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Polistes canadensis (Linnaeus, 1758), “The church cabin”

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There are numerous species of wasps present in the Amazon, highlighting, among them, the species *P. canadensis*, popularly known in the region as “Caba-da-igreja”. They are social wasps, capable of obtaining resources within a radius of 650 meters from the colony, a relatively non-aggressive species that allows them to translocate their nests, that is, it allows the nests to be manipulated by humans, who can remove them from an unwanted location to a suitable location (Figure 1) [1-5].



Figure 1. A-Evaluated colonies of *Polistes canadensis* (Linnaeus, 1758); B-Nectar collection, when there were trophallaxis adult larvae.; C-Water collection.; D-Gathering of vegetable fiber in the vicinity of the colonies.; E and F returns with prey used in feeding the immatures.; G-Prey being shared. Source: https://www.researchgate.net/figure/A-Evaluated-colonies-of-Polistes-canadensis-B-Nectar-collection-when-there-were_fig2_322136638.

Caterpillars are the main source of food for both *P. canadensis* and other species in this genus. When capturing prey, these wasps exhibit a characteristic behavior, which is to cut and macerate the caterpillars, which makes it difficult to identify the preyed species, which are later shared with other wasps to feed the immature ones. Only one species, very present in collections, was identified with 37% of captured caterpillars being the corn caterpillar, also known as armyworm *Spodoptera frugiperda* (Smith, 1797) (Lepidoptera: Noctuidae). The average daily return with prey was 10.2, which demonstrates the potential of *P. canadensis* as a biological control agent [6-8].

In several regions of the Amazon, the advancement of agriculture is undeniable and growing, but there are large gaps in the knowledge of sustainable agricultural practices adapted to the local reality, especially in the phytosanitary area. In this context, biological control with predatory wasps is an excellent strategy for the region, as it regulates the insect pest

population, reduces the use of insecticides and, consequently, environmental impacts, and allows agriculture to fulfill its role, which is produce and generate income without destroying the environment [9-11].

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