

INTRODUCTION OF THE EXOTIC TICK *AMBLYOMMA CHABAUDI* RAGEAU (ACARI: IXODIDAE) INTO FLORIDA ON IMPORTED TORTOISES

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International trade in live reptiles has been ongoing for many years, with the pet trade component of this enterprise a significant end-user of live tortoises, turtles, lizards and snakes (Roth & Merz 1997). In the United States, the pet trade is responsible for more than 80% of the total world trade in reptiles (Hoover 1998). Many of these reptiles enter the United States through Florida. Studies conducted by the University of Florida between 1997 and 1999 showed that 10 exotic tick species have been imported into Florida on reptiles (Burrige et al. 2000, Simmons & Burrige 2000), including six species of *Amblyomma* and four species of *Aponomma*. Some of these tick species can transmit disease agents of animal or public health significance (Burrige 2001) and, thus, research is underway in the authors' laboratory to define measures to minimize the introduction and spread of exotic ticks. Recently, we detected yet another exotic tick species, *Amblyomma chabaudi* Rageau, that has been introduced into Florida on imported tortoises. Details of this introduction are described herein.

In collaboration with the Florida Fish and Wildlife Conservation Commission, the authors initiated studies of reptiles recently imported into Florida through the Miami International Airport. One such shipment involved 125 spider tortoises (*Pyxis arachnoides*) imported from Madagascar to a reptile dealer in South Florida. Nineteen of the tortoises were infested with 23 adult ticks, 21 and 2 of which were attached to the rear and front legs, respectively. All ticks were identified as male *Amblyomma chabaudi* Rageau. Sample specimens were submitted to the National Veterinary Services Laboratory in Ames, Iowa, for species confirmation, with accession No. 95109.

This is the first report of *A. chabaudi* in the United States and the first report of this tick outside of Madagascar. *Amblyomma chabaudi* was first described in 1963 infesting a spider tortoise in Madagascar (Rageau 1964). Since that time, three publications regarding this species (Uilenberg 1965, 1967, Uilenberg et al. 1979) have shown *A. chabaudi* distributed only in southern Madagascar and have indicated a limited host range. All published records of *A. chabaudi* are from spider tortoises, except for one male on a radiated tortoise (*Geochelone radiata*) (Uilenberg et al. 1979), with both tortoise species limited in natural distribution to Madagascar (Alderton 1988). However, Uilenberg (1967) was able to feed *A. chabaudi* in the laboratory on radiated tortoises, Madagascar flat-shelled tortoises (*Pyxis*

planicauda) and rabbits. Thus, in the absence of its preferred host, the spider tortoise, *A. chabaudi* could infest other host species. Nothing is known of the potential of *A. chabaudi* to transmit diseases or regarding its potential environmental impact in Florida.

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SUMMARY

This is the first report of the ixodid tick, *Amblyomma chabaudi* Rageau, in the United States. It was introduced into the United States on spider tortoises (*Pyxis arachnoides*) imported from Madagascar to a reptile dealer in Florida. Information on the few published reports on this exotic tick is reviewed.

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