

# SURVEY OF *ANOPHELES* MOSQUITOES (DIPTERA: CULICIDAE) IN WEST SUMBA DISTRICT, INDONESIA

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**Abstract.** In August 2007, mosquitoes were collected using four different collection methods at 2 upland interior and 2 coastal villages in West Sumba District, East Nusa Tenggara Province, Indonesia. Methods included human-baited and unbaited tent and malaise traps, human-landing collections (HLC), and unbaited CDC light traps. Mosquitoes were identified to species by morphological characters and all anophelines were tested for malaria circumsporozoite protein (CSP) using an enzyme-linked immunosorbent assay (ELISA). During six trap nights, 4,174 *Anopheles* mosquitoes belonging to 13 species were captured and identified: *An. aconitus*, *An. annularis*, *An. barbirostris*, *An. flavirostris*, Hyrcanus Group species, *An. indefinitus*, *An. kochi*, *An. leucosphyrus* group, *An. maculatus* s.l., *An. subpictus* s.l., *An. sundaicus* s.l., *An. tessellatus*, and *An. vagus*. Of potential disease vectors, *An. annularis*, *An. subpictus*, and *An. vagus* were the most frequently collected species in the upland interior sites, whereas *An. sundaicus*, *An. subpictus*, and *An. vagus* were most commonly found along the coast. The predominant species from evening human-landing collections (mosquitoes per human) were *An. subpictus* and *An. vagus* in the upland interior and *An. sundaicus* along the coast. All mosquitoes were non-reactive for *Plasmodium* CSP. One specimen of the *An. leucosphyrus* group was captured from indoor HLC in Tenateke Village, an upland interior location. This finding appears to represent a new collection record for Sumba Island.

**Keywords:** *Anopheles*, malaria vectors, Sumba Island, Indonesia

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