## Research Note

DEFINITE RECORDS OF MARPESIA CHIRON (FABRICIUS) AND A NEW RECORD OF EUPTOIETA CLAUDIA CRAMER (LEPIDOPTERA:NYMPHALIDAE) FROM PUERTO RICO¹

Marpesia chiron (Fabricius) has been reported from Cuba, Jamaica, and Hispaniola by Comstock.<sup>2</sup> It has been reported from Puerto Rico by Dewitz<sup>3</sup> and Stahl<sup>4</sup> as belonging to the genus *Timetes*; by Moschler<sup>5</sup> and Gundlach<sup>6</sup>, as a *Megalaura*; and by Wolcott<sup>7</sup>, by citing all these earlier authors. Referring to this species, Comstock said; "There is no definite record of its capture in Porto Rico but, as it is known from Cuba, Jamaica, and Hispaniola, it might appear in Porto Rico."

The author has examined a male specimen of *M. chiron* at the collection of the Puerto Rico Agricultural Experiment Station, captured in Cambalache Forest, Arecibo, Puerto Rico, on December 1, 1972, by Dr. Luis F. Martorell and Mr. Silverio Medina Gaud. He has in his collection a male captured in Baños de Coamo (Coamo Springs) on November 16-17, 1974, by Mr. Manuel Torrech.

Both specimens fit very well the description of this species given by Comstock of specimens from Hispaniola. Brown and Heineman<sup>8</sup> said: "Since there are numerous records of eastward migration of the species from Central America, it seems quite possible that the Antillean strain is constantly refreshed from the mainland and that the species has not maintained the isolation on the islands necessary for the formation of indigenous subspecies". Therefore, the author has doubt whatsoever that both butterflies are indeed *Marpesia chiron* (Fabr.).

- <sup>1</sup> Manuscript submitted to the Editorial Board September 23, 1975.
- <sup>2</sup>Comstock, William Phillips, The insects of Porto Rico and the Virgin Islands. Rhopalocera or butterflies, Scientific Surv. P.R. and the Virgin Islands, New York Acad. Sciences 12: 421–622, 1944.
- <sup>3</sup> Dewitz, Hermann, Tagschmetterling von Portorico, Entomol. Zeit., Stettin 28: 233–45, pl. I., 1877.
- <sup>4</sup> Stahl, Agustin, Fauna de Puerto Rico, Catálogo de Gabinete Zoológico; Imprenta Boletín Mercantil, Bayamón, P. R. 249 pp. 1882.
- <sup>6</sup> Moschler, Heinrich Bruno, Die Lepidopteren-Fauna von Portorico, Abhandlungen der Senckenbergischen Naturforschenden Gesellschaft, Frankfurt 16: 69–360, pl. 1 figs. 25, 1890.
- <sup>6</sup> Gunlach, Juan, Suplemento segundo para la contribución de la Entomología Cubana, I, Lepidópteras 445–480, Havana, 1891.
- <sup>7</sup> Wolcott, George N., The insects of Puerto Rico, J. Agr. Univ. P.R. 32 (3): 417–784, Rio Piedras, P.R., 1948.
- <sup>8</sup> Brown, Frederick Martin, and Heineman, Bernard, Jamaica and its butterflies, E. W. Classey Limited, London, 478 pp., illus., 1972.

Of *M. chiron* in Jamaica, Brown and Heineman state: "It would be no surprise to us to learn that all found there (Jamaica) are wanderers from the mainland or Hispaniola. A breeding colony should be sought by resident collectors."

