Neotropical orchid bees (Hymenoptera: Apidae: Euglossini) have been reported only twice from the United States of America; once near Brownsville, Texas (23°31'19"N, 98°08'W), by USDA employees in the fruit fly monitoring program and sent to the Florida State Collection of Arthropods for identification (Wiley 2004). To date, more than 50 males and several females have been reported (Table 1). Neither the exact location of the introduction nor the current distribution in Florida is known. However, observations point to an accidental introduction around Butterfly World, Coconut Creek, Broward County—likely as a nest inside a wooden object (shipping pallet, bamboo furniture etc.)—followed by a southward spread to Dade County in 2004.

_Euglossa viridissima_ is native to Mexico and most of Central America and recorded from near sea level up to 1,900 m a.s.l. (Ramírez et al. 2002). The natural distribution mainly follows the range of the tropical dry forest on the Pacific Coast, from NW Costa Rica (ca. 10°N) to the northernmost population near 27°N in the State of Sonora, Mexico (Janzen et al. 1982; Bürquez, 1997), although the species has adapted to habitats ranging from lowland tropical rain forest over arid, scrubby secondary forest to oak-pine forest at 1,300-1,800 m a.s.l. (pers. obs., Fierros-Lopez 1998). Adult males are active when ambient temperature exceeds 20°C, and the “typical” habitat will be 25-28°C with 70-80% relative humidity (pers. obs.).

_Euglossa viridissima_ is a robust, medium-sized bee (3-4 mm wide, 11-13 mm long), bright metallic green, and with a long tongue (10 mm) neatly folded underneath the body. The male has a characteristic cushion of blond hairs on the second sternum (Roubik & Hanson 2004). _E. viridissima_ nests in natural as well as man-made cavities (Friese 1922; Aquino Vázquez & Cuadriello Aguilar 1990). The females gather resin to seal off any cracks in the cavity, leaving only a small entrance hole, and to construct barrel-shaped cells for the mass-provisioned offspring. Each cell is about 11-12 mm tall, 5-8 mm across, and “glued” together with neighboring cells in a roughly hexagonal pattern in one plane (Friese 1922). A nest holds 4-20 cells, which can stand on the floor, or be glued to the walls, giving a “flying carpet” impression (Aquino Vázquez & Cuadriello Aguilar 1990). Sometimes two groups of cells can be found in the same cavity, probably founded independently. There is evidence of cell reuse, and seven females co-existed in a nest with only two open cells, indicating some level of sociality (Aquino Vázquez & Cuadriello Aguilar 1990). In Chiapas, Mexico, the species is multivoltine and generations can overlap. The life expectancy for an individual _E. viridissima_ hardly exceeds a few months (60-90 days). During this time, the female can lay a minimum of 6-8 eggs (Friese 1922). The development from egg to adult in the nest studied by Aquino Vázquez & Cuadriello Aguilar (1990) was at least 53 days, but developmental time is expected to vary due to a negative correlation with temperature (Roubik & Hanson 2004).

Male orchid bees leave the natal nest upon eclosion and never return; they do not aid in construction, maintenance, provisioning, or defense of the nest. Instead they devote a considerable amount of time and energy collecting volatile compounds produced in fungus-infested wood, rotting vegetation, and specialized “perfume” flowers in Orchidaceae, Araceae, and a few other families (reviewed in Roubik & Hanson 2004). The fragrances are kept in hind tibiae that are uniquely modified for their storage, and are, most likely, used in species-specific recognition and/or as evidence of male fitness (Eltz et al. 1999). Male _Euglossa viridissima_ are known to collect fragrances from at least eleven genera of orchids (Ramírez et al. 2002). They also can be attracted to pure compounds in field bioassays. Eugenol (clove oil) is especially attractive (Cameron & Fenster 1984), followed by cineole, methyl salicylate, trans-methyl cinnamate, and benzyl acetate. Males also collect terpinen-4-ol, veratrole, phenylethanol, _p_-cresyl acetate, and geraniol (pers. obs.).

A number of plant families provide resources for _Euglossa viridissima_. Flowers of _Dalechampia_ spp. (Euphorbiaceae) that excrete a pliable resin (Armbruster 1988) are the only documented sources of resin for _E. viridissima_. However, Friese (1922) suggested cashew (Anacardium occidentale, Anacardiaceae) and conifers (Coni-