

Newsletter

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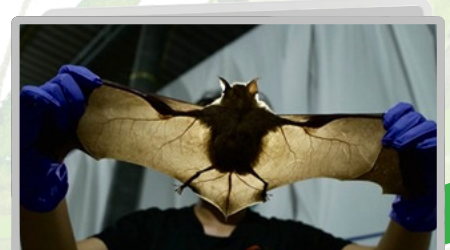
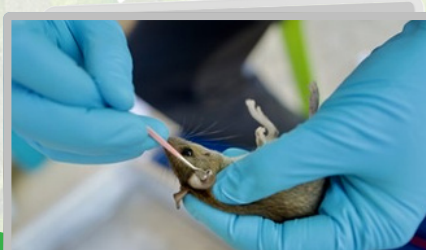
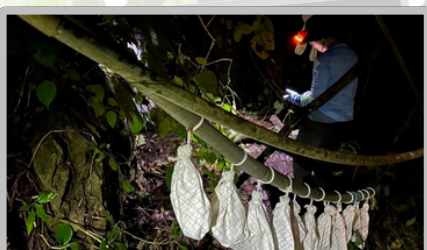


PANDASIA completes wildlife and domestic animal sample collection in Chanthaburi and Chiang Rai Provinces in 2024

The PANDASIA's Work Package 2 (WP2) animal research team, led by Dr. Boripat Siriaroonrat from the Faculty of Environment and Resource Studies, Mahidol University (MU), completed field sample collection in Chanthaburi and Chiang Rai provinces in 2024. The field research team included Assoc. Prof. Dr. Prateep Duengkae from the Faculty of Forestry, Kasetsart University; Asst. Prof. Dr. Aingorn Chaiyes from the School of Agriculture and Cooperatives, Sukhothai Thammathirat Open University; Asst. Prof. Dr. Kittipong Chaisiri from the Faculty of Tropical Medicine, Mahidol University; Asst. Prof. Dr. Supaphen Sripiboon from the Faculty of Veterinary Medicine, Kasetsart University; Dr. Wanlaya Tipkantha and Dr. Waleemas Jairak from the Zoological Park Organization; and veterinary epidemiologist Paisin Lekcharoen participated in the field sample collection.



Wildlife samples were collected from diverse habitats, including forests and agricultural areas, dump sites, and households. In Chantaburi, samples were collected in Pong Nam Ron and Soi Dao districts during the dry season from April 2–8, 2024, and in Wiang Kaen and Mae Fah Luang districts, Chiang Rai, from April 21–29, 2024. The team obtained oral swabs, rectal swabs, blood samples, and more from 178 bats, 172 rodents, 161 domestic animals (dogs and cats), and 15 secondary wildlife species (e.g., treeshrews, ground squirrels, squirrels, and civets). During the wet season, the sampling activity took place in Pong Nam Ron and Soi Dao districts, Chantaburi province, from July 8–15, 2024, and in Wiang Kaen and Mae Fah Luang districts, Chiang Rai province, from October 18–26, 2024. The team collected similar samples from 234 bats, 132 rodents, 155 domestic animals (dogs and cats), and 9 secondary wildlife species (e.g., treeshrews, ground squirrels, and birds). All samples were submitted to the Khon Kaen University (KKU) laboratory for virus screening.



The invertebrate team revisited the Chanthaburi study sites in the wet season, from August 13–23, 2024 and collected mosquito, fly, and leech samples. Mosquito samples were collected to assess the insect's role as intermediate hosts in virus transmission, while flies, leeches, and blood-fed mosquitoes were collected for environmental DNA (eDNA) analysis to identify bloodmeal hosts and assess animal biodiversity. A total of 8,439 mosquitoes (37 blood-fed), 1,771 flies, and 2 leeches were collected, identified, and stored for subsequent virus screening at the KKU laboratory.



The invertebrate sampling collection was led by Dr. Hans J. Overgaard, the principal investigator of PANDASIA, led the team, and joined by Dr. Rebecca Brown from the Norwegian University of Life Sciences (NMBU), a research team of medical entomologists from KKU, local entomologists, representatives from the Center of Vector Borne Disease Control, an entomology field assistant, and an MSc student from the Faculty of Tropical Medicine, MU. The invertebrate team spent 10 days collecting samples from the same locations during the dry season, focusing on zoonotic spillover interfaces such as village houses, temples, dump sites, fruit orchards, forest edges, forest interiors, and bat caves.

