

Two New Species of the Genus *Ancistroplax* (Anoplura: Hoplopleuridae) Parasitic on *Soriculus* (Insectivora: Soricidae) in Nepal and Taiwan

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ABSTRACT Two new species of sucking lice belonging to the genus *Ancistroplax* are described and illustrated. *Ancistroplax nepalensis* was obtained from *Soriculus nigrescens* in Nepal, *A. taiwanensis* was found on *S. fumidus* in Taiwan. A key to the five species now in the genus is given.

KEY WORDS Insecta, sucking lice, shrew, taxa

THE GENUS *Ancistroplax* Waterston is one of the small genera of the family Hoplopleuridae Ferris, subfamily Haematopinoidinae Ewing. In his world list of the sucking lice, Ferris (1951) recorded only one species of the genus *Ancistroplax*, *A. crocidurae* Waterston, 1929, from *Crocidura horsfieldi* (Tomes) distributed in Sri Lanka. Since then, *A. nasuta* Johnson, 1964 was described from a Bornean ground shrew (probably either *Suncus* sp. or *Crocidura* sp.), and *A. chodsigoae* Chin, 1984 was recorded from *Soriculus salenskii* Kastschenko in China.

Up to now, only these three species have been placed in *Ancistroplax*. In 1986, we had the opportunity to study two interesting new species belonging to this genus; they are described and illustrated here. A key to the species of *Ancistroplax* is also presented.

Ancistroplax nepalensis Kaneko & Uchikawa, n. sp. Fig. 1-6

Male. Total length 1.1 mm. Maximum body width 0.46 mm. Head length 0.154 mm, width 0.125 mm; somewhat longer than wide, with sclerotic ventral plate that bears several scalelike markings; postantennal angles quite prominent; occipital angles rounded and without long setae. Antennae clearly 4 segments; terminal segment with a large sensorium. Thorax very small, shorter than head; sternal plate somewhat wedge-shaped. Legs typical of genus. Forelegs small, with slender claw. Midlegs similar to but larger than forelegs, with strongly sclerotized protuberance at base of the claw. Hindlegs large, heavily sclerotized, and compressed, with flattened tarsal claw. Abdomen elongate-oval. Tergite of 3rd segment ill-defined,

bearing 6 slender setae; tergite of 4th segment with 2 rows of stout setae; 6th segment similar to 4th. Sternite of 2nd abdominal segment divided into 2 longitudinal plates, with its posterior apex coalesced to sternite of 3rd segment. Paratergites present on 1st to 8th segments of the abdomen, those of 4th to 6th segments appear to be divided longitudinally into 2 parts by a median line of weak sclerotization (Fig. 4). Genitalia with basal plate moderately broad, but little expanded at apex. Parameres more than half as long as basal plate, somewhat curved but nearly parallel; enclosing tubular penis and Y-shaped pseudopenis (Fig. 6).

Female. Total length 1.32 mm. Maximum body width 0.54 mm. Head length 0.154 mm, width 0.130 mm. General character essentially as in male, but with more dorsal and ventral sclerites. Fourth to 7th segments each with 3 plates; plates mostly with 4-6 sword-shaped setae. Genital region without distinctive characters at the species level.

Types. HOLOTYPE ♂, ALLOTYPE ♀, PARATYPES 1♂ and 1♀ from *Soriculus nigrescens* (Gray 1842), Pokara, Nepal, 12-VI-1986, K. Kaneko. Type series deposited in the collection of the National Science Museum of Natural History, Tokyo.

Diagnosis. *Ancistroplax nepalensis*, n. sp. is closely related to *A. crocidurae*, *A. nasuta*, and *A. chodsigoae*, but it is easily separable from those species by the structure of the tergite of the male 6th segment and by the female paratergites. The male 6th tergite is almost tetrangular in the new species and in *A. chodsigoae*, whereas it is strongly modified to form conspicuous processes in *A. crocidurae*. *A. nasuta*, which is known only from the female, has very short apical setae on the paratergites of the 3rd and 7th segments instead of the paired long setae found on the corresponding paratergites of the new species. *A. nepalensis* also differs from *A. chodsigoae* in having the usual pair of long setae on each lateral margin of the male 7th and 8th abdominal segments and having broader lobes on the 3rd paratergite.

