Ectoparasitic chiggers (Acari: Trombiculidae, Leeuwenhoekiidae), lice (Phthiraptera), and Hemiptera (Cimicidae and Reduviidae) from South Carolina, U.S.A.

WILL K. REEVES1, LANCE A. DURDEN2 & WILLIAM J. WRENN3

1 Centers for Disease Control and Prevention, Viral and Rickettsial Zoonoses Branch, Mailstop G-13, 1600 Clifton Rd. NE, Atlanta, GA 30333, USA email: wreeves@alumni.clemson.edu
2 Department of Biology, Georgia Southern University, Statesboro, GA 30460, USA
3 Orange County Vector Control District, P.O. Box 87, Santa Ana, CA 92702, USA

Abstract

We report on the distribution of 15 chiggers, 31 lice of mammals, and 7 blood feeding hemipteran species in South Carolina. Some of these arthropods are vectors of pathogens to humans and domestic animals. Both Triatoma lectularia and T. sanguisuga were reported from houses and these bugs are potential vectors of Trypanosoma cruzi. We also report on the continued presence of the bed bug, Cimex lectularius, in homes across the state. In addition we found the lice Haematopin- nus suis, Neohaematopinus sciuropteri, Pediculis humanus, Polyplax spinulosa, and Trichodectes canis, all of which are vectors or intermediate hosts of human or animal pathogens.

Key words: Acari, Anoplura, Cimicidae, Leeuwenhoekiidae, Mallophaga, Phthiraptera, Reduviidae, Triatominae, Trombiculidae

Introduction

Hematophagous arthropods and arthropod-borne pathogens have attracted increased attention in South Carolina. Recent local and statewide studies have focused on the distribution, bionomics, or vectorial capacity of fleas (Durden et al. 1999), ticks (Williams et al. 1999; Fang et al. 2002; Reeves et al. 2002), mosquitoes (Evans & Wills 2002), bed bugs (Reeves 2001a), arboviruses (Wozniak et al. 2001; Ortiz et al. 2003), Trypanosoma cruzi Chagas (Yabsley & Noblet 2002), and the history of arthropod-borne diseases in South Carolina (Adler & Wills 2003). Some ectoparasitic arthropods such as chiggers, lice, and blood feeding bugs have largely been ignored or overlooked. These arthropods can be important pests of humans and wildlife and some are vectors of pathogens. We report the