The mating behaviour of *Oxylipeurus variegatus* (Mallophaga: Lipeuridae)

YOSHIKA ONIKI

Pesquisador Associado (CNPq), Departamento de Zoologia, UNESP, Caixa Postal 199, 13.506-900 Rio Claro e Florida State Collection of Arthropods, Division of Plant Industry, P. O. Box 1269, Gainesville, Florida 32602, U. S. A.

(Recebido em 12-II-95)

Mating behaviour (male under female) for *Oxylipeurus variegatus* (Lipeuridae) is similar to that registered for certain other Mallophaga.

Key-words: Mating behaviour; Mallophaga; *Oxylipeurus*.

A posição de acasalamento para *Oxylipeurus variegatus* (Lipeuridae) é de macho sob a fêmea, como em certos outros Mallophaga.

Palavras-chave: Acasalamento; Mallophaga; *Oxylipeurus*.

INTRODUCTION

While the position of the sexes in mating may be different in different groups of Mallophaga, much of this kind of information is unavailable in the literature (EICHLER, 1963). In most cases (at least in Ischnocera) the position is subfeminal, *i. e.*, the male is under the female (SIKORA & EICHLER, 1941). In the case of *Columbicola columbae* (Linnaeus, 1758) the male clasps from below with his seizing antennae the first abdominal segment of the female (SCHMUTZ, 1955).

Here, I present a description of the copulatory position for *Oxylipeurus variegatus* Carriker, 1944 (Lipeuridae).

MATERIAL AND METHODS

On 22 June 1981, the author received a female Speckled Chachalaca, *Ortalis guttata* (Spix, 1825), family Cracidae, from a private zoo in the Barão Geraldo District of Campinas, State of São Paulo, Brazil. This bird had been in the freezer for at least 48 hours and during taxidermy was found to be very fat and in heavy body molt.

RESULTS AND DISCUSSION

While the Chachalaca was being skinned, three light-colored flat lice (*Amyrsidea* sp.) came crawling slowly to the hand out of the body feathers.

Several large dark colored lice (*Oxylipeurus variegatus* Carriker, 1944) were collected from the wing feathers.

Another six pairs of mating individuals were obtained, at times from nearby barbules, large ones (females) atop small (males) so that, in many cases there seemed to be only one individual. The male genitalia were curved upward and when dislodged made a clicking sound due to high chitinization. In all 15 males and 10 females were collected as well 12 immatures.

Three points are interesting in this report. First, the copulation position was confirmed for *Oxylipeurus* to be maleventral as in *Columbicola*. Second, the copulating lice had remained on the bird and yet were still alive after being in the freezer for hours. Third, in June lice were still reproducing even when immatures were already present.

Mallophaga are known to be very dependent on the temperature, but URBAN & ZLOTORZYCKA (1981) have shown that some may survive low temperatures for a relatively long period. The fact that six pairs of *Oxylipeurus* were in copulatory position suggests that copulating could have been a reaction to the approaching danger of freezing.

ACKNOWLEDGEMENTS

The identification of lice was confirmed by the late Dr. K. C. Emerson, to whom I am indebted not only for his help but for starting me in studies of these very interesting and little known ectoparasites of birds. Drs. W. Eichler and E. O. Willis helped with a preliminary version of this paper.

REFERENCES

EICHLER, W. – *Mallophaga. Bronns Klass. Ordn. Tierreichs.* Leipzig, 5/III/7b/1, 1963.

SCHMUTZ, W. – "Zur Konstruktionsmorphologie des männlichen Geschlechtsapparates der Mallophagen." *Zool. Jb. Anat. (Jena)*, **74**, 1955, 189-338.

SIKORA, H. & EICHLER, W. – "Über Kopulationseigentümlichkeiten der Mallophagen." *Z. Morph. Okol. Tiere,* Berlin, **38**, 1941, 80-84.

URBAN, E. & ZLOTORZYCKA, J. – "Untersuchungen über die Lebensfähigkeit der Hühnermallophagen nach Verlust ihres Wirtes." *Angew. Parasitol*, **22**, 1981, 83-91.