

***Amblyomma variegatum* in Marie Galante: survey and consequences for eradication in the Antilles**

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Abstract

In 1994, an eradication campaign for the tropical bont tick (TBT) *Amblyomma variegatum* was started in the French West Indies. The progress of the campaign in Guadeloupe and Marie Galante, the two most infested islands in the Antilles, has been hampered by interruptions of funding and problems with the sanitary organisation of farmers that is responsible for acaricide distribution. In 2005, a survey was undertaken to assess TBT prevalence and control in Marie Galante. Of the 1885 cattle herds known on the island, 195 were examined and 144 (73.8%) were infested with TBTs, with 35 (17.9%) infested with engorged females. The average number of TBTs per infested animal was 11.5. No significant difference in herd prevalence (hp) was found among parishes or among ecological zones. All treating farmers used aspersion of amitraze. Herd prevalence was significantly different among farmers treating every one to two weeks (hp=69.6%, n=148), every month or less often (hp=88.6%, n=35) and never treating (hp=100%, n=4). Of the 42 herds treated less than three days before the survey, 27 (64%) were infested with TBTs, and 6 (14%) were infested with engorged females. These results indicate a high level of TBT infestation in Marie Galante despite regular treatment. Increased communication efforts are needed so that farmers adopt the bimonthly flumethrine pour-on treatment strategy, which has enabled other Antillean islands to be declared provisionally TBT-free. Animal movements and cattle egrets can transport TBTs between islands. The high infestation level in Marie Galante hinders eradication of TBT in the region.