6 February 1986
JOURNAL OF THE KANSAS ENTOMOLOGICAL SOCIETY
59(1), 1986, pp. 206–209

Two New Species of Mallophaga from the Black-tailed Water Hen (Gruiformes) of Australia

ROGER D. PRICE[1] AND K. C. EMERSON[2]

ABSTRACT: Two new species of chewing lice are described and illustrated from the type-host *Gallinula ventralis*, the Black-tailed Water Hen, of Australia. They are *Pseudomenopon australis* (Amblycera: Menoponidae) and *Rallicola bournei* (Ischnocera: Philopteridae).

Birds in the family Rallidae normally harbor species of Mallophaga in the amblyceran genera *Laemobothrion* and *Pseudomenopon* and the ischnoceran genera *Fulicoffula*, *Incidifrons*, and *Rallicola*. The two new species described and illustrated herein were taken off *Gallinula ventralis* Gould, the Black-tailed Water Hen, collected in Australia and represent the first species of chewing lice recorded from this host taxon. The holotypes will be deposited in the South Australian Museum. Paratypes will be deposited there as well as the U.S. National Museum, the University of Minnesota, and Oklahoma State University.

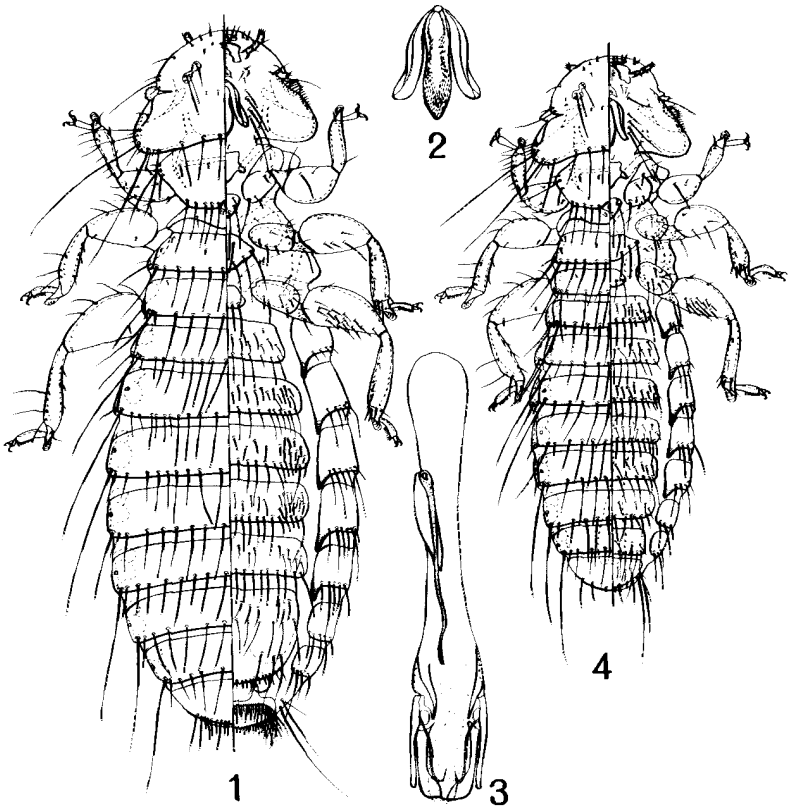
Pseudomenopon ***australis*** Price and Emerson, new species
(Figs. 1–4)

TYPE-HOST: *Gallinula ventralis* Gould.

MALE: As in Fig. 4. Median portion of gular plate tapered (Fig. 2), 0.15–0.16 mm long. Head seta 7 extending slightly over half way to base of seta 9. Marginal pronotal seta 3 much longer than marginal seta 1. Marginal tergal setae: I, 12; II, 14; III–V, 12; VI–VII, 11–12; VIII, 9–10. Postspiracular seta on V only 0.13–0.18 mm long, much shorter than those on IV or VI. Sternal setae: I, 4; II, 27–31; III–IV, 34–39; V, 31–36; VI, 24–28; VII, 17–21; VIII, 10–15. Subgenital plate with 10–11 setae. Genitalia (Fig. 3) 0.48–0.52 mm long, 0.09–0.10 mm wide, with principal sclerite 0.23–0.24 mm long, slender, relatively straight, and accessory sclerite 0.14–0.16 mm long.

