

associated with a variety of types of forest cover, including primary and secondary tropical rain forests, wet to dry evergreen forests, and secondary evergreen and deciduous forests. Anopheline mosquitoes are common throughout Thailand and utilize a wide variety of habitats (Table 4). Also, we here propose 13 informal infrasubgenetic categories (Table 3).

Anopheline larvae usually require clean water; however, some are found in highly polluted water with high concentrations of buffalo dung and urine (e.g., *An. barbirostris*), in muddy water, or in brackish water (e.g., *An. baezai*). Most species are found in still to slowly running water, in water-filled containers, or in various other ground-water habitats. A complete listing of known larval habitats based on collection records is provided in Table 4. The majority of habitats that support the development of *Anopheles* larvae contain submerged, emergent, and/or floating vegetation. Larvae are found in both temporary and permanent water sources that are located in a variety of sunlight conditions ranging from direct sunlight to heavy shade.

Feeding behavior

Female anopheline mosquitoes feed primarily on mammalian and avian blood, with the former predominating. Most records from Thailand refer to nocturnal feeding on humans (these records generally resulted from studies on the transmission of malaria). The nocturnal feeding periodicity varies greatly among the different species, e.g., *An. baimaii* and *An. dirus* predominantly feed between 20 00-23 00 hr and *An. minimus* feeds throughout the night without a clearly discernible peak. Mosquitoes like *An. maculatus* and *An. sawadwongporni*, and those of the Barbirostris and Hyrcanus Groups, are predominantly collected between 18 00 and 20 00 hr (Rattanarithikul *et al.*, 1996b). Many species (e.g., *An. minimus* and *An. sawadwongporni*) can be collected during the day while resting in houses or other sheltered areas, whereas some species such as *An. dirus* (in heavily forested areas) (Rattanarithikul, unpublished data), *An. separatus*, *An. barbirostris*, and *An. campestris* (near their larval habitats) will feed during the day (Harrison, unpublished).

Habitats of the Groups and Subgroups of *Anopheles*

A description of the known habitats of each of the members of the various group-level taxa of *Anopheles* follows. A complete listing of the species found in each Group and Subgroup is presented in Table 3, and the known habitats of each species are presented in Table 4.