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A NEW SPECIES OF *MEGAPODIELLA* (MALLOPHAGA:  
PHILOPTERIDAE) FROM THE MALLEE FOWL OF  
AUSTRALIA

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ABSTRACT

A new species, *Megapodiella parkeri*, is described and illustrated from specimens taken off the Mallee Fowl, *Leipoa ocellata*, from Australia. Genitalic structures, details of chaetotaxy, and dimensions are used to separate this species from *M. nakatae*, the only other known species in the genus.

RESUMEN

Se describe y se ilustra una especie nueva, *Megapodiella parkeri*, colec-

tado de un ave australiano, *Leipoa ocellata*. Se utilizan las estructuras genitales, los detalles de quietaxia, y las dimensiones para separar esta especie de *M. nakatae*, la única otra especie conocida en este género.

The new philopterid genus *Megapodiella* was described by Emerson and Price (1972) to include the single new species *M. nakatae*, whose type-host is *Aepyodius arfakianus* (Salvadori) (Galliformes: Megapodiidae). At that time, we stated the likelihood that future collections from other host species in this family would yield additional species of *Megapodiella*. It is our purpose here to describe and illustrate a second species of this genus from specimens taken off the Mallee Fowl, *Leipoa ocellata* Gould, from Australia.

*Megapodiella parkeri* Price and Emerson, NEW SPECIES  
(Fig. 1-3)

**FEMALE:** As in Fig. 2. Each side of head with 2 long setae associated with "V"-shaped dorsoanterior suture and 3 long marginal temple setae. Pteronotum divided medially, each side of posterior margin with 3 very long lateral and 5-6 medial setae. Abdominal tergites II (first apparent segment)-VIII divided; II-IX with porous-appearing structure aligned mediad to spiracles; IV-VIII with single lateroposterior seta; IV-V with long postspiracular seta; and with following number of uniformly long marginal tergocentral setae: II, 8-10; III, 13-15; IV, 12-14; V, 11-12; VI, 6-7; VII, 2-3; VIII, 2. Tergite IX not divided, each side with very long and short lateral setae and 2 widely-spaced very long posterior marginal setae. With small terminal tergal plate. Abdominal sternal setae similar in size to tergocentral setae, with following number: II, 8-9; III, 11-13; IV-V, 9-11; VI, 5-8; VII, 1-2. Subgenital plate with flattened posterior margin bearing 11-13 very short setae, anteriorly with small transverse plate and scattering of short setae and 1 very long lateroanterior seta. Ventro-posterior margin with 9-10 short to very long setae on each side. Dimensions (in mm): temple width, 0.79-0.80; head length, 0.91-0.92; prothorax width, 0.47-0.48; pterothorax width, 0.65-0.68; abdominal width, 1.06-1.15; total length, 2.69-2.72.

**MALE:** As in Fig. 3. Except for terminalia, general morphology and lengths and distribution of setae much as for ♀. Pteronotum with 5-7 medial very long marginal setae on each side. Number of abdominal tergocentral setae: II, 8-10; III, 12-14; IV, 11-14; V, 7-9; VI, 4-7; VII-VIII, 2. Tergite IX very short, undivided, without apparent porous-appearing structure, with each side having 4-5 long setae medioposterior to plate. Very short tergal plate along posterior abdominal margin. Number of abdominal sternal setae: II, 7-8; III, 7-12; IV-V, 6-8; VI, 2-4; VII-VIII, 2. Subgenital plate of irregular shape. Genitalia as in Fig. 1; with broad evenly-tapered basal plate, essentially rectangular protruding medioposterior sclerite, and parameres curved mediad, each with minute terminal seta. Dimensions (in mm): temple width, 0.73-0.75; head length, 0.85-0.86; prothorax width, 0.44-0.45; pterothorax width, 0.61-0.62; abdominal width, 1.04-1.07; total length, 2.18-2.26; genitalia width, 0.14-0.15; genitalia length, 0.47-0.53.

