

# **EVOLUTION OF MITOCHONDRIAL GENOMES OF BIRD LICE ISCHNOCERA.**

Covacin, Catherine, R. Shao and S. Barker

*Department of Microbiology and Parasitology, and Institute for Molecular Bioscience, The University of Queensland, Brisbane, Queensland, 4072, Australia.*

Nucleotide sequences of various mitochondrial regions and whole-gene arrangements have been used to gain information on the population structure and/or evolutionary relationships.

Using PCR to amplify target genes, conserved mitochondrial insect primers and species-specific primers, sections of the ichnoceran lice, *Columbicola columbae* and *Campanulotes bidentatus compar* have been sequenced. Both lice have a unique arrangements of genes in their mitochondrial genomes.

Provisional data indicates: *Campanulotes sp.* has a cox1- cob cox11 arrangement while the gene order for *Columbicola columbae* places L2 before the cox1 gene.