FEMALE: As in Fig. 1. Gula, head seta 7, pronotum, and postspiracular setae as for male. Marginal tergal setae: I, 14; II–III, 21–22; IV, 19–20; V–VI, 17–19; VII, 14; VIII, 12. Last tergite with 21–22 inner posterior setae. Sternal setae: I, 4; II, 31–33; III, 50; IV, 50–56; V, 54–58; VI, 44–45; VII, 24–29. Subgenital plate with 21–22 marginal setae. Anus with 64–69 ventral fringe setae, 60–63 dorsal fringe setae, these being relatively short laterally; without evidence of small ring in genital chamber region.

DIMENSIONS (in mm): Preocular width, male 0.35–0.36, female 0.40–0.41; temple width, male 0.48–0.50, female 0.58–0.59; head length, male 0.28–0.29, female 0.32–0.33; prothorax width, male 0.35–0.37, female 0.44–0.45; metathorax width, male 0.39–0.40, female 0.53–0.54; total length, male 1.55–1.65, female 2.10–2.16.



Figs. 1–4. *Pseudomenopon australis*. 1. Female. 2. Female gula. 3. Male genitalia. 4. Male.

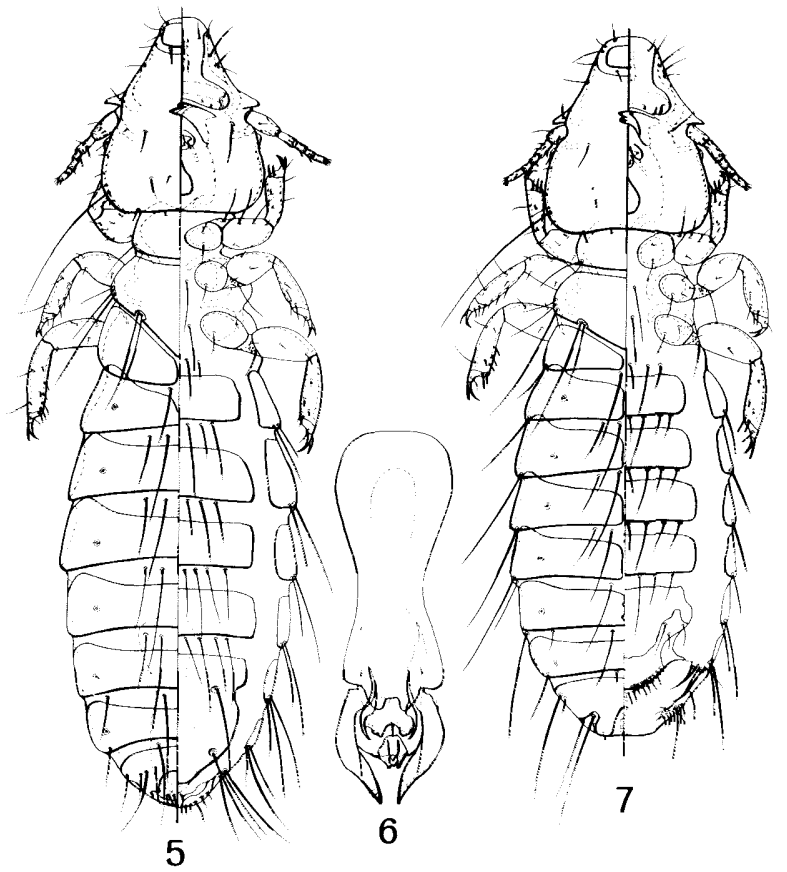
REMARKS: In the key to males given by Price (1974), *P. australis* goes to couplets 12 and 13 where it identifies closest to *P. pilgrimi* Price, *P. cinereum* (Piaget), and *P. pflegeri* Eichler. However, the combination of short postspiracular seta on V, marginal pronotal seta 3 longer than seta 1, and size and shape of the principal genital sclerite are unique for *P. australis*. In the key to females given by Price (1974), *P. australis* passes to the second half of couplet 19 where it identifies with *P. meinertzhageni* Price and *P. scopulacorne* (Denny). Unfortunately, females of these last two species, along with those of several others, are difficult to separate. The male genitalia of both *P. meinertzhageni* and *P. scopulacorne* are grossly different from *P. australis* and support the recognition of this new species.

