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First record of a Japanese marine shore dolichopodid fly, *Thambemyia* (= *Conchopus*) *borealis* (Takagi), from the Neotropical Region (Diptera: Dolichopodidae)

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Thambemyia Oldroyd is a marine shore dolichopodid genus in the aphrosyline subgroup of the subfamily Hydrophorinae. The genus was erected by Oldroyd (1956) based on the greatly elongated proboscis of the Malaysian species *T. pagdeni* Oldroyd. Since the early 1980's the generic limits of *Thambemyia* have been in flux as a result of differing opinions regarding the proposed synonymy of the related genus *Conchopus* Takagi, 1965 by Meuffels & Grootaert (1984). Masunaga *et al.* (2005) argued to retain the generic status of *Conchopus* in a much restricted sense (i.e., the *rectus* species group of Takagi), but did not provide evidence to support that classification, however later Masunaga in Zhu *et al.* (2005) appears to have reversed this decision. Recent catalogs have all treated *Conchopus* as a junior synonym of *Thambemyia* (Bickel & Dyte 1989; Pollet *et al.* 2004; Yang *et al.* 2006). Presently *Thambemyia* (*sensu* Meuffels & Grootaert 1984) includes 24 described species from Japan, China and the Hawaiian Islands (Yang *et al.* 2006). Masunaga & Saigusa (2006) reported an additional five undescribed species (as *Conchopus*) from the Hawaiian Islands.

One of the Japanese species, *Thambemyia borealis* (Takagi) (Fig. 1) was recently discovered in the Nearctic Region from disjunct coastal sites near major seaports in California and Alabama, USA (Fig. 2), and it has been hypothesized that this species was introduced into the Nearctic by international shipping traffic from Japan (Masunaga *et al.* 1999). In Japan, *T. borealis* is known to occur in high densities in rocky intertidal zones around harbours and seaports (Masunaga *et al.* 1999). Females oviposit in the interspaces between barnacles and the larvae are thought to be predaceous mainly on other Diptera larvae living among the barnacles. Pupation typically occurs in the valves of dead barnacles. Adults are predaceous on chironomid larvae, and apparently will also scavenge on other dead animal tissue if available (Sunose & Satô 1994).

Here, we report the first occurrence of *T. borealis* in the Neotropical Region, from the coastal District of Miraflores, in Lima Province, Peru (Figs. 1 and 2), based on the following eight specimens housed in the Canadian National Collection of Insects, Ottawa, Canada (CNC) and the University of Guelph Insect Collection, Guelph, Canada (DEBU): 1♂, PERU: Lima, Miraflores, seashore, 18.VI.2006, S.M. Paiero & J. Klymko, debu00271499 (CNC); 1♀, with same data except: debu00271502 (CNC); 2♂, 2♀, with same data except: debu00271500, debu00271501, debu00271498, and debu00271503; 2♂ with same data except: beach, May 2007, S.M. Paiero (DEBU). The identity of the Peruvian specimens was confirmed based on comparison with paratypes of *T. borealis* in the CNC (2♂, 2♀, JAPAN: Hokkaido, Tokoro, 26.VII.1962, S. Takagi; 3♂, 3♀, with same data except: Otaru, Syukuzu, 19.VII.1962). The Peruvian collection locality is in the vicinity of Callao, the largest seaport in Peru. As such, it seems very likely that the Miraflores population of *T. borealis*, originated from stowaway flies associated with ships arriving from Japan, the USA, or possibly another, currently unknown locality, where *T. borealis* has become established.

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FIGURE 1. Male *Thambemyia borealis* (Takagi) resting on intertidal rock at Miraflores, Peru. Photo by Steve Marshall.

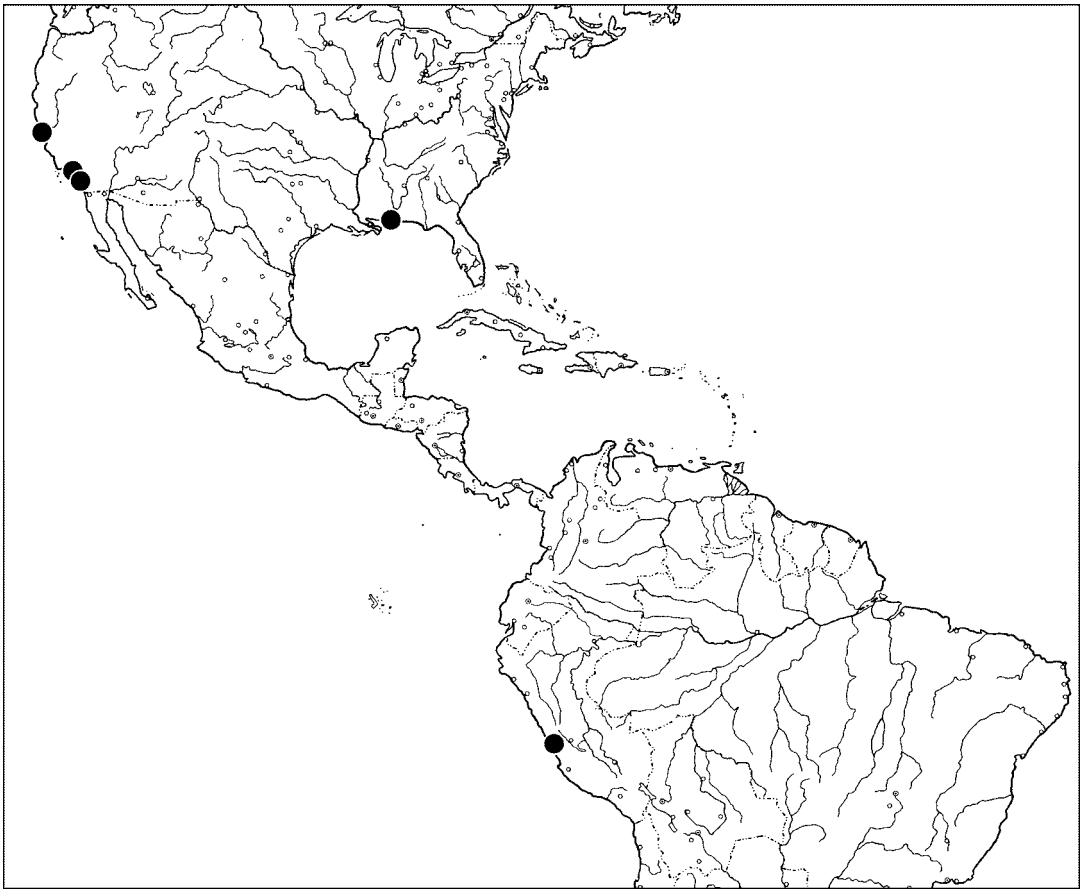

FIGURE 2. Known distribution of *Thambemyia borealis* (Takagi) in the New World.

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