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Spartocera batatas (Fabricius) (Hemiptera: Coreidae), newly established in Florida

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Abstract. Spartocera batatas (Fabricius) was found for the first time in the USA in Homestead, Florida, in 1995. Records from Brazil, British Guiana, Colombia, Dominica, Dominican Republic, Ecuador, Grenada, Jamaica, Martinique, Panama, Peru, Puerto Rico, Saba, and Venezuela also are reported. The bug can be a pest of sweet potato, Ipomoea batatas.

Introduction

Spartocera batatas (Fabricius 1758) (Fig. 1) was found in Homestead, Florida, in late June 1995 by Florida Department of Agriculture and Consumer Services, Division of Plant Industry (DPI) inspector Lynn D. Howerton. A large colony of the insects was found on an Asian cultivar of sweet potatoes (Ipomoea batatas (L.) Lam.) in a residential area. The plants were badly damaged by the bugs. Spartocera batatas has not been reported before in the USA except in a DPI circular (Halbert 1996). Other than a single collection of nymphs in Broward County, Florida, S. batatas has been found only in Miami-Dade County.


Spartocera batatas was described from Surinam under the name Lygaeus batatas. It is found in Puerto Rico, where it is considered a pest of sweet potato (Jones 1915, Martorell 1976, Wolcott 1923). Records from Cuba may indicate a range expansion, and thus a fairly recent colonization of that island (Grillo 1988).

In addition to the reports from Puerto Rico and Cuba, we have seen specimens from the following countries: BRAZIL: 1 male, S. Cath., Corupa (Hansa Humbolt), XI-1944, A. Maller (AMNH); 1 female, Para: Jacareacanga, I-1969, F. R. Barbosa (AMNH); 1 male Amazonas, Uypiranga, Rio Negro, 14 km from Manaus, 81 m [elev.], X-1941, August Rabaut (AMNH). BRITISH GUIANA: 1 female Rio Essequibo (Source), J. Oglivia (AMNH). COLOMBIA: 1 male Felipe Ovalle (AMNH). DOMINICA: 1 male Salibia, 28-30-I-1968, Borys Malkin (AMNH). DOMINICAN REPUBLIC: 1 female Pr. La Vega, La Cienega de Manabao, Park. Headq., 3-5-VII-99, 3000 ft. Elev., R. E. Woodruff. ECUADOR: 1 female Pastaza: Ashuara Village on rio Macuma, 10 km. from Rio Morona, 300m, 5-16-VII-1971, B. Malkin (AMNH); 1 male 1 female same except 11-16-VII-1971, (AMNH); 1 female Pastaza: Cuisimi, on Rio Cuisimi, 150km SE Puyo, 350m, 15-31-V-1971, B. Malkin (AMNH). GRENADE: 8 male, 11 female St Andrews Parish, Cottage, 24-III-1990, J. Telesford, on sweet potato. JAMAICA: 1 male Port Antonio,

There are specimens in the United States National Museum (USNM), verified by Dr. T.J. Henry from the following additional countries: ST. LUCIA: 1 female Sta 200, 21-IV-1936, Chapin & Blackwelder. ST. VINCENT: 1 female Sta/73 13-II-1936, Chapin & Blackwelder; 1 female Sta/178, 18-II-1936, Chapin & Blackwelder; 1 female Imp. Dept. Agric. West Indies, No. 295, Bot. Garden, 6-XII-1903, H.A.B.

Spartocera batatas will key to genus (under the old name, Corecoris) in Baranowski and Slater (1986). A revised key to Florida Spartocera follows (key taken from Halbert 1996):

1a. Antennae short, segments II and III subequal, IV 1/3 shorter, antennal segment I scarcely longer than the head; rare ......................... diffusa (Say)

1b. Antennae longer, segments II-IV subequal, antennal segment I distinctly longer than the head ................................................................. 2

2(1)a. Bright orange or yellow insect; pronotum with a pair of black longitudinal lines; on Solanum americanum .................... fusca (Thunberg)

2b. Uniformly dark brown insect; pronotum without markings; on Ipomoea and possibly a few other plants ......................... batatas (Fabricius)

The most important host of S. batatas appears to be sweet potato, but it has been reported on a few other plants, including tomato (Lycopersicon esculentum Mill., Solanaceae), eggplant (Solanum melongena L., Solanaceae), potato (Solanum tuberosum L., Solanaceae), black nightshade (Solanum nigrum L., Solanaceae), avocado (Persea americana Mill., Lauraceae), and Citrus spp. (Rutaceae) (Grillo 1988, Martorell 1976, Alayo 1967, Barber 1939, Wolcott 1923). Our observations in Florida indicate that S. batatas adults sometimes disperse in high numbers and can be found on a wide variety of plants. Many of the above host records may not represent breeding populations. In Florida, breeding records have been obtained from Ipomoea alba L. (moonvine) (FSCA# E1997-4501) and Ipomoea microdactyla Griseb. (a morning glory) (FSCA# E1999-2314) in Miami-Dade County.

So far in Florida, in our experience, S. batatas has not become a pest of commercial sweet potatoes. Primarily, it is a nuisance in urban settings when large numbers develop on sweet potato plants or moonvine in home gardens, or in one case, a student science project.

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