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Source: Florida Entomologist, 94(3) : 709-710

Published By: Florida Entomological Society

URL: <https://doi.org/10.1653/024.094.0343>

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## CAFIUS BISTRIATUS (COLEOPTERA: STAPHYLINIDAE), DISTRIBUTIONAL RANGE EXTENSION TO NORTH CAROLINA

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The most species-rich coastal staphylinid genus *Cafius* Stephens contains 45 species (Herman 2001) and many are found on the shores of the Pacific Ocean. They live in accumulations of decaying seaweed and are predators of other coastal invertebrates such as amphipods, larvae of seaweed flies, and so on (Topp & Ring 1988). *Cafius bistriatus* (Erichson) is the only species occurring on both the Pacific and Atlantic coasts. It is hypothesized to have colonized the Atlantic from the Pacific (Frank et al. 1986).

Along the Atlantic shores, *C. bistriatus* has been recorded from Canada (Newfoundland—New Brunswick) and United States (Maine—Virginia, Florida). Frank et al. (1986) pointed out that the distribution of the species is closely linked to the association of drifted seaweeds such as brown algae. As Frank (1986) did in 1981, the first author made a trip in Apr 2009 from Virginia to Florida, with frequent stops at beaches to collect littoral staphylinids. The collection revealed that the distributional range of *C. bistriatus* includes the Atlantic coast of North Carolina. Adults (Fig. 1) were collected under seaweeds on a sandy beach at Oregon Inlet, Dare County, North Carolina on 6 -IV-2009, K.-J. Ahn. There still remains a wide distributional gap from Cape Hatteras south almost to Cape Canaveral.

New records for the Dominican Republic are: Provincia Puerto Plata, Playa Cabarete, 31-X-1986, under seaweed on sea beach, J. H. Frank (4 exx.), in the collection of J. H. Frank; and for Mexico are: Estado Veracruz, Alvarado, 2-VII-1995, under seaweed on sea beach, J. H. Frank (8 exx.), these specimens were carried alive to Instituto de Ecología in Xalapa, Veracruz, and maintained

alive in containers in hope that females would oviposit; no oviposition was obtained and no specimens were preserved.

Most references on the distribution of *Cafius bistriatus* were examined, and, as a result, we can document the distributional range—including some new records—as follows: North Atlantic Ocean (Canada: New Brunswick, Newfoundland, Nova Scotia, Quebec; USA: Maine, Maryland, Massachusetts, New Jersey, New York, Rhode Island, Virginia, North Carolina—new record, Florida; Bermuda; Bahamas); Gulf of Mexico (Mexico: Campeche, Veracruz—new record; USA: Florida, Texas); Caribbean Sea (Antigua and Barbuda; Barbados; Dominican Republic—new record; Grenada; Guadeloupe; Jamaica; Montserrat; Puerto Rico; St. Kitts Nevis; St. Lucia; Trinidad and Tobago; US Virgin Islands; Venezuela; Mexico: Quintana Roo); North Pacific Ocean (Mexico: Baja California, Guerrero); Gulf of California (Mexico: Baja California Sur, Sonora; USA: an isolated population on the shores of the Salton Sea, California, attributed here to the Gulf of California rather than the Pacific Ocean).

Records supporting this distribution, listed by country, are as follows: Blackwelder (1943)—Antigua and Barbuda (Antigua), Bahamas, Barbados, Dominica, Grenada (Carriacou), Guadeloupe, Jamaica, Montserrat, Puerto Rico (including Mona), St. Kitts-Nevis (St. Kitts), St. Lucia, Trinidad and Tobago (both islands), US Virgin Islands (St. Croix, St. John, St. Thomas) [Despite allusion to this species existing in Cuba (Blackwelder 1943; Frank et al. 1986) the records were based on the species that Bierig (1934) described as *C. rufifrons*, which is not a synonym; thus there are no substantiated records from Cuba]; Smetana (1965)—Canada (Newfoundland); Orth & Moore (1980)—USA (California-Salton Sea), Mexico (Baja California, Baja California Sur, Sonora) [these belong to subspecies *C. b. fulgens* Frank]; Frank et al. (1986)—Canada (Quebec, New Brunswick, Nova Scotia), Mexico (Campeche, Quintana Roo), USA (Florida [both coasts], Maine, Maryland, Massachusetts, New Jersey, New York, Texas, Virginia), Venezuela (Falcón); Hilburn & Gordon (1989)—Bermuda; Smetana (1995)—Canada (Newfoundland); Navarrete-Heredia et al. (2002)—Mexico (Guerrero) [subspecies *C. b. fulgens*]; Sikes (2004)—USA (Rhode Island); This work: Dominican Republic, Mexico (Veracruz), USA (North Carolina).



Fig. 1. *Cafius bistriatus* on a sandy beach in North Carolina

## SUMMARY

*Cafius bistriatus* (Erichson) is recorded for the first time on the shores of North Carolina, Veracruz (Mexico), and the Dominican Republic. Distributional range extension of the species is briefly discussed.

## ACKNOWLEDGMENTS

This research was supported by Basic Science Research Program through the National Research Foundation of Korea (NRF) funded by the Ministry of Education, Science and Technology (2009-0073111). An anonymous reviewer was very helpful.

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