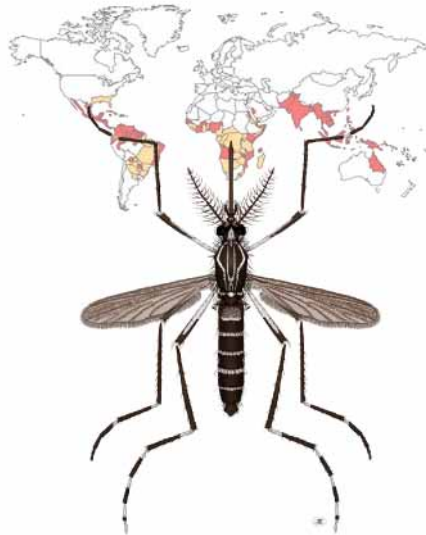


# ZOOTAXA

589

## **Pictorial keys for the identification of mosquitoes (Diptera: Culicidae) associated with Dengue Virus Transmission**

LEOPOLDO M. RUEDA



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## Pictorial keys for the identification of mosquitoes (Diptera: Culicidae) associated with Dengue Virus Transmission

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### Abstract

Identification keys are provided for female adults and fourth stage larvae of the mosquito species likely to transmit dengue viruses in 4 regions of the world. The keys are illustrated with Auto-Montage® photomicrographs, allowing optimum depth of field and resolution. Species included for the **Afrotropical Region** are: *Aedes (Stegomyia) aegypti* (Linnaeus), *Ae. (Stg.) africanus* (Theobald),

*Ae. (Stg.) albopictus* (Skuse), *Ae. (Stg.) luteocephalus* (Newstead), *Ae. (Stg.) opok* Corbet and Van Someren, *Ae. (Diceromyia) furcifer* (Edwards), and *Ae. (Dic.) taylori* Edwards; for the **South Pacific Islands and Australian Region**: *Ae. (Stg.) aegypti*, *Ae. (Stg.) albopictus*, *Ae. (Stg.) cooki* Belkin, *Ae. (Stg.) hebrideus* Edwards, *Ae. (Stg.) hensilli* Farner, *Ae. (Stg.) polynesiensis* Marks, *Ae. (Stg.) rotumae* Belkin, *Ae. (Stg.) scutellaris* (Walker), and *Ochlerotatus (Finlaya) notoscriptus* (Skuse); for the **Oriental Region**: *Ae. (Stg.) aegypti*, *Ae. (Stg.) albopictus*, and *Oc. (Fin.) niveus* subgroup; and for the **American Region** (North, Central and South America, including the Caribbean Islands): *Ae. (Stg.) aegypti*, *Ae. (Stg.) albopictus*, and *Oc. (Gymnometopa) mediovittatus* (Coquillett).

**Key words:** Diptera, Culicidae, *Ochlerotatus*, *Aedes*, *aegypti*, *albopictus*, dengue, identification key, mosquitoes

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On the cover: *Aedes (Stegomyia) aegypti* (Linnaeus) adult female, dorsal view. (Drawing by Taina Litwak; world map courtesy of U.S. Centers for Disease Control and Prevention (CDC) (<http://www.cdc.gov/ncidod/dvbid/dengue/map-distribution-2000.htm>).

### Introduction

*Aedes* and *Ochlerotatus* mosquitoes include species that are known or potential vectors of dengue viruses infecting humans. With an increasing number of human cases of dengue and dengue hemorrhagic fever worldwide, it is essential that identification keys for the mosquito vectors be readily available. A list of mosquito species (Table 1) includes 7 commonly known or potential vectors of dengue viruses in the Afrotropical Region, 9 in the South Pacific Islands and Australian Region, about 3 in the Oriental Region (particularly Southeast Asia) and 3 in the Americas (North, Central and South America including the Caribbean Islands). These species are treated separately according to regions (Fig. A) in the identification keys for both adults and fourth stage larvae. Two species, *Aedes aegypti* (Linnaeus) and *Aedes albopictus* (Skuse), are found in all 4 regions of the world that are treated in this work.