FIRST RECORD OF *RETICULITERMES* (ISOPTERA: RHINOTERMITIDAE) FROM THE WEST INDIES: *R. FLAVIPES* ON GRAND BAHAMA ISLAND

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Reticulitermes Holmgren is a Holarctic genus of subterranean termites indigenous to North America, the Mediterranean and Black Sea regions, and eastern Asia (Emerson 1971). Although *Reticulitermes* spp. constitute the dominant complex of subterranean termite pests of structures in most of these areas (Edwards & Mill 1986), records of emigrations to non-indigenous locations are remarkably less common compared to pest species of *Coptotermes* Wasmann and *Cryptotermes* Banks (Gay 1967). Of more recent note, the European *R. lucifugus* (Rossi) is an immigrant of Montevideo, Uruguay (Aber & Fontes 1993), Santiago, Chile (Scheffrahn et al. unpubl.), and North Devon, United Kingdom (R. H. J. Verkerk, unpubl.). We herein report the discovery of established *R. flavipes* (Kollar) populations on Grand Bahama Island, Bahamas.

As part of an ongoing survey of the termites of the West Indies, JAC and JRM conducted a preliminary survey of Grand Bahama Island on 13 December 1998. Samples of a *Reticulitermes* sp. were collected from natural woody debris on soil at three locations (Fig. 1): junction of Fortune Bay Drive and Warburton Drive, 26.577°N, 78.611°W (alates, soldiers, pseudergates, nymphs; collection no. BA604-608); near Garden of the Groves, 26.553°N, 78.570°W (soldiers, pseudergates, nymphs; BA610, 613); and McLean's Town, 26.650°N, 77.955°W (alate, soldier, pseudergates; BA629). The Bahamian specimens were compared with vouchers of *Reticulitermes* spp. from Florida, Texas, California, France, and Japan. Based on qualitative and quantitative congruence of characters with those of *R. flavipes* (Scheffrahn & Su 1994), the Bahamian samples have been tentatively been assigned to *R. flavipes*. Measurements of the Bahamian *R. flavipes*, however, were in the smaller range of this species. The ab-

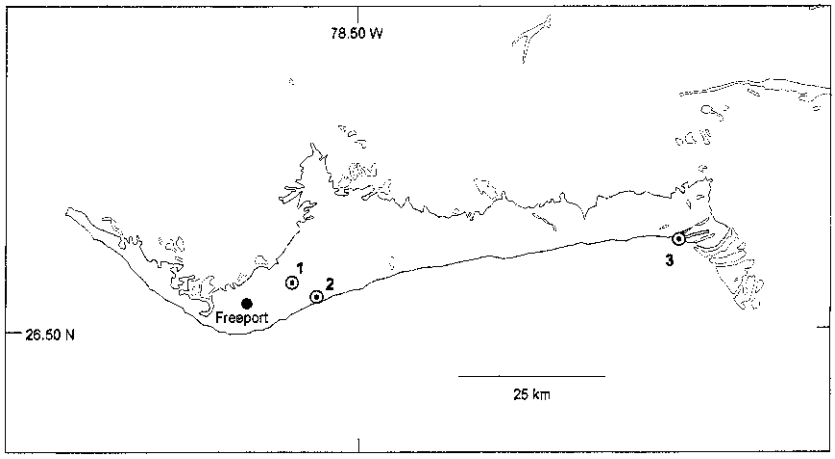

Fig. 1. Grand Bahama Island, Bahamas, with locations by number, where *Reticulitermes flavipes* were collected: 1) Fortune Bay Drive and Warburton Drive, 2) near Garden of the Groves, and 3) McLean's Town.

solute identification of *Reticulitermes* spp. from the eastern Nearctic remains problematic and this complex is in need of taxonomic revision.

Heterotermes sp. (Rhinotermitidae) has previously been reported from Grand Bahama Island (Scheffrahn et al. 1994), but it was not found during the current survey in which only *R. flavipes* and species in the family Kalotermitdae (genera *Cryptotermes*, *Incisitermes*, *Neotermes*, and *Procryptotermes)* were collected. Although not an exhaustive survey, it was unexpected that no other subterranean or arboreal nesting species were encountered. The arboreal nesting *Nasutitermes rippertii* (Rambur) (family Termitidae) and the subterranean *Heterotermes* sp. are common on other more southerly Bahamian islands (Snyder 1956, Scheffrahn et. al. 1994, Scheffrahn & Su 1995). December is unusually early in the year to find alates of *R. flavipes*, however, a warm autumn in 1998 and the subtropical climate of Grand Bahama Island may have promoted early alate production.

The occurrence of *R. flavipes* on Grand Bahama Island can either be attributed to anthropogenic or natural dispersal. We favor an anthropogenic event for two reasons. *Reticulitermes* spp. are not known from any other Bahamian island including other islands close to the Florida mainland such as Bimini, North Andros, and North Cat Cay (Snyder 1956, Scheffrahn et al. unpubl.). Secondly, Grand Bahama Island was developed by American industrialist Wallace Groves in the 1950s (Baker 1998) and shipments of materials from the United States mainland may have been the mode of *R. flavipes* immigration. The remote localities (>60 km apart) of *R. flavipes* on Grand Bahama Island suggest either multiple extraterritorial introductions or anthropogenic dispersal within the island.

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SUMMARY

Reticulitermes, a Holarctic genus of pestiferous subterranean termites, is reported from the West Indies for the first time. The broad establishment of *R. flavipes* on Grand Bahama Island probably represents several anthropogenic introductions.

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