MATERIAL: Holotype male, ex *G. ventralis*, Etadunna, South Australia, 22.VII.1984, J. M. Bourne (B-38425). 6 female, 4 male paratypes, same data as holotype.

Rallicola ***bournei*** Price and Emerson, new species
(Figs. 5–7)

TYPE-HOST: ***Gallinula ventralis*** Gould.

MALE: As in Fig. 5. Antenna with enlarged basal segment shorter than combined segments II–V and lacking process on posterior margin. Abdominal tergite II (first apparent tergite) divided at midline,



Figs. 5–7. *Rallicola bournei*. 5. Male. 6. Male genitalia. 7. Female.

III only partially divided, and remainder undivided. Tergites II, VII, and VIII with 2 medial setae; III–VI with 4. Sternites III–VI usually with 7 setae (80%), much less often 6 (10%) or 8 (10%). Genitalia as in Fig. 6, with inwardly curved parameres extending well beyond complex of mesosomal structures; genitalia length 0.43–0.50 mm, width 0.13–0.14 mm.

FEMALE: As in Fig. 7. Antenna without such pronounced enlarged basal segment as for male. Abdominal tergites II–VI divided at midline, VII only partially divided, and VIII entire. Tergal chaetotaxy much as for male. Sternites III–VI usually with 7 setae (87.5%), much less often 6 (12.5%). Subgenital plate with short row of short spiniform setae and row of slender longer setae on margin; 2 large setae on tubercles on each side of plate.

DIMENSIONS (in mm): Preantennal width, male 0.42–0.44, female 0.40–0.42; temple width, male 0.46–0.47, female 0.46–0.48; head length, male 0.52–0.53, female 0.50–0.52; prothorax width, male 0.28–0.32, female 0.28–0.30; pterothorax width, male 0.40–0.42, female 0.40–0.41; abdomen width, male 0.62–0.68, female 0.57–0.64; total length, male 2.06–2.16, female 1.94–2.07.

REMARKS: In the key given by Emerson (1955), *R. bournei* goes to couplet 17, as does also *R. campbelli* Emerson, another species subsequently described by Emerson (1964). *Rallicola bournei* most closely resembles *R. campbelli* found on *Tribonyx mortierii* DuBus in Tasmania; however, there are significant differences. The male of *R. bournei* is larger, while the female is smaller. For males of *R. bournei*, abdominal tergite II is divided at the midline, III only partially divided, and the remainder entire; for males of *R. campbelli*, II and III are divided at the midline, IV only partially divided, and remainder entire. Abdominal tergites III–VI of *R. bournei* each has four median setae, while for *R. campbelli* there are two median setae. There are also minor differences in the male genitalia and terminal abdominal segments. Ornithologists are not in agreement as to whether *Gallinula* or *Tribonyx* is the generic name for the host of *R. bournei*; the *Rallicola* species found on the two hosts discussed above suggest that the genus *Tribonyx* is the correct choice.

MATERIAL: Holotype male, ex *G. ventralis*, Etadunna, South Australia, 22.VII.1984, J. M. Bourne (B-38425). 10 male, 6 female paratypes, and 3 immatures, same data as holotype.

ACKNOWLEDGMENTS: We thank Dr. Shane Parker, Curator of Birds, South Australian Museum, Adelaide, South Australia, for furnishing us with the specimens used for the description of these new species. This study was partially supported by Projects No. Min-17-015 and Min-17-016, Minnesota Agricultural Experiment Station, St. Paul, Minnesota 55108, and has been assigned Paper No. 14,401, Scientific Journal Series.

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[1] Department of Entomology, University of Minnesota, St. Paul, Minnesota 55108.
[2] 560 Boulder Drive, Sanibel, Florida 33957.
Accepted for publication 17 July 1985.