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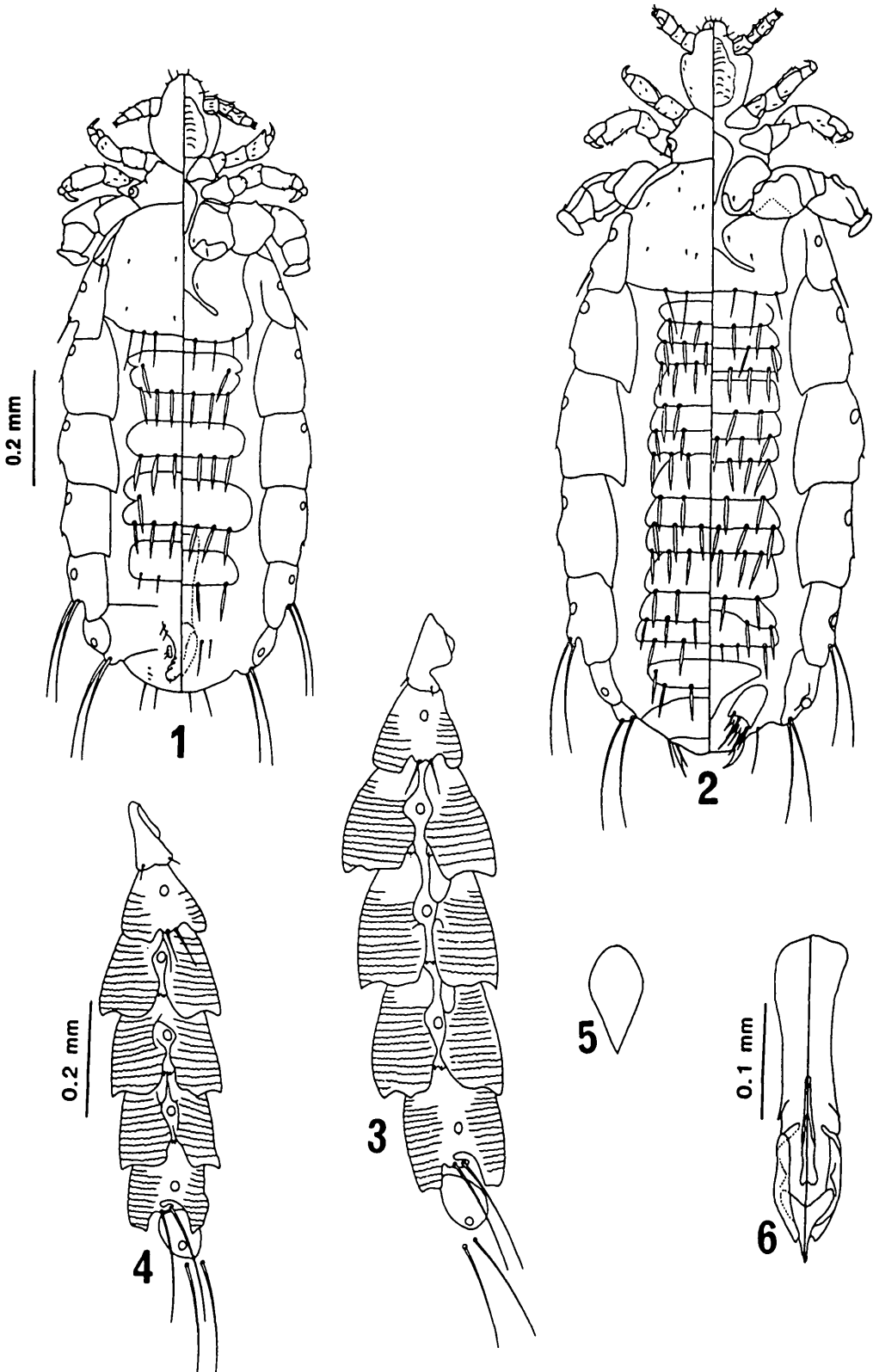


Fig. 1-6. *A. nepalensis*: (1) male; (2) female; (3) female paratergites; (4) male paratergites; (5) male thoracic sternal plate; (6) male genitalia.

