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Amblyseius largoensis FOR CONTROL OF THE RED PALM MITE *Raoiella indica*

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The red palm mite, *Raoiella indica* Hirst (Acari: Tenuipalpidae), is a serious invasive pest of palms and banana reported in Caribbean Islands, in 2004. Nowadays, it has spread to Brazil, the Caribbean Islands, Colombia, Mexico, USA, and Venezuela. *Amblyseius largoensis* (Muma) (Acari: Phytoseiidae) has been frequently reported as a potential natural enemy for this pest on coconut. Surveys have been conducted to prospect biological control agents in the Western Hemisphere, where *R. indica* possibly originated. A population of *A. largoensis* from La Réunion Island was introduced in the state of Roraima, Brazil, and the results obtained in the laboratory suggested that this population is more efficient to control *R. indica* than the native one. The objective of this work was to evaluate the efficiency of two *A. largoensis* populations in controlling *R. indica*. The treatments were: release of *A. largoensis* from the island of La Réunion; release of *A. largoensis* from the state of Roraima, Brazil; and a control, without predator release. Initially, 20 predators were released per plant; three other releases were done at a rate of ten adults per plant, at 46, 135, and 156 days after the first release. The population densities were estimated every 20 days, during six months. Both *A. largoensis* populations evaluated are not sufficiently efficient to control the *R. indica* population. Complementary studies should be conducted under conditions as close as possible to those of natural fields in order to imitate the natural environment for fully-grown plants and to increase the predation rate, by, for example, providing pollen as an alternate food to predators, orientating the abaxial surface of the leaf seedling to the ground or using seedlings with leaves expanded into leaflets.

Keywords: Phytoseiidae, Tenuipalpidae, biological control, coconut, quarantine pest.
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