This is probably not the case of M. chiron in Puerto Rico, as substantiated by the following observations:

- a) Both specimens are nearly perfect specimens and not broken as migrants usually are.
- b) Both Ficus laevigata Vahl, (now F. citrifolia Mills.), reported by F. M. Jones (Comstock op. cit.) and Chlorophora tinctoria (L.) Gaud., reported by Moschler<sup>5</sup> and Bates<sup>9</sup> as food plants in Puerto Rico and Cuba, respectively, are found in Cambalache Forest (Little and Wadsworth<sup>10</sup> and Little et al.<sup>11</sup>). F. laevigata is mentioned by Little and Wadsworth as the most common of the Ficus in Puerto Rico and is widely distributed in the Island. Artocarpus integrifolia (now A. heterophyllus Lam.) given by d'Almeida<sup>12</sup> as a food plant of continental M. chiron is rare in Puerto Rico.
- c) The specimen captured at Baños de Coamo was not the only one observed there. It was estimated that from six to eight M, chiron were flying in the area at the time.

Both locations were visited recently by the author but no captures or sighting records were made. This, and the fact that one of the captures was about the middle of November and the other about the beginning of December, seems to indicate that *M. chiron* is single-brooded in the Island. This might explain why it took so long to capture this butterfly after it was originally reported.

Euptoieta claudia claudia Cramer 1775

Cramer described Euptoieta claudia claudia from Jamaica. It was not collected there for almost 150 years until Dr. Andre Avinoff collected it in Clarendon parish on Bull Head (Brown and Heineman op. cit.). In 1943 it was reported by de la Torre 13 from Cuba; it has not been reported from Hispaniola, but the butterfly fauna of this island has not been thoroughly studied. It probably occurs there but has not been collected probably for the same reason that it was so long being collected again in Jamaica.

<sup>&</sup>lt;sup>9</sup> Bates, Marston D., The butterflies of Cuba. Bull. Mus. Comp. Zool., Harvard College, Cambridge, Mass., 78: 63–258, illus., 1935.

<sup>&</sup>lt;sup>10</sup> Little, Elbert L., Jr., and Wadsworth, Frank H., Common trees of Puerto Rico and the Virgin Islands, USDA, Agr. Handbook 249, 548 pp., illus., 1964.

<sup>&</sup>lt;sup>11</sup>Little, Elbert L., Jr., Woodbury, Ray O., and Wadsworth, Frank K., Trees of Puerto Rico and the Virgin Islands, 2nd Vol. USDA Agr. Handbook, pp. 449–1024, illus., 1974.

<sup>&</sup>lt;sup>12</sup> d'Almeida, Romualdo Ferreira, Mélanges Lépidopterogiques, Etudes sur les Lépidoptères du Brésil, R. Friedländer & Sohn, Berlin, 226 pp. 1922.

<sup>&</sup>lt;sup>13</sup> Torre y Callejas, Salvador Luis de la, Dos nuevas especies de mariposas diurnas para Cuba, Mem. Soc. Cubana Hist. Nat. 17 (2): 139–40, 3 pl., 1943.

Nine specimens (seven males, two females) were collected by Mr. Héctor Quintero, Mr. José Figueroa, and the author in Barrio Tiburones, Quebradillas on November 9-10, 1974. These butterflies were captured in a sunny grassland where they were flying together with *Euptoieta hegesia watsoni* Comstock.

This butterfly probably has been overlooked in Puerto Rico for the same reason offered by Brown and Heineman for Jamaica: "It seems to us that  $E.\ claudia$  in a situation comparable to  $E.\ nise$ , may simply have been overlooked. At low elevations, where a person first collects in Jamaica,  $Euptoieta\ hegesia$  is rather common. The average collector soon becomes surfeited and no longer bothers to collect that species. Thus when the collector comes upon one of the very local colonies of  $E.\ claudia$ , he passes it by. Only the experienced and unhurried collector may sample the colony and discover that it is composed of another,  $E.\ claudia$ ."

Brown and Heineman suggest that this insect might be single-brooded in Jamaica, for all the captures have been made in late July and early August. This also might be the case in Puerto Rico, since the locality of Barrio Tiburones is one visited frequently by the author and so far no more captures have been made.

> Stuart J. Ramos Department of Biology Mayagüez Campus University of Puerto Rico