

New records of *Paramusonia cubensis* (Saussure, 1869) (Dictyoptera: Mantodea) and notes on its behavior in the Dominican Republic

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Abstract: New collection records are given for the mantis *Paramusonia cubensis* from the Dominican Republic. This species appears to be attracted to human dwellings.

Key words: Dictyoptera, Mantodea, *Paramusonia cubensis*, Santo Domingo, Dominican Republic.

The mantid *Paramusonia cubensis* (Saussure, 1869) is the only species in the genus *Paramusonia* Rehn, 1904 (Erhmann, 2002; Otte & Spearman, 2005). The genus is included in the subfamily Thespiinae, tribu Thespini (Erhmann, 2002) which contains other 8 genera and many species distributed mainly in tropical South America (Terra, 1995). *Paramusonia cubensis* was first recorded from the island of Hispaniola by Lombardo & Perez-Gelabert (2004) based on specimens collected in the lowlands of three different provinces of the Dominican Republic (Barahona, Distrito Nacional and La Altagracia). Besides Hispaniola, the distribution of *P. cubensis* includes Cuba, Venezuela and Colombia. *Paramusonia cubensis* is a medium size mantis (about 30 mm long), with a very slender and delicate body and homogeneous pale straw coloration in both sexes (Fig. 1). This species seems to prefer sunny areas with abundant grasses where they likely use their elongated shape and dull color to blend in among the vegetation. To the present, ten species of mantids have been recorded from Hispaniola (Lombardo & Perez-Gelabert, 2004), although several other species still to be reported are already known to be found in the island.

Interestingly, the specimens studied here were collected during an afternoon visit to a friend's house following some entomological investigation of the insects in the woods of secondary vegetation adjacent to the neighborhood. The mantids were found perching on the upper part of the interior walls of the house, reportedly a recurrent phenomenon at least during the summer months. Apparently, these mantids enter the house and stay there for days. At the time of our visit, eight adult individuals were captured, mainly from the living room and some of the bedrooms. The same day of the collection, *P. cubensis* was found on the vegetation near the house, clearly indicating that the species was abundant in the area at this time of the year. One of the house residents told me that the next day and every day after our visit for more than a week, three or more mantids could be seen inside the house. As with many other houses in the area, its construction was of cinder block and cement with a concrete roof. The house was located in a suburban area where nature is still less affected by urbanization. As we witnessed that afternoon, all house doors and windows are commonly kept open most of the day, thus providing an airy and well illuminated interior space. The occupants of the house (five women from juvenile to adult) tolerate the mantids, not bothering them nor being afraid of them. Clearly the mantids were not seeking refuge from adverse weather conditions, as both temperature and humidity were optimal. The mantids seemed to find enough food inside the house, most likely other insects that also enter at night.

I have been unable to find references to any cases in which mantids closely associate with human dwellings, although it is not unusual that some mantid sporadically enters a house, mostly at night, attracted by lights and the other insects also coming to the lights. The mantids are predatory insects that are considered beneficial because of their voracious appetite consuming a wide variety of other insects. Many people appear to recognize mantids and, on finding them inside a house, might give them a more benign treatment than that other insects may get if found indoors. It would seem that *P. cubensis* has a propensity to enter human dwellings. I have never encountered a similar situation with any of the other mantid species reported from the Dominican Republic.

Material studied. Eight individuals, DOMINICAN REPUBLIC, Prov. Santo Domingo Oeste, Palacios de Engombe, 18°27.038'N



Fig. 1. *Paramusonia cubensis* in the vegetation.

69°59.800'W, 6.viii.2006, R. Rodríguez, R. Bastardo, A. Hilario, D. Perez-Gelabert. Six specimens deposited in the entomological collection of the Instituto de Investigaciones Botánicas y Zoológicas (IBZ) of Universidad Autónoma de Santo Domingo and 2 specimens deposited at the National Museum of Natural History (NMNH), Washington, DC. Also other two individuals, DOMINICAN REPUBLIC, RD-230 ~2 km road Guanito – Bohechio, San Juan Prov., 409 m, 18°44.383'N 71°05.357'W, 20.iv.2004, D. Perez, B. Hierro, R. Bastardo. Deposited at the National Museum of Natural History (NMNH), Washington, DC. San Juan is a new provincial record for *P. cubensis*.

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