

NOTE

First Report of *Hesperoctenes fumarius* Westwood  
(Hemiptera: Polyctenidae) from the Island of Dominica

*Hesperoctenes fumarius* (Westwood) is one of the most widely distributed and most frequently recorded polyctenids in the New World (Ueshima 1972, Ryckman and Sjogren 1980). It has been previously found on several islands in the West Indies, in southern Mexico, and in the northern regions of South America. Within the Caribbean, it has been recorded thus far from Cuba, Jamaica, Puerto Rico, and the Virgin Islands (Ueshima 1972, Ryckman and Sjogren 1980). Ueshima (1972) listed 11 species of bats in the family Molossidae as hosts of *H. fumarius* and he noted records, that he considered accidental, from Emballonuridae and Noctilionidae. The last complete revision of this little-known family was by Ferris and Usinger (1939). A good summary of the literature on Polyctenidae is provided by Schuh and Slater (1995), who adopted the subfamily classification of Maa (1964).

We report here the first record of *H. fumarius* from the island of Dominica as well as the first record of the family Polyctenidae from either the Leeward or Windward Islands of the Lesser Antilles. Bats and their ectoparasites have been sampled extensively from Dominica for more than twenty years (Pence et al. 1981), but this is the first report of the island fauna harboring ectoparasites from the family Polyctenidae. Though a relatively small island, Dominica is characterized by extensive forested habitats, marked altitudinal gradients, and a rich flora. Thirteen species of bats, representing six families, have been recorded from Dominica (Genoways et al. 2001). During the months of May and June, from 1998–2001, members of Texas A&M University's (TAMU) study abroad program in Dominica have participated in an on-going

survey of Dominican bats and their ectoparasites. During this period, 150 bats representing eight species and five families were captured in mist nets, identified, examined for ectoparasites, and released. All ectoparasites that could be captured without injuring the bats were removed and preserved in 70% ethanol. Voucher specimens of bats are represented by tissue samples taken from wing plugs during the 2001 survey (Texas Cooperative Wildlife Collection, TAMU). Voucher specimens of ectoparasites are deposited in the TAMU Insect Collection and with the Forestry and Wildlife Division of Dominica. The vast majority of the ectoparasites collected during this survey consisted of mites (Acari) and parasitic flies of the family Streblidae. Polyctenidae were noted for the first time on Dominican bats on 5 June 2001. Seven specimens were removed from bats field identified by Thomas Lacher (TAMU) as *Molossus molossus* (Pallas 1766). These bats were taken in a mist net erected at the entrance of a sea cave near Rodney's Rock (15°22'N 61°29'W). Wing tissue was taken for additional identification and is currently being used as part of a study on population genetics and speciation of New World bats. The seven adult polyctenid specimens were identified by the authors as *H. fumarius*, using the keys in Ueshima (1972). Both females and males were represented. One additional specimen, presumed to be a pharate first instar based on the folded and incompletely developed nature of the legs, was tentatively identified as a member of this species. The adults were collected while traversing the body of the bat, but the immature specimen was discovered in the cavity between the second and third finger of the bat.



*Hesperoctenes fumarius* was found on the three *M. molossus* sampled from the sea cave population on the Caribbean side of the island, but not on any of the other 34 *M. molossus* examined from other roosting sites during this survey. Few *M. molossus* were infested with mites and none with streblids. Conversely, polyctenids were not found on any other bat species during this study. The presence of *H. fumarius* on Dominica links the distribution of this species to populations previously recorded from Venezuela (Ueshima 1972) and to those recorded from Cuba, Puerto Rico, and the Virgin Islands (Ryckman and Casdin 1977).

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- Debra A. Scott and Robert A. Wharton, *Department of Entomology, Texas A&M University, College Station, TX 77843, U.S.A. (e-mail, RAW: rawbaw2@neo.tamu.edu)*



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