوسط وسيقوم المتحف بنشر هذا التقرير الذي يقع في نحو ١٥٠ صفحة خلال عام ١٩٥٧٠

بشير اللوس

متحف التاريخ الطبيعي \_ بغداد ٢٠ كانون الاول ١٩٥٦

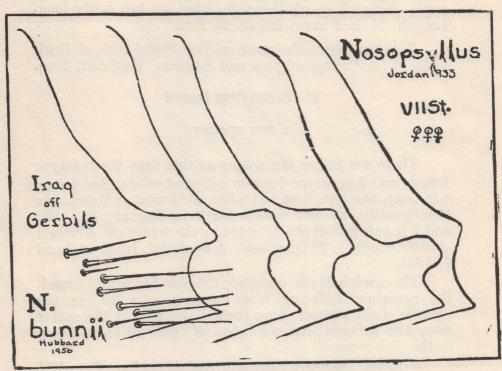


Fig. 6.

The proximal arm of st. IX is fairly straight and narrow, the distal arm is much narrower. Penis very characteristically shaped, like the open beak of a hooked beaked bird. Female. Apical margin of st. VII with a truncate lobe which is acute dorsally but rounded off ventrally, the armature consisting of a row of 5 bristles preceded by 1 or 2 smaller ones. Posterior margin of st. VIII forming an acute angle between the spiracle and the ventroposterior angle. Body of spermatheca globular, its tail fairly long. Length: Male 2 mm., female  $2\frac{1}{2}$  mm.

This flea bears the name of Dr. Abdul-Aziz el Duri, Dean of the College of Arts and Sciences, Baghdad, Iraq.

# 6. Nosopsyllus bunnii

# a new species

There are before the writer at this time the holotype female and 2 paratype females collected off Jaculus loftusi (Jerboa), the type host, 40 miles northwest of Basra, the type locality, by Dr. Robert Hatt on January 31, 1953 and 2 female paratypes collected by the writer off Meriones crassus (Gerbil), 20 miles west of Baghdad, Iraq, on April 4, 1953.

The head is nicely rounded; the eyes black and round, the armature differing from other Nosopsyllus in the absence of the bristles above the 3 major ones in the ocular row. The pronotal comb consists of from 20 to 22 black teeth.

Modified Segments: Female. Apical outline of st. VII developed into a strong block-like squarish lobe. There is some variation in the bulk of this lobe. The armature consists of a main row of 6 strong bristles and several smaller ones. The body of the spermatheca is globular, the tail medium. Length: the female is 2.75 mm. long. The male is not known.

This flea bears the name of Mr. Munir Bunni, Assistant to the Dirctor, Iraq Museum of Natural History, Baghdad, who was very helpful to the writer during his work in Iraq.

(Dec. 20, 1956.)

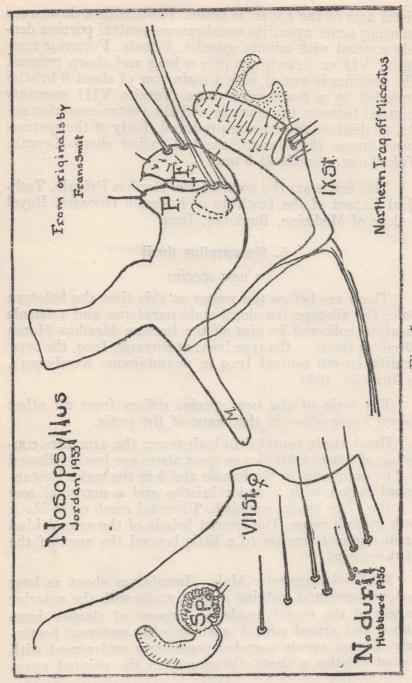


Fig. 5.

distal arm of the IX st. is broad. Penis with a downward pointing acute apex, its membranous ventral portion densely covered with minute spicules. Female. Posterior margin of VII st. drawn out into a long and sharp process. The sternum is armed with a main row of about 6 bristles preceded by a few smaller ones. Tergite VIII smoothly rounded between the spiracle and the ventro-posterior angle, no distinct angle being produced. Body of the spermatheca longer than broad, the tail rather short. Length: Male 2 mm., female  $2\frac{1}{2}$ -3 mm.

