

MISCELLANEA.

INSECTS.

REPORT ON A SMALL COLLECTION OF FLEAS FROM INDIA
AND CHINA.

[The following report on a small collection of fleas belonging to the Indian Museum has been received from the Hon. Charles Rothschild.]

Pulex irritans, Linnaeus.

1758. *Systema Naturae*, Ed. x, No. 614.
Tengyueh, Yunnan, W. China; ca. 5,400 ft.
Ukhrul, Manipur, Assam; 6,400 ft.
Darjiling, E. Himalayas; 7,000 ft.

Ceratophyllus alladinis, Rothschild.

1904. *Novitates Zoologicae*, vol. xi, p. 632, No. 23, pl. xii,
fig. 53.

Garhwal, W. Himalayas; from *Pteromys inornatus*.

[Described from Sidapur, India; from "small jungle squirrel."]

Xenopsylla nesiotes, Rothschild and Jordan.

1908. *Parasitology*, vol. i, p. 47, No. 10, pls. iii, vi, figs. 3, 4.
Calcutta; from rat (? *Mus rattus*).
[Described from Christmas Island; from *Mus macleari*.]

Xenopsylla pallidus, Taschenberg.

1880. *Die Flöhe*, p. 65, pl. i, fig. 9.
Karachi, Sind, W India; from *Erinaceus collaris*.

Ceratophyllus fasciatus, Bosc.

1800. *Bulletin des Sciences par la Société Philomatique*, ii,
p. 156, No. 44.

Amritsar, Punjab; from various species of rats.

„ „ ; from *Mus rattus*.

Ctenocephalus canis, Curtis.

1826. *British Entomology*, iii, No. 114, figs. A—E × 8.
Amritsar, Punjab.

Below Phagu, Simla Hills, 7,000 ft., Western Himalayas; from sheep.

[Specimens of Mallophaga and of the tick *Haemaphysalis flava*, Neum., were obtained on the same sheep.—N. A.]

Ctenocephalus felis, Bouche.

1835. *Nova Acta Physico-Medica Academiae Caesareae Leopoldino Carolinae Naturae Curiosorum*, vol. xvii, p. 505.

Berhanpur, Murshidabad District, Bengal; from cat.

Calcutta Zoological Gardens; from domestic cat.

„ „ „ ; from *Hyaena striata*.

„ „ „ ; from domestic goat.

Agra, United Provinces; from *Erinaceus grayi*.

Calcutta; from *Canis aureus*.

[Numerous specimens of lice and of a small variety of the tick *Haemaphysalis leachi* (types of var. *indica*, Warburton) were obtained from the same jackal.—N. A.]

Amritsar, Punjab: from *Mus rattus*.

„ „ ; from various species of rats.

Xenopsylla cheopis, Rothschild.

1903. *Entomologist's Monthly Magazine*, 2nd series, vol. xiv, p. 85, pls. i-ii, figs. 3, 9, 12, 19.

Amritsar, Punjab; from *Scotophilus temmincki*.

„ „ ; from *Mus rattus*.

„ „ ; from various species of rats.

N. CHARLES ROTHSCHILD.

SOME FLIES FOUND ASSOCIATED WITH CATTLE IN THE NEIGHBOURHOOD OF CALCUTTA.—By permission of Col. Raymond, C.V.D., the museum collector spent a few days about August 20th of last year (1910) at the Veterinary College, Belgatchia, Calcutta, collecting flies from the cattle there. These have now been identified, mostly by Mr. Brunetti, as shown in the following list:—

On cattle in the open during the day:—

<i>Tabanus albimediis</i> , Wlk.	1 specimen.
<i>Tabanus hilaris</i> , Wlk.	1 „
Oscinidae (not known to suck blood)	3 specimens.
Anthomyid (? <i>Cacosia</i>) (not known to suck blood)	2 „
<i>Stomoxys calcitrans</i> , L.	9 „
<i>Stomoxys indica</i> , Pic. (= <i>limbata</i> , Aust.)	7 „
<i>Liprosia exigua</i> , Meij.	29 „
<i>Liprosia minuta</i> , Bez.	16 „