Reprinted from *The Florida Entomologist*, Volume 71, Number (2), June 1988.

MENACANTHUS DENNISI (MALLOPHAGA: MENOPONIDAE), A NEW SPECIES FROM THE GREY CURRAWONG (PASSERIFORMES: CRACTICIDAE) IN SOUTH AUSTRALIA

ROGER D. PRICE
Department of Entomology
University of Minnesota
St. Paul, MN 55108

AND

K. C. EMERSON
560 Boulder Drive
Sanibel, FL 33957

ABSTRACT

A new species of chewing louse, *Menacanthus dennisi*, is described and illustrated from specimens taken off the Grey Currawong, *Strepera versicolor*, from South Australia. Genitalic structures, details of chaetotaxy, and dimensions are used to separate this species from *M. gonophaeus*, the species most similar to it.

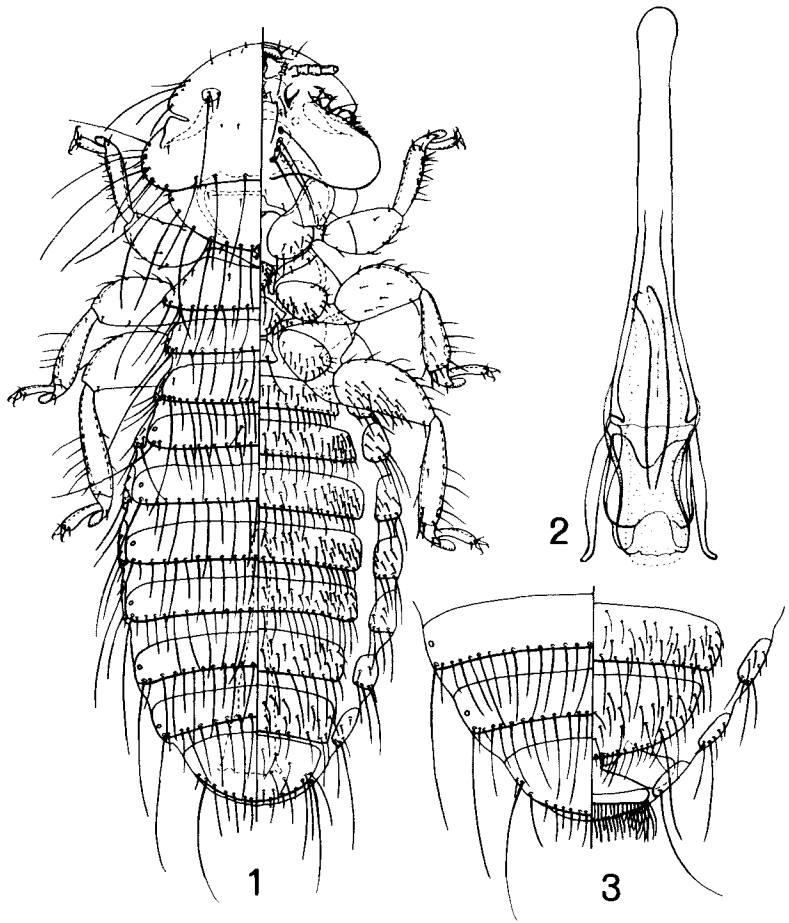
RESUMEN

Se describe y se ilustra una especie nueva, *Menacanthus dennisi*, colectada de *Strepera versicolor*, el Currawong Gris del sur de Australia. Se utilizan las estructuras genitales, los detalles de quetataxía, y las dimensiones para separar esta especie de *M. gonophaeus*, la especie más semejante a ella.

In a review of the mallophagan genus *Menacanthus* Neumann from hosts within the perching-bird order Passeriformes, Price (1977) discussed and keyed 28 species of lice. We recently obtained a series of *Menacanthus* from the Grey Currawong (Slater 1974) in the passerine family Cracticidae, these representing the first lice of this genus to be reported from this host family. Since they were found to represent an undescribed species, it is our intent to describe and illustrate this new species here. For brevity, we will not repeat characters in common to the passerine *Menacanthus*, as these are given by Price (1977). Measurements are in millimeters.

Menacanthus dennisi Price and Emerson, New Species (Fig. 1-3)

Male: As in Fig. 1. Ventral spinous head process 0.05-0.06 long; marginal temple seta 24 (4th seta from midline) 0.35-0.39 long; gular setae 4 + 4. Pronotum marginally with 7 long and 1 short seta on each side; central pronotal setae with inner and outer setae equal in length and thickness. Metanotum with 3-5 lateroanterior setae on each side and 18-20 marginal setae; mesosternal and metasternal plates each with 13-16 setae. Abdominal marginal tergal setae: I, 19-20; II-III, 23-26; IV, 21-24; V, 25-26; VI, 24-28; VII, 24-26; VIII, 16-21. Occasionally with few anterior tergal setae: I, 0; II, 0-2; III, 1-5; IV, 0-3; V, 0-1; VI-VIII, 0. Each side of last segment with 2 very long setae and 1 short seta lateroanterior to these; total of 10-11 inner posterior setae. Pleurites