This flea bears the name of Dr. Gordon Pringle, Technical Expert of the Institute of Endemic Diseases, Royal College of Medicine, Baghdad, Iraq.

#### 5. Nosopsyllus durii

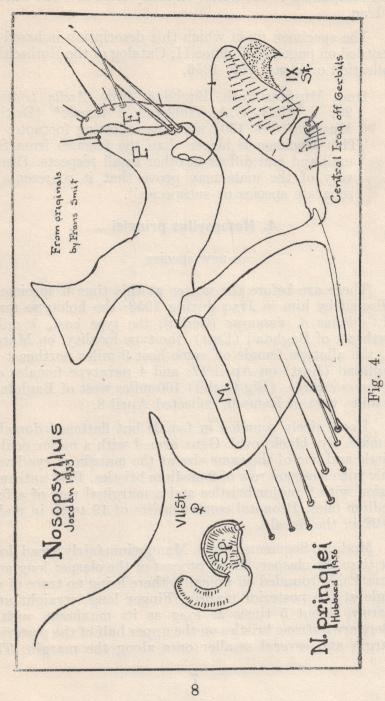
a new species

There are before the writer at this time the holotype male, the allotype female, 2 male paratypes and 1 female paratype collected by him off the Persian Meadow Mouse (Microtus irani), the type host, at Sirsang, Iraq, the type locality (north central Iraq in mountainous Kurdistan), on June 28, 1953.

The male of the new species differs from all other known Nosopsyllus in the shape of the penis.

Head nicely rounded in both sexes; the armature consisting of 3 major bristles on gena above eye level, followed by 2 medium ones in the female and 5 in the male. Postantennal region with 2 major bristles and a marginal row of a few. Eye black, roundish. Pronotal comb of 18 black teeth in both sexes. The longest bristle of the second hind tarsal segment reaches to a little beyond the apex of the third segment.

Modified Segments: Male. Manubrium about as long as the clasper and forming a right angle with the anterior margin of the tergal apodeme. Process of clasper dome shaped and armed with 3 small bristles; undercut posteriorly. Finger evenly rounded posteriorly and armed with 2 stout bristles a short distance from the pointed apex.



field companion to the writer on many trips into the wastes of Iraq.

The specimen upon which this description is based is recorded on page 364 Volume II, Catalog of the Rothschild Collection of Fleas, May 1956,

Iraq, Mustansiriyah, Baghdad, from Asella tridens, 26, V, 1953, C.A. Hubbard: 1 female\* (British Museum 1954. 159) with the following footnote: "This specimen is larger than the females from Somaliland and differs in other small respects. Discovery of the male may prove that it represents a separate species or subspecies".

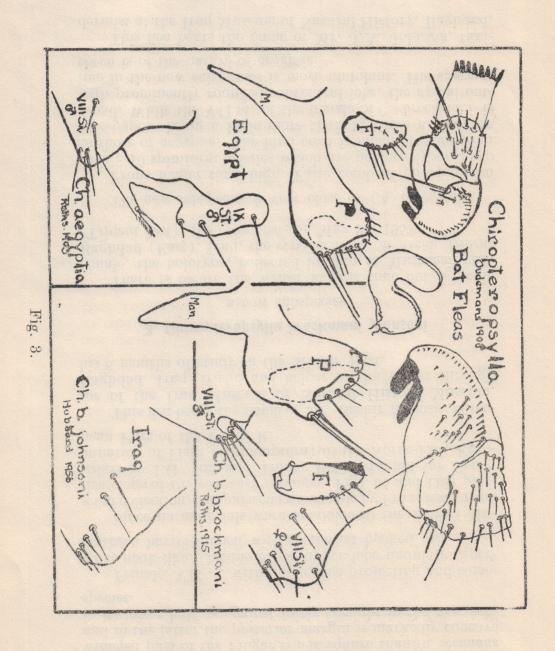
#### 4. Nosopsyllus pringlei

#### a new species

There are before the writer at this time 6 specimens collected by him in Iraq during 1953; the holotype male off Gerbillus d. dasyurus (Gerbil), the type host, 7 miles northeast of Baghdad (East), the type locality, on March 24; the allotype female off same host 9 miles northeast of Baghdad (East) on April 17; and 4 paratype females off Meriones crassus. (Big Gerbil) 100 miles west of Baghdad, 15 miles west of Ramadi, collected April 8.

