

## A LECTOTYPE DESIGNATION FOR HOPLOPLEURA PACIFICA EWING (Anoplura : Hoplopleuridae)<sup>1</sup>

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*Abstract:* *Hoplopleura pacifica* Ewing, 1924 is considered a valid species. It is redescribed, illustrated, and a lectotype is designated from the cotypes for the species.

While pursuing a study of Philippine Anoplura, it became necessary to compare present specimens with the type of *Hoplopleura pacifica*. It was subsequently learned that a holotype for this species does not exist, but, instead, a series of cotype. Ewing did not give complete drawings in his original description (1924), but illustrated only the male genitalia and paratergal plates VI-VIII. Therefore, in order to have available a definite type, descriptive drawings and measurements are given and a lectotype is designated.

The anopluran in question was, for many years, held in synonymy by Ferris and others with *Hoplopleura oenomydis* Ferris. The original description and drawings given by Ewing are somewhat inadequate, but definitely differ from Ferris' (1921) original description of *H. oenomydis* in having two long setae on paratergal plates III. Ewing stated that PT-plate III "possessed two setae, both longer than the posterior lobes and subequal" in reference to his species. Ferris on the other hand (1921) stated "pleural plates.....third to sixth each with a single small seta."

The first synonymy appeared in 1933, although with but little explanation. Neither in this account, nor in any subsequent references at hand, can I find where Ferris acknowledged either the correction or changes that he made in *H. oenomydis* as they appeared in the original description.

Several workers have long contended that Ferris' synonymy was not correct (Hopkins 1950; Scanlon in Johnson 1959; Johnson 1959). The problem has been admirably worked out by Johnson (1964) in her treatise and it is the purpose here only to point out minor differences which exist between Johnson's illustrations and the lectotype of this species (shape of paratergal plates, male genitalia, and measurements) by the present illustrations and description. Since none of the workers mentioned has, as far as I have been able to ascertain, examined Ewing's types, I have, and have selected a lectotype, encircled it with red paint, and illustrated it. It is located at the extreme bottom of the slide when the labels are held so as to be readable; a female. All drawings were made with

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the aid of a camera lucida.

### DIAGNOSIS

*Hoplopleura pacifica* was first described by Ewing (1924) from *Rattus exulans* (as *R. hawaiiensis*) in the Hawaiian Islands, presumably on Oahu I. and Popoia Islet. It was reported at the same time to occur on several different forms of *Rattus* (*concolor*, *hawaiiensis*, *raveni*, *raveni eurous*, *surdus*, and *R. sp.*) from seven different localities widely scattered around the Pacific. *H. pacifica* is a common parasite of *Rattus* and is one of the most abundant lice represented in the Bishop Museum collections from these animals in the Asian-Pacific Region (Laos, Malaya, Philippines, Thailand, and Vietnam).

#### **Hoplopleura pacifica** Ewing, 1924

*Hoplopleura pacifica* Ewing, 1924: 9, figs 1b-c.

*Hoplopleura oenomydis* Ferris, 1932: 121 (*in part*); 1951: 132 (*in part*).

Lectotype ♀ (BISHOP 1360), on a slide bearing lectotype, 6♀ paratypes and 5♂ paratypes.

