

Reid et al. (1979) postulated that probable vector or non-vector strains (in respect to malaria and filariasis) can be identified by the branching of pupal seta 1-VII. They believe that populations of *barbirostris* with more than 20% of specimens with less than 20 branches on pupal seta 1-VII might be regarded as a possible vector population. The branching of seta 1-VII of the Guam pupae is: specimen 058-01, 35-24 and 058-02, 31-33. Only a single pupal skin of *barbirostris* from Vietnam was found in the National Museum of Natural History (USNM) collection. This specimen (GV 95, Gó Váp—Gia Dinh) had branching of 28 and 30 on seta 1-VII. Although these samples are small, the range of branching of seta 1-VII falls within the area of probable non-vector strains as hypothesized by Reid et al. (1979).

As *An. barbirostris* (*sensu strictu*) does not occur in the Philippines (the closest related species are *franciscoi* Reid and *manalangi* Men-

doza), it appears extremely likely that this species was introduced to Guam from Vietnam sometime prior to 1976, probably by aircraft.

The above specimens have been deposited in the USNM.

References Cited

- Harrison, B. A. and J. E. Scanlon. 1975. Medical entomology studies—II. The subgenus *Anopheles* in Thailand (Diptera: Culicidae). *Contrib. Am. Entomol. Inst.* 12(1):1-307.
- Reid, J. A., B. A. Harrison and S. Atmoseodjono. 1979. Variation and vector status in *Anopheles barbirostris* (Diptera: Culicidae). *Mosquito Syst.* 11:235-51.
- Ward, R. A., B. Jordan, A. R. Gillogly and F. J. Harrison. 1976. *Anopheles litoralis* King and *A. barbirostris* group on the island of Guam. *Mosquito News* 36:99-100.

AN APPARATUS FOR THE USE OF CO₂ GAS WITH A CDC LIGHT TRAP

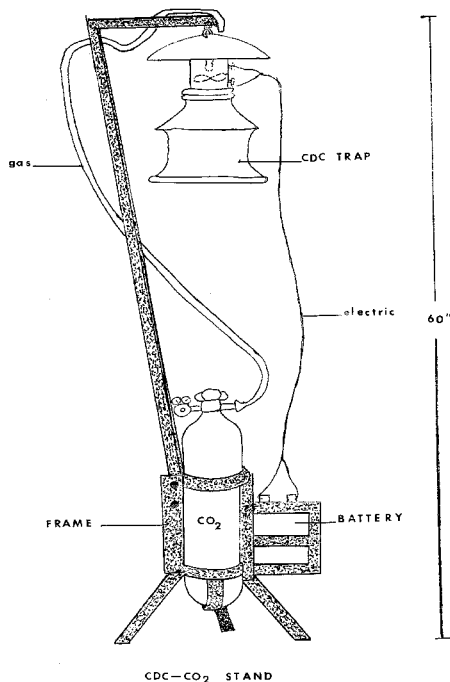
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In an effort to set up routine surveillance and control of *Culex nigripalpus* populations in mosquito control districts in connection with the Florida Statewide Encephalitis Program, the Department of Health and Rehabilitative Services recommended the use of CDC mosquito light traps with the added attractant of frozen CO₂ (dry ice). However, in the event there was poor access to dry ice, they suggested the use of the traps alone.

In Collier County, obtaining dry ice proved to be difficult, time-consuming and very expensive, which led to the use of CO₂ gas as a substitute. The gas, in 7 pound cylinders, passed through plastic tubing and through inexpensive Sherwood-Type M gauges, and then was calibrated for each trap by trickling it through a measured volume of water (25 bubbles per minute).

A detachable, 5-foot, metal stand was devised to hold the CDC trap, 6-volt battery and CO₂ cylinder, (figure 1). This apparatus proved to be compact, easily set up and moved, making it an efficient tool for field work.



CDC-CO₂ STAND