Feather lice from Ascension and Magnificent Frigatebirds

In the recent paper on the identification of the 1953 Tiere frigatebird (Walbridge et al.; Brit. Birds 96: 58–73), the authors drew attention to the identification evidence provided by chewing lice (Insecta: Phthiraptera). A number of lice representing three genera were obtained from the Tiere corpse and the identification of these specimens, held in the National Museums of Scotland, Edinburgh, had been rechecked and compared with current listings of frigatebird lice.

One louse species recorded from the Tiere bird was Colpocephalum angulaticeps (Piaget 1880), a species which can be found on both Lesser Fregata ariel and Great Frigatebirds F. minor, but not on Magnificent Frigatebird F. magnificens, where it is replaced by the closely related C. spineum (Kellogg 1899). Walbridge et al. used this as supporting evidence to rule out the possibility that the Tiere bird was a Magnificent Frigatebird. When the paper went to press, there were no fully authenticated records of Colpocephalum spp. from Ascension Frigatebirds F. aquila.

We have now been able to examine lice collected from Ascension Frigatebirds on Boatswainbird Islet, off Ascension Island, the only breeding place of this species. Following a request from BZ, Richard White, Ascension Island Conservation Officer, kindly collected four lice from Ascension Frigatebird fledglings in December 2002. These lice were slide-mounted and identified by RJP, and deposited in the entomological collection of the Museum of New Zealand, Wellington. The four lice examined were identified as two female C. angulaticeps (Piaget 1880) and two female Pectinopygus crenatus (Giebel 1874).

Magnificent Frigatebird is host to the louse C. spineum, and is to date the only known host of this louse species. Our data establish that C. angulaticeps is indeed the species of this genus which occurs on F. aquila and confirms the evidence from the Tiere specimen’s ectoparasites, conclusively ruling out Magnificent Frigatebird. As yet, no Colpocephalum louse has been recorded from Christmas Island Frigatebird F. andrewsi and thus we hesitate to say that C. spineum is host-specific to F. magnificens only. This host specificity would be easy to clarify should anyone provide lice from F. andrewsi on Christmas Island (please contact any of the authors; see details below).

Pectinopygus crenatus (with type-host F. aquila) was the first species of Pectinopygus described from any frigatebird species. Two other species were described later: P. gracilicornis (Piaget 1880) from F. minor, and P. fre-gataphagus (Eichler 1943) from F. magnificens. On morphological grounds it is, however, extremely difficult to separate these three nominal species of Pectinopygus and, consequently, they have little value as aids for the identification of frigatebirds at the species level. Many other species of Pectinopygus lice occur on almost all other species of Pelicaniformes. In the UK, for example, the Pectinopygus lice parasitising Northern Gannet Morus bassanus, Great Cormorant Phalacrocorax carbo, and Shag P. aristotelis belong to three different species, one per host species.

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