### DESCRIPTION

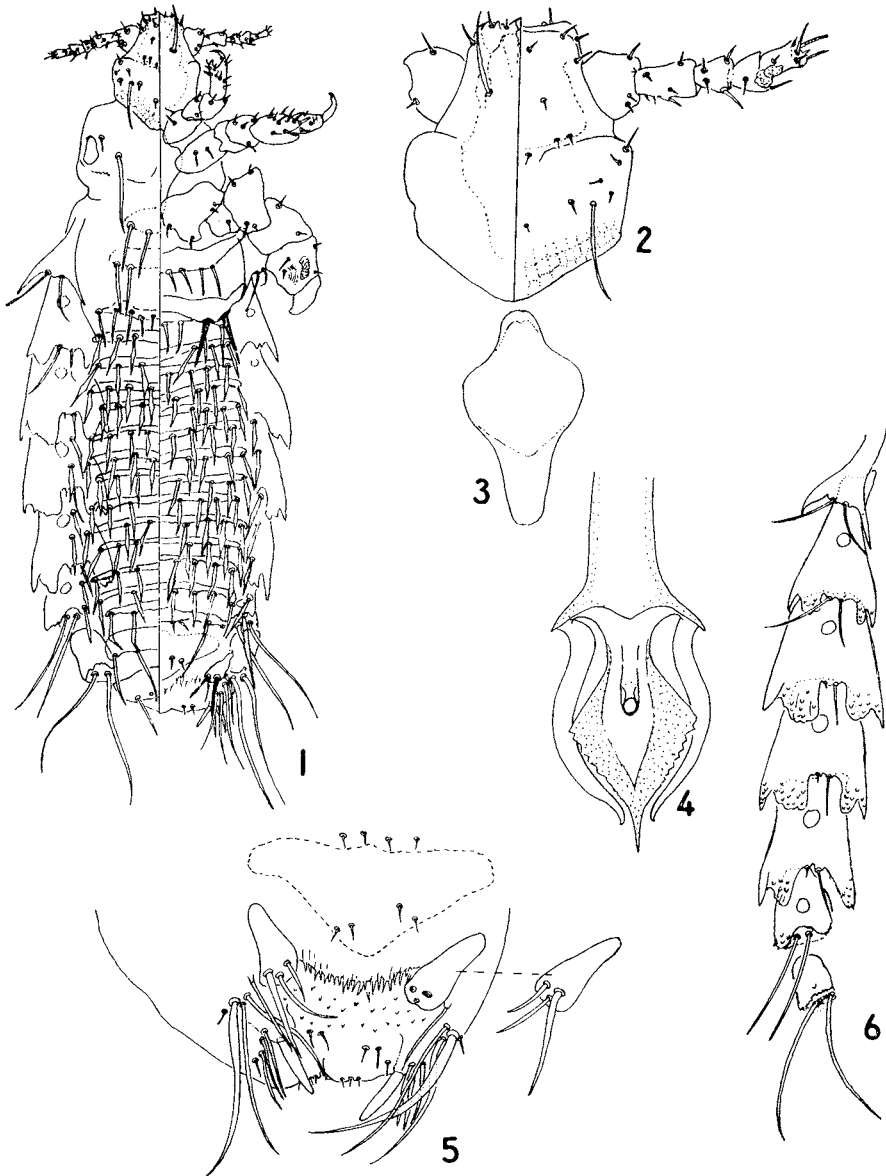
♀. Closely resembling *Hoplopleura oenomydis* Ferris and as such is placed in the *affinis-hesperomydis* group. Both sexes of *H. pacifica* possess the characteristic sword-like setae on the abdominal plates and have lateral abdominal setae off sternal and tergal plates V-VII.

*Paratergal plates (PT)*. Paratergal plates II with 2 posterior, acute apices; II-V each with 2 lobes both of which are incised on posterior margins. Each incised lobe produced into an acute apex laterally and a more-or-less truncate portion medially; VI with dorsal lobe incised as in III-V and having the ventral lobe acute; VII-VIII without free apical lobes, but having slight concavities posteriorly producing a slight bi-lobed appearance but with the dorsal apex longer. Characterized by Ewing as "Each of posterior lobes of typical pleural plates with concave posterior emarginations and serrate edges; outer corners of lobes acute, inner rounded."

*Setation of PT-plates*. II-III each with 2 long setae reaching past apex of distal lobes; IV-VI with 1 seta as long as rounded portion of lobes, the other very minute and short; and VII-VIII each with the usual pair of elongated setae.

*Genitalia*. ♀ with sternite of segment VIII roughly an obtuse triangle in shape (compared to an almost equilateral shape in *H. oenomydis*) and faintly sclerotized. Gonopods each with 3 setae which are graded in size and have their bases arranged in a subtriangular manner; flanked laterally with a single thin, short seta and an additional cluster of three long setae. Both posterolateral edges of vulvar fold provided with a massive sclerotized tusk-like seta; 3 moderately long setae and 6 minute setae.

♂. Shorter but with setation as in ♀. Genitalia as illustrated (fig 4) with basal plate possessing a median point directed posteriorly; parameres not completely flanking



Figs. 1-6. *Hoplopleura pacifica* Ewing, lectotype: 1, ♀ dorsoventral view; 2, ♀ head and antenna; 3, ♀ sternal plate; 4, ♂ genitalia; 5, ♀ genitalia 6, ♀ paratergal plates II-VIII.

pseudopenis; pseudopenis wide with posterolateral serrations distinct and ending in a long, acute tip.

Table 1. Measurements of *H. pacifica* (in mm)

	Lectotype	Paratype ♀♀ (6)						Paratype ♂♂ (5)				
Body												
Length	1.20	1.04, 1.04, 1.11, 1.22, 1.13, 1.20	.89, .91, .90, .76, .89									
Width (at thorax)	.23	.21, .21, .22, .24, .22, .23	.16, .21, .18, .16, .22									
Head												
Length	.23	.18, .21, .19, .22, .19, .20	.17, .17, .17, .18, .19									
Width (at P.L.A.)	.14	.14, .14, .14, .14, .14, .14	.13, .13, .14, .14, .14									
Sternal plate												
Length	.15	.13, .14, .14, .14, .14, .14	.13, .14, .14, .13, .14									
Width	.08	.08, .09, .08, .08, .08, .08	.08, .08, .08, .08, .06									
Pseudopenis of ♂												
Length			.09, .11, .09, .10, .10									
Width			.05, .05, .05, .05, .05									

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