

ARE HUMAN HEAD AND BODY LICE PRODUCTS OF SYMPATRIC SPECIATION? LEVENE AND DOBZANSKY REVISITED.

David Reed, & Dale Clayton

Dept. of Biology, University of Utah 257 South 1400 East Salt Lake City, Utah 84112-0840

The evolutionary history of lice (Phthiraptera: Anoplura) that infest primates is not well understood. There are several species that appear to be very closely related within and among *Pediculus* and *Pedicinus*. The evolutionary relationship of the three lice that are found on humans (*Pediculus humanus capitis*, *Pediculus h. humanus*, and *Phthirus pubis*) is not known from molecular characters, and some suggest that human head and body lice are the product of sympatric speciation. Much speculation exists about the origin of the New World primate lice and their relation to the human-associated lice. We have generated phylogenies based on mitochondrial DNA sequences for these and other primate lice in an attempt to better understand the evolutionary history of this group.