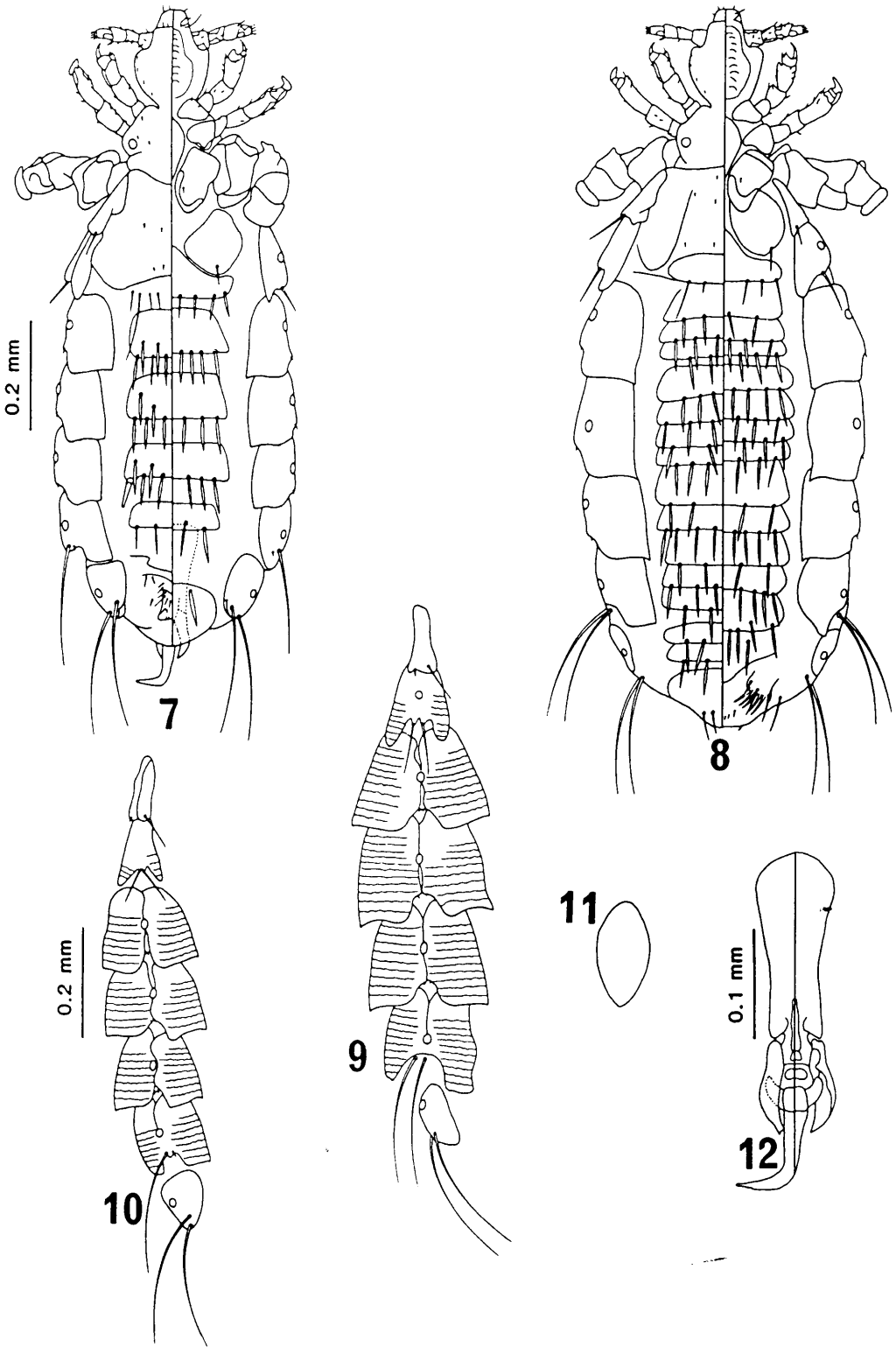


Fig. 7-12. *A. taiwanensis*: (7) male; (8) female; (9) female paratergites; (10) male paratergites; (11) male thoracic sternal plate; (12) male genitalia.

