**ABSTRACT**

**Study of a medicinal plant, *Doratoxylon f.a littoralé* (SAPINDACEAE): facing environmental pressures**

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In traditional medicine, the leaves of *Doratoxylon f.a littoralé* or marodona, are used for the treatment of joint disease, gout and high blood pressure. This endemic forest plant of the Antsinanana Region is threatened by deforestation. Currently, it is grown in plantations. In both environments, the young plants are attacked by a caterpillar, *Cleora marcancntha* (Geometridae). A caterpillar can decimate an entire plant. The objective of this study is to assess the abundance of the leaf-cutting caterpillar and to identify its potential natural enemy in order to preserve the plant.

Observations were carried out in the forest of Antsahalalina District of Vatomandry (2 plots of 600 m2 each) and in the plantation of the NGO Aina (600 m2) in 2019. The counting of caterpillars was carried out on twenty marodona plants along a 10m transect repeated 4 times. The natural enemy search was carried out by visual method. Data collection was carried out monthly.

27 caterpillars of *C. marcancantha* were identified in plantations against 22 in the forest. *Eumenes aethiopicus* (Vespidae) hunts the caterpillars of *C.marcancantha* to feed its nest. Each nest contains 6 to 8 caterpillars. A female has two offspring and can eliminate 14 caterpillars. 20 nests were observed in the plantation and 42 in the forest giving a total of 434 caterpillars eliminated. The numbers of caterpillars observed on the plants are much lower than the number of caterpillars found in the nests. Thus, *Eumenes aethiopicus* helps to control *C.marcancantha*.

**Key words**: Medicinal plant, *Doratoxylon f.a littoralé*, caterpillar, parasitoid insect, biological control