chromosomal forms of Anopheles that occur in Thailand, only An. baimaii, An. dirus, An. minimus, and An. maculatus (each belonging to complexes of species that are often morphologically indistinguishable) are considered major vectors (Pinichpongse and Bullner, 1967; Chareonviriyaphap et al., 1999). The Dirus Complex consists of at least seven closely related species, with five occurring in Thailand (Baimai et al., 1984a,b; Peyton and Ramalingam, 1988; Peyton, 1990; Sallum et al., 2005). Members of this complex inhabit forest and forest-fringe areas, have strong human-biting tendencies, and are generally long-lived, all factors which results in particularly efficient vectors even at low population densities (Rosenberg et al., 1990). In Thailand, the Minimus Complex consists of two species that are commonly found along the guiet, shaded edges of slow moving streams in areas with low hills, with contact with humans usually along the margins of villages (Sucharit et al., 1988; Green et al., 1990). Anopheles minimus s.l. are generally reported to be zoophilic, exophilic, and exophagic in their resting and feeding behavior, which reduces their vector efficiency compared to An. dirus (Harrison, 1980). The Maculatus Group consists of at least eight sibling species (Rattanarithikul and Green, 1986; Baimai et al., 1993b; Kittayapong et al., 1993). Members of this group usually occur in hilly forested zones where the larvae occur in shaded puddles in drying streams and other temporary habitats such as rock pools (Rattanarithikul et al., 1995; Chareonviriyaphap et al., 2000).

## Japanese encephalitis

Japanese encephalitis (JE) is a flavivirus found throughout Southeast Asia. It is endemic in birds and mammals and serological evidence has been reported of widespread human infections in many countries in the region. However, clinical encephalitis has been recognized only sporadically, or in small outbreaks. The primary vectors of JE are various species of the genus *Culex*; however, a number of *Anopheles* species that are found in Thailand have been incriminated as vectors (Table 2). These include *An. subpictus* (Dhanda *et al.*, 1997), *An. sinensis* (Zhang, 1990), *An. annularis*, and *An. va-gus* (Olson *et al.*, 1985; Sucharit *et al.*, 1989), *An. peditaeniatus* (Mourga *et al.*, 1989), and various members of the Barbirostris, Hyrcanus, and Umbrosus Groups (Ramachandra Rao, 1984).

## Filariasis

*Wuchereria bancrofti* (Cobbold) and *Brugia malayi* (Buckley) cause Bancroftian and Brugian filariasis, respectively. *Brugia malayi* occurs as periodic and subperiodic forms and is primarily found in the flat coastal plains of southern part of Thailand, whereas *W*.