

TYPE LOCALITIES OF SOME NEOTROPICAL LYCAENIDAE
TAKEN BY GERVASE MATHEW AND DESCRIBED BY
W. C. HEWITSON

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Hewitson (1874) described eight species of neotropical lycaenids. Following his common practice he gave only the country of origin of these specimens (Mexico, Panama, Peru, or "Chili") and ordinarily any further precision of type localities would have to be arbitrary.

In this instance, however, it seemed possible that further information on the actual localities of origin of the specimens might be obtainable, for in his prefatory remarks Hewitson states that they were taken by "Mr. Gervase Mathew, of the Royal Navy, who collected them during a cruise by H. M. S. 'Repulse' in the Pacific." Some record of the movements of the "Repulse" should, it seemed, be on file with the Admiralty and such a record might make it possible to restrict the localities.

I therefore addressed an inquiry to the Naval Librarian, Ministry of Defense, London. The reply I received, from Miss Vivienne S. Heath, was most helpful. Miss Heath abstracted the relevant portions of the published précis of the movements of the "Repulse" and even though she apologizes for the brevity and occasional lapses of detail in this account, it still provides an accurate record and gives about all the relevant information that could be expected. In only one place did it fall short: the leg of the voyage from San Francisco to Mazatlán, critical for one species (*Thecla critola*). Miss Heath suggested that the log itself (in the Public Records Office) should be consulted. Thanks to the précis, it was possible to request microfilm copy of only this part of the log, which I did.

In addition to furnishing the précis, Miss Heath also transcribed and sent the obituary notice of Mathew that appeared in the London *Times* for 17 February 1928. In this notice, mention is made of Mathew's journals, "which he kept continuously from 1861 until the beginning of his last illness in 1925, [and which] are full . . . of the scientific observations which he made in many countries." Unfortunately, all efforts to locate these journals have failed. My good friend, Mr. N. D. Riley, of the British Museum Department of Entomology (who also published an obituary of Mathew: *Entomologist* 61:119, 1928), to whom I wrote for help, checked all the possible repositories known to him, including the societies of which Mathew was a member, but found no trace of the journals.

For their much appreciated efforts in connection with this paper, I thank The Naval Library and Miss Heath; Mr. Riley; and the Public Record Office.

The "Repulse" left Great Britain in August, 1872, with Assistant Paymaster Mathew on board as clerk to the Admiral's secretary, headed for a routine program on the Pacific station. Proceeding by way of Madeira and Rio de Janeiro she rounded the Cape and put in at Valparaiso, Chile, on 27 October, staying there until about 18 February 1873. She then continued north to Coquimbo, Chile (20 February–6 March); Arica, Chile (15–22 March); Callao, Peru (29 March–17 April); Payta [Paita], Peru (late April–2 May).

From Paita she left for the Sandwich [Hawaiian] Islands. The "Repulse" departed Honolulu on 27 June, headed northeast for Vancouver Island, and reached Esquimalt, near Victoria, on 26 July. There she remained until 4 November, when she departed for San Francisco, California.

On 19 November 1873 (our information now derived from the ship's log itself) she left San Francisco, continuing south, and put in at Bahía Magdalena (Baja California Sur, Mexico) on 25 November, staying less than eight hours. She then left, rounded Cabo San Lucas on 27 November and reached Guaymas (Sonora, Mexico) on 29 November. She departed Guaymas on 2 December, after two full days in port, and continued south, reaching Mazatlán (Sinaloa, Mexico) on 5 December, and stayed there until 11 December.

From Mazatlán (we resume with the précis), the "Repulse" continued southward to Acapulco (Guerrero, Mexico) (about 16 December 1873 to 18 January 1874), and Taboga (Isla Taboga, Panamá, in the Bahía de Panamá), which she reached on 6 March, remaining until 22 March. She then moved to Cd. Panamá, where she stayed until 18 May 1874.

Here, Mathew apparently left the "Repulse," and our interest in her further movements ceases (she continued south). Mathew must have crossed the isthmus and obtained passage on a homeward-bound vessel. However he did it, he made good time: about six months after he left the "Repulse" Hewitson's descriptions of his lycaenids were published!

It should be added that on several occasions the admiral shifted his flag to another vessel among the several that more or less accompanied the "Repulse," and departed on various side trips. He did so at Esquimalt; at Acapulco, to visit some of the ports of Central America; and again in Panamá, to visit ports along the north end of South America's Pacific coast. Although, as Miss Heath pointed out, Mathew might have gone on some or all of these side trips, there is no evidence that he did so

(or, if he went, that he did any collecting). All the countries mentioned by Hewitson were visited by the "Repulse" herself.

