

SIMULTANEOUS IDENTIFICATION OF *ANOPHELES DIRUS* COMPLEX AND MALARIA PARASITE BY MOLECULAR DIAGNOSTICS (POSTER)

Khuntirat B, Promstaporn S, Coleman RE and Jones JW

Malaria remains an important health problem in border areas of Thailand although control programs in mosquito reduction and eradication are being implemented. Primary malaria vectors in the country consists of *Anopheles dirus*, *A. minimus*, and *A. maculates* each of which also contains species complexes. Accurate identification within these species complexes cannot be accomplished by morphological characterization. A multiplex PCR system was developed to simultaneously identify different species of *A. dirus* complex and determine if the vector is infected with malaria parasites. Using laboratory-reared mosquito DNA spiked with malaria DNA, it was found that this technique could be applied to detect the mosquito species and the presence of malaria in the same reaction. Additional experiments with field-collected specimens are being pursued to validate the system.

**51st Annual Meeting of the American Society of Tropical Medicine and Hygiene.
Denver, Colorado, USA. 10-14 November 2002.**