Figs. 1-3. *Menacanthus dennisi*, n. sp. 1, dorsal-ventral view of ♂; 2, ♂ genitalia; 3, dorsal-ventral view of ♀ terminalia.

with short anterior setae. Abdominal sternal setae: I, 2-4; II, 37-45; III, 61-75; IV-V, 77-91; VI, 65-74; VII, 48-59; VIII, 30-37. Subgenital plate with 26-32 setae. Genitalia as in Fig. 2, with very long slender sclerite associated with sac; length of sclerite, 0.25-0.27. Dimensions: preocular width, 0.51-0.53; temple width, 0.65-0.66; head length, 0.35-0.36; prothorax width, 0.49-0.52; metathorax width, 0.54-0.56; total length, 2.05-2.12; genitalia length, 0.60-0.71; genitalia width, 0.12-0.14.

Female: Much as for ♂, except for abdominal chaetotaxy, terminalia, and dimensions. Abdominal marginal tergal setae: I, 24-25; II, 24-29; III, 27-30; IV-V, 29-32; VI, 29-33; VII, 26-30; VIII, 21-26. Anterior tergal setae: I, 0; II, 0-4; III, 0-6; IV, 0-2; V, 0-4; VI, 0-2; VII, 0-1; VIII, 0. Last segment with 13-16 inner posterior setae. Abdominal sternal setae: I, 2-3; II, 43-49; III, 80-88; IV-V, 90-102; VI, 87-95; VII, 68-79. Ventral terminalia as in Fig. 3; subgenital plate with smooth medioposterior margin and with

20-26 marginal and 35-42 anterior setae, giving total of 61-66 setae; dorsal fringe of anus with 39-45 setae and ventral fringe with 44-49; width of anus, 0.32-0.33. Dimensions: preocular width, 0.54-0.55; temple width, 0.69-0.71; head length, 0.36-0.39; prothorax width, 0.55-0.57; metathorax width, 0.64-0.69; total length, 2.43-2.50.

Holotype ♂, ex *Strepera versicolor* (Latham) (South Australian Museum skin #B-40243), South Australia, Kangaroo Island, 18-IV-1986, T. Dennis; in collection of South Australian Museum.

Paratypes: 25 ♂, 35 ♀, same data as holotype; in collections of the South Australian Museum, United States National Museum of Natural History, Oklahoma State University, University of Minnesota, and Florida State Collection of Arthropods.

Etymology: This species is named in honor of the collector of the host bird, Mr. T. Dennis.

Remarks: In the key to the passerine *Mencanthus* in Price (1977), *M. dennisi* morphologically identifies with *M. gonophaeus* (Burmeister) in couplet 4. A number of features, including the very long marginal temple seta 24 and presence of 7 long marginal pronotal setae on each side for both sexes in addition to the structure of the ♂ genitalia, ally these two species and separate them from other known members of the genus. The features possessed by *M. dennisi* that separate it from *M. gonophaeus* are: (1) ♂ with longer genital sac sclerite (0.25-0.27 vs 0.16-0.21); (2) ♂ with tendency for fewer setae on sternite I (2-4 vs 3-7) and more setae on sternite VIII (30-37 vs 20-33); (3) ♀ with tendency for more setae on tergite VIII (21-26 vs 19-21), sternite VII (68-79 vs 52-73), and subgenital plate (61-66 vs 50-62); (4) ♀ with wider anus (0.32-0.33 vs 0.25-0.28); and (5) both sexes with inner and outer central pronotal setae similar, instead of outer distinctly longer and thicker than inner. While *M. gonophaeus* is found only on hosts in the family Corvidae, *M. dennisi* represents the first *Menacanthus* reported from the Cracticidae. In the phylogenetic sequence of passerine families, Cracticidae and Corvidae are often listed close to each other (e.g., Morony et al. 1975); the similarity of these louse species would lend support to this postulated relationship.

Acknowledgements

We thank Dr. Shane Parker, Curator of Birds, South Australian Museum, for furnishing the specimens used to describe this new species. This study was partially supported by Project No. Min-17-015, Minnesota Agricultural Experiment Station, St. Paul, MN 55108, and has been assigned Paper No. 15,730, Scientific Journal Series.

References Cited

Morony, J. J., Jr., W. J. Bock, and J. Ferrand, Jr. 1975. Reference list of the birds of the world. Amer. Mus. Nat. Hist., New York. x + 207 p.

Price, R. D. 1977. The *Menacanthus* (Mallophaga: Menoponidae) of the Passeriformes (Aves). J. Med. Entomol. 14: 207-220.

Slater, P. 1974. A field guide to Australian birds. Vol. 2, Passerines. Rigby Ltd., Adelaide. 309 p.