Head nicely rounded in female but flattened dorsally in male. Eye black, oval. Gena armed with a major ocular bristle and one of the same size at the margin at eye level; male with a second row of 2 medium bristles. Post-antennal region with 2 major bristles and a marginal row of a few medium ones. Pronotal comb consists of 19 teeth in male, 19-22 in the female.

Modified Segments: Male. Manubrium fairly broad, longer than the clasper. Fixed process of the clasper long and remarkably rounded off apically, there being no trace of an angle at the posterior margin. Finger long, straight and narrow, about 5 times as long as its maximum width. There are 2 strong bristles on the upper half of the posterior margin and several smaller ones along the margin. The



of the Finger is equal in length to the posterior apical angle, while in *secundus* the anterior angle is longer. The widened part of the Finger is less square than in *secundus* and in the latter the posterior margin is markedly concave in its lower half as against fairly straight in the new subspecies.

Female. VII st. with upper lobe projecting and somewhat hook-like. Outline below upper lobe undulate. Spermatheca barrel-shaped with somewhat hooked tail.

Since no materials were available in the British Museum collection, comparisons were made by Frans Smit from drawings of Ct. congener secundus (Figs. 64 and 118) published by I.G. Ioff and Tiffov, 1938, Manual for Determination of Fleas (Aphaniptera) of the North-East European Part of the U.S.S.R.

This flea bears the name of Mr. Bashir Allouse, Director of the Iraq Museum of Natural History Museum, Baghdad, Iraq, friend and helper of the writer through his 6 months of study in the Middle East.

# 3. Chiropteropsylla brockmani johnsoni

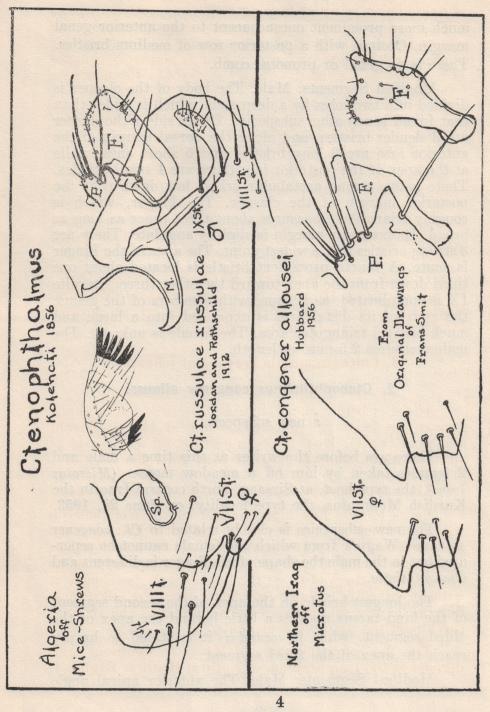
a new subspecies

There is before the writer at this time but a single female, the holotype, collected by him at Mustansiriyah, Baghdad (East), Iraq, the type locality, off Asella tridens (Trident Bat), the type host, on May 26, 1953.

The new subspecies is very close to Ch. brockmani.

Frons longer than high. False comb of metepimeron with 8-10 spiniform bristles which are not nearly so sharp as those of aegyptia. The hind coxa is much broader than in aegyptia being a little more than  $1\frac{1}{2}$  times as long as broad. While the VII st. of the female of C. brockmani is with prominently rounded subventral lobe, the apical outline in the new subspecies is more undulant. The spermatheca is of the nature of aegyptia.

