New tick-host records (Acari: Ixodidae) from Mississippi, U.S.A.

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Abstract

Thirty-five specimens of at least five tick species—*Amblyomma americanum, Dermacentor variabilis, Haemaphysalis leporispalustris, Ixodes cookei* and *Ixodes scapularis*—were collected from eight mammal species in Rankin County, Mississippi, U.S.A. All are new county records. Three collections of *D. variabilis* from the eastern mole, *Scalopus aquaticus*, constitute the first report of tick collections anywhere in Mississippi from a mole.

Key words: Ixodidae, host records, Mississippi

Introduction

Hard ticks (Acari: Ixodidae) are of significant medical and veterinary importance, being vectors of many diseases and maladies, such as Rocky Mountain spotted fever, Lyme disease, ehrlichiosis, anaplasmosis, tick-borne encephalitis, babesiosis, and tick paralysis (Goddard 2008). Knowledge of species present in a given area and their hosts is important to physicians, veterinarians, wildlife biologists, and owners of livestock. Previous studies have documented tick species present in Mississippi (Rhodes & Norment 1979, Jackson & Goddard 1995, Goddard 2006, Goddard & Layton 2006, Goddard & Piesman 2006) and the disease agents associated with them (Stricklin 1975, Norment *et al.* 1985, Goddard & Norment 1986, Goddard *et al.* 2003, Goddard & Varela-Stokes 2009, Castellaw *et al.* 2010). This paper presents new distributional and host records for hard ticks (Ixodidae) in the State of Mississippi, U.S.A.

Methods

From November 17, 2008 until December 20, 2010, ticks were removed from dead mammals captured by the second author's cat and also from road kill, in Rankin County, central Mississippi. Animals were first carefully examined for attached ectoparasites, then their fur was vigorously combed over a white enamel pan partially filled with ethanol. Tick specimens were retrieved, preserved in ethanol and/or mounted on microscope slides, and subsequently identified by the third author (RGR). Voucher specimens of 19 ticks were deposited in the Mississippi Entomological Museum, Mississippi State University, accession numbers 80-2a through 80-2n, and 16 specimens were returned to the second author's collection.