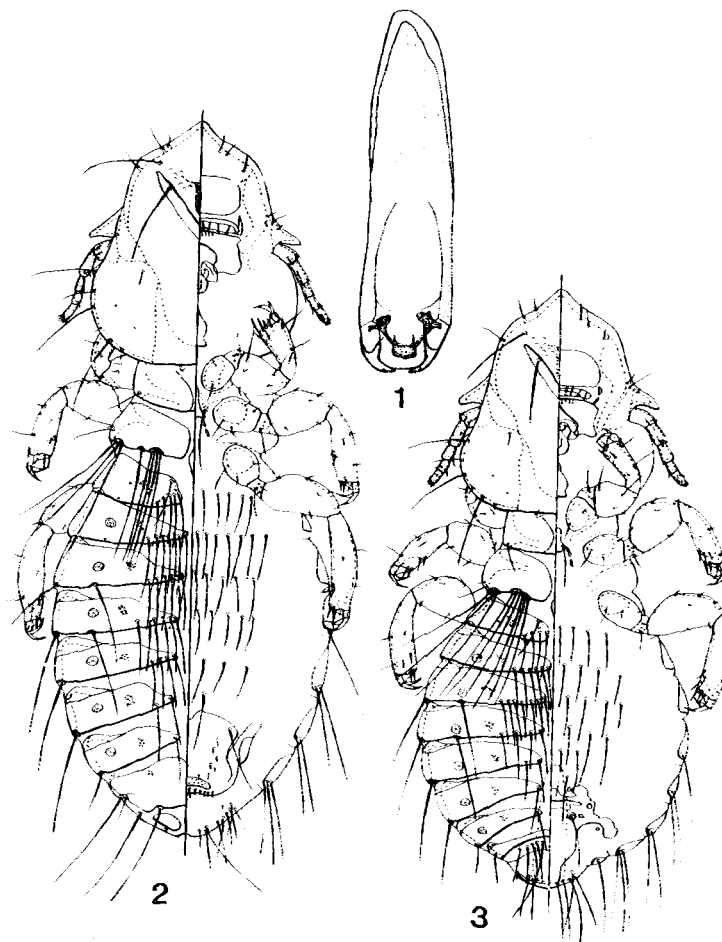


Fig. 1-3. *Megapodiella parkeri*. 1) ♂ genitalia; 2) dorsal-ventral view of ♀; 3) dorsal-ventral view of ♂.

Holotype ♀, ex *Leipoa ocellata* (South Australian Museum skin #B-36624), Zoo, Adelaide, South Australia, 1983; in collection of South Australian Museum. Paratypes, ex *L. ocellata*: 5 ♀, 2 ♂, same data as holotype; 8 ♀, 3 ♂, South Australian Museum skin #B-8347, Tintinasa, South Australia, 27.X.1906; 2 ♀, 2 ♂, South Australian Museum skin #B-8348, Murray Scrubs, South Australia, "early 1900's"; 1 ♀, Western Australia, no date. Paratypes will be deposited in the South Australian Museum, U.S. National Museum of Natural History, University of Minnesota, Florida State Collection of Arthropods, and K.C. Emerson Entomology Museum at Oklahoma State University.

While there are numerous characters possessed by *M. parkeri* that will separate it from *M. nakatae*, the only other known species of the genus, the following represent the most useful ones: (1) ♀ with flattened posterior margin of subgenital plate bearing only up to 13 very short inconspicuous setae; (2) ♀ ventroposterior abdominal margin with total of only 19-20 irregularly-placed short to very long setae; (3) tergite IX of ♀ with 2 widely-spaced very long setae on each side, ♂ with total of 9-10 medioposterior setae; (4) smaller specimens, temple width only up to 0.80 for ♀, up to 0.75 for ♂; (5) both sexes with abdominal tergites III-IV each with only up to 15 tergo-central setae; (6) ♂ tergo-central setae on II-VIII long, extending beyond bases of those of following tergite; and (7) ♂ genitalia with basal plate having evenly-tapered sides. Contrasted to these, the corresponding character states for *M. nakatae* are: (1) ♀ with evenly-rounded posterior margin of subgenital plate bearing row of about 40 short to medium setae; (2) ♀ ventroposterior abdominal margin with row of about 60 long setae; (3) tergite IX of ♀ with 2 close-set very long setae on each side, ♂ with total of only 5 medioposterior setae; (4) larger specimens, temple width over 0.88 for ♀, 0.81 for ♂; (5) both sexes with abdominal tergites III-IV each with at least 16 tergo-central setae; (6) ♂ tergo-central setae on II-VIII short, not extending to bases of those of following tergite; and (7) ♂ genitalia with basal plate constricted approximately 1/3 distance from anterior end.

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