

Survey of Rickettsial Diseases in Thailand

Principal Investigators : Vichai Sankasuwan, MAJ, MC, RTA*
Premthavi Bodhidatta, Flight Lieutenant, MC, RTAF**

Associate Investigator : Richard A. Grossman, LTC, MC

Assistant Investigators : Cheodchai Chuenchitra, B.Sc. (Med Tech)
Bupha Manetese, B.Sc. (Med Tech)

OBJECTIVE: To determine the distribution and seasonal variation of Q-fever and spotted fever group rickettsiae at Lopburi; identify arthropod vector(s), mammal reservoirs and alternate hosts(s); serve as consultative laboratory.

DESCRIPTION: Search is being made for evidence of Coxiella burneti and spotted fever infections in man and rodents at Lopburi, central Thailand. Standard rickettsial identification, isolation and serologic techniques are being used.

PROGRESS: Trips to Lopburi were made in December, 1970 (winter season) and March, 1971 (summer season). Six strains of Coxiella burneti had previously been isolated from trapped bamboo rats (Bandicota indica) in Lopburi. In December, 2 C. burneti were isolated from 61 B. indica and 7 sera were positive to Q-fever CF antigen. No spotted fever rickettsiae were recovered and 2 sera were positive to spotted fever group CF antigen in these bandicoots. In March, 79 B. indica were trapped. Isolation results are pending; 16 of the sera were CF positive (Q-fever); no spotted fever agents were isolated and 2 sera were CF positive (spotted fever group). No isolations or positive sera were obtained for either CF or spotted fever group in 6 Rattus rattus trapped in December and 17 trapped in March.

A total of 106 Hemophysalis and Amblyomma ticks were removed from these rats. Results are pending on rickettsial isolation attempts from these arthropods.

A total of 150 sera were collected from people living in and around the study areas. Results are pending on rickettsial serology.

* Chief Investigator (Thai Component)

** Investigator, Division of Research (Thai Component)