This flea bears the name of Mr. J.A. Johnson, taxidermist at the Iraq Museum of Natural History, Baghdad,



2 Fig.

much more prominent one adjacent to the anterior genal margin. Occiput with a posterior row of medium bristles. There is no genal or pronotal comb.

Modified Segments: Male. The body of the clasper is divided into two lobes by a deep sinus which is wider than that found in any other subspecies. On the side of the clasper are 3 slender bristles, and along the dorsal margin of the anterior lobe are 3 long bristles and 5 short ones, while at the apex of the posterior lobe there are 4 small bristles. There is one strong acetabular bristle low down near the posterior margin of the clasper. The Finger, which is roughly triangular, measures about three times as long as broad. Its posterior margin is slightly angulate. There are 3 strong bristles at the widest point. The apex of the Finger is acute. A fourth prominent bristle is located about one third down from the apex toward the other three. Sternite IX is complicated, as is usual with members of the genus; the apex of its distal arm is expanded into a large and much bristled triangular area. The female is unknown. The male measures 2.5 mm. in length.

#### 2. Ctenophthalmus congener allousei

a new subspecies

There are before the writer at this time a male and 2 females taken by him off a meadow mouse (*Microtus irani*), the type host, at Sirsang, north central Iraq in the Kurdish Mountains, the type locality, on June 28, 1953.

The new subspecies is closely related to Ct. congener secundus Wagner from which the female cannot be seperated but in the male the shape of the Finger is different and characteristic.

The longest bristle on the apex of the second segment of the hind tarsus reaches a little beyond the apex of the third segment, while in *secundus* it is stated to hardly reach the apex of the third segment.

Modified Segments: Male. The anterior apical angle

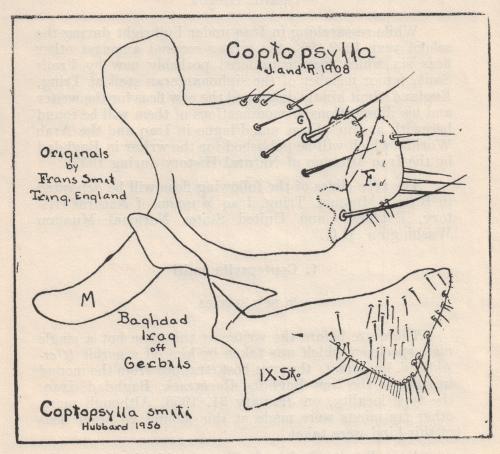


Fig. 1.

#### SIX NEW FLEAS FROM IRAQ

by

#### C. Andresen Hubbard

Tigard, Oregon.

While researching in Iraq under Fulbright during the school year 1952-1953 the writer secured amongst other fleas six which were considered porbably new by Frans Smit, junior member of the siphonapteran staff at Tring, England. Smit kindly diagnosed the new fleas for the writer and his illustrations or modifications of them will be found herewith and in "Fleas and Plague in Iraq and the Arab World" which will be published for the writer in Baghdad by the Iraq Museum of Natural History during 1957.

The type slides of the following fleas will be deposited in British Museum, Tring, Iraq Museum of Natural History, Baghdad, and United States National Museum Washington, D.C.

#### 1. Coptopsylla smiti

#### a new species

There are before the writer at this time but a single male specimen which was taken by him off a gerbil (Gerbillus d. dasyurus), the type host, trapped from the mound in front of the New Baghdad Racetrack, Baghdad, Iraq, the type locality, on January 31, 1953. Although many other trappings were made at this mound no other fleas of this kind were taken.

According to Smit, whose name this flea bears, the new species is close to *C. lamellifer* and *C. bondari* but differs from them in the proportions of the clasper.

Head very characteristically shaped, flattened and with a clypeus which points upwards. There appears to be 2 major bristles in front of the large black eye and a

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#### College of Arts and Sciences

### IRAQ NATURAL HISTORY MUSEUM

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# Six New Fleas From Iraq

by

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Foreword in Arabic by
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