The following list of Hewitson's eight species of lycaenids includes remarks on their probable type localities, based on the above trip résumé. Where they are known I give current equivalents of his names. The page reference after each name refers to Hewitson's paper.

THECLA SEDECIA [*Strymon albata sedecia*], p. 105

Described from Mexico. The source of the material must be either Mazatlán or Acapulco, since the species does not occur on Baja California or as far north as Guaymas. There is no reason why it should not occur in the Acapulco region, but I know of no records. On the other hand, it was recorded from Presidio, near Mazatlán, by Godman & Salvin (1887: 94) and we took it in three different places near Mazatlán in 1961 (Cary-Carnegie Museum Expedition). In view of this, the following designation is made:

Type locality: here restricted to Mazatlán, Sinaloa, Mexico.

THECLA CHONIDA, p. 105

Described from Mexico. For the same reasons as the preceding, this must be from either Mazatlán or Acapulco. This poorly known species may turn out to be the female of *Strymon bebrycia* Hewitson 1869. We took the latter near Mazatlán, but I do not know if it occurs near Acapulco. With so little information, no further restriction is advisable at this time.

Type locality: either Mazatlán, Sinaloa, or Acapulco, Guerrero.

THECLA CYRRIANA, p. 105

Described from Peru. This is another poorly known species, but not surprisingly so, as the western coast of South America is hardly better known today than it was when Mathew collected there.

Type locality: either Callao or Paita, Peru.

THECLA CRITOLA [*Hypostrymon critola critola*], p. 105

Described from Mexico. The "Repulse" stopped at two localities within the range of this species, Bahía Magdalena on the peninsula of Baja California, and Guaymas, Sonora, on the mainland. Each of these areas is inhabited by a different subspecies and it is therefore important to identify the source of the type.

Although the "Repulse" stopped at Bahía Magdalena, it was a brief call of only a few hours and I doubt if Mathew did any collecting there

at all. The stop at Guaymas, however, lasted several days, time enough to take net in hand and do some exploring.

Guaymas, then, is the most likely source of the type of this species. Mr. G. E. Tite, Department of Entomology, British Museum, kindly compared the type of *critola* with other specimens of the species in the British Museum collection from Guaymas. I had sent Mr. Tite a list of the differentiating characters of the two subspecies and he found that the type agreed closely with specimens of known Guaymas origin and with the characters of the mainland subspecies.

The name *critola*, therefore, is restricted to the mainland populations, leaving the name *festata* Weeks (1891: 102) (TL, San José del Cabo, Lower California) for the peninsular subspecies.

Type locality: here designated as Guaymas, Sonora, Mexico.

THECLA MATHEWI, p. 106

Described from Mexico. The species apparently does not occur as far north as Mazatlán. A definite restriction is not made at this time.

Type locality: probably Acapulco, Guerrero, Mexico.

THECLA CYPHARA [*Electrostrymon endymion cyphara*], p. 106

Described from Panama.

Type locality: either Isla Taboga or Ciudad Panamá. I have no information from which to make a choice.

THECLA QUADRIMACULATA [*Thecla* "bicolor" Philippi], p. 107

Described from "Chili."

Type locality: Valparaiso, Coquimbo or Arica, Chile.

LYCAENA LYRNESSA [*Pseudolucia collina* Philippi], p. 107

Described from "Chili." The name is now considered a synonym of *Lycaena collina* Philippi (Nabokov 1945: 32).

Type locality: Valparaiso, Coquimbo or Arica, Chile. The species has been taken at both Valparaiso and Coquimbo (Nabokov, 1945).

LITERATURE CITED

- HEWITSON, W. C., 1874. Descriptions of new species of Lycaenidae from South [sic] America. Ent. Mo. Mag., 11: 104-107; published in October.
 GODMAN, F. D., and O. SALVIN, 1887-1901. Insecta, Lepidoptera-Rhopalocera, Vol. 2. Biol. Centrali-Amer., 782 pp.
 NABOKOV, V., 1945. Notes on Neotropical Plebejinae (Lycaenidae, Lepidoptera). Psyche, 52: 1-61.
 WEEKS, A. G., 1891. New Lepidoptera. Ent. News, 2: 102-104.