Ancistroplax taiwanensis
Kaneko & Uchikawa, n. sp.
Fig. 7-12

Male. Total length 1.19 mm. Maximum body width 0.45 mm. *Head* length 0.168 mm, width 0.139 mm, only slightly longer than broad, with sclerotic ventral plate that bears a number of scale-like markings; postantennal angles quite prominent; head constricted posteriorly into a slender neck; antennae clearly 4 segments. *Thorax* quite small; sternal plate somewhat elongate-oval. *Legs* typical of genus. Forelegs subequal to midlegs in size and shape. Hindlegs large, each with a stout flattened claw. *Abdomen* elongate-oval. Tergite of 3rd segment ill-defined, bearing 8 slender setae; tergite of 4th to 6th segments bearing 2 rows of stout setae; posterior angles of 6th segment with a pair of heavy stout spines. First abdominal segment without a sternite; 2nd segment with sternites divided longitudinally into 2 plates; 3rd segment with a single plate that is medially produced between plates of 2nd segment. Sternites of 4th to 7th segments well developed, occupying about median half of body. Paratergites present on 1st to 8th abdominal segments, those of 4th to 6th segments divided longitudinally into 2 plates, marked with transverse lines, and a pair of minute setae on posterior margin; plate of 7th segment with 2 setae, 1 minute and 1 long (Fig. 10); spiracles present on 3rd to 8th segments. *Genitalia* with basal plate moderately stout, with posterior angles strongly produced and reaching to anterior end of parameres. Parameres about half as long as basal plate, nearly parallel; enclosing penis and a weakly sclerotized structure anterior to penis. Pseudopenis very long (140 μ m), strongly curved to form a hook, and with lateral expansions at proximal end (Fig. 12).

Female. Total length 1.31 mm. Maximum body width 0.52 mm. *Head* length 0.178 mm, width 0.144 mm. *Abdomen* differing from male conspicuously in tergites and sternites; 1st and 2nd segments without tergites, 3rd segment with 1 tergite, 4th to 7th segments each with 3 tergites, 8th with 2 tergites, and 9th with 1 tergite. First segment apparently without a sternite, 2nd with sternite divided longitudinally into 2 oval plates, 3rd segment with a single sternite, 4th to 7th segments each with 3 sternites. Paratergites of 7th segment with the usual pairs of long setae. *Genital region* apparently without any distinctive characters at the species level.

Types. HOLOTYPE δ , ALLOTYPE ♀ from *Soriculus fumidus* Thomas 1913, Nantou-ken, Taiwan, 7-X-1986, K. Uchikawa. Type series deposited in the collection of the National Science Museum of Natural History, Tokyo.

Diagnosis. *Ancistroplax taiwanensis*, n. sp. is closely similar to *A. crocidurae*, *A. nasuta*, and *A. chodsigoae* in appearance. However, *A. taiwanensis* is separated from those three species by the same characters as *A. nepalensis*. *A. taiwanensis* is easily

differentiated from *A. nepalensis* in the male by the shape of the pseudopenis, which is distinctly longer (140 μ m) in the former species, and by the heavy stout spines on the tergite of 6th segment. In addition, *A. taiwanensis* is related to *Typhlo-myophthirus bifoliatus* Chin, 1980 reported from *Typhlomys cinereus* Milne-Edwards in China. However, it is clearly distinguished from this species by the number of the antennal segments, and by the sternal setae on the 7th segment. *T. bifoliatus* has 5-segmented antennae and, at least in the female, has 2 large modified leaflike setae on the sternite of the 7th abdominal segment.

Key to Species of *Ancistroplax*

1. Paratergites of 3rd and 7th segments of female each with all apical setae much shorter than plate (male unknown)
..... *nasuta* Johnson
Some paratergites of female with 1 or 2 setae as long as or longer than plate 2
2. Tergite of male 6th segment modified, with large posterolateral processes directed mesad *crocidurae* Waterston
Tergite of male 6th segment almost rectangular 3
3. Tergite of male 6th segment with a stout spine on the posterior angles
... *taiwanensis* Kaneko & Uchikawa, n. sp.
Tergite of male 6th segment without a stout spine on the posterior angles 4
4. Paratergite of 3rd segment with broad lateral lobes
... *nepalensis* Kaneko & Uchikawa, n. sp.
Paratergite of 3rd segment with pointed lateral lobes *chodsigoae* Chin

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