

***TMOLUS AZIA*, A NEW RESIDENT HAIRSTREAK BECOMING MORE WIDESPREAD IN JAMAICA (LEPIDOPTERA: LYCAENIDAE)**

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The two small, single-tailed species in the tropical hairstreak genus *Tmolus* Hübner are found on the mainland of South America north through Central America and Mexico (Emmel, 1975). *Tmolus echion* (Linnaeus) and *T. azia* (Hewitson) both reach southern Texas, and *T. azia* has been reported in the older literature to stray up into southeastern Arizona (Emmel, 1975), although there are no confirmed recent records there (Bailowitz and Brock, 1991). *Tmolus azia* has only recently become established in southern Florida (Opler and Krizek, 1984), where it is locally abundant now in the Upper Keys and has been recorded from Key Largo, Plantation Key, and Key West (Minno and Emmel, 1992). Brock found *T. azia* on Green Turtle Cay, in the Abaco Island group in the Bahamas, on 30-31 May 1989, an apparent first record. In the West Indies, between the Florida Keys and South America, the species was not recorded from any island in the comprehensive field guide by Riley (1975). It has now been found on the large island of Hispaniola at many sites (Schwartz, 1989), but was only reported starting in 1981 (Beck, 1983), though Schwartz (1989) believes the many sites recorded for it on Hispaniola and Isla Saona during the 1980's suggest a much longer residence. It has not yet been found on Cuba (Alayo and Hernandez, 1987). Pinchon and Enrico (1969: 118-119) recorded *T. azia* from Grenada in the Lesser Antilles, collecting one specimen on 22 Apr 1967. The species was not reported from Jamaica in the exhaustive treatment of the fauna by Brown and Heineman (1972). However, a few years later, Vyhmeister (1980) discovered the first two Jamaican specimens in 1978, at two sites in Manchester Parish (11km northwest of Mandeville, on 12 Feb, and 18km south of Mandeville at ca. 450m elevation, on 2 Jul).

The first five authors of this note encountered a series of well-established populations of *Tmolus azia* during 17-21 Jan 1992 while doing field work in the Rio Grande Valley of Portland Parish, northeastern Jamaica. A map of this area was previously published by Emmel and Garraway (1990). The adult hairstreaks were closely associated with a weedy, low-growing, shrubby



Fig. 1. Habitat of *Tmolus azia* in Jamaica: roadside second-growth vegetation in foreground, with montane rainforest habitat at the upper Rio Grande Valley, area above Mill Bank, looking northeast toward the John Crow Mts. from the lower slope of the Blue Mts.



Fig. 2. Male *Tmolus azia* (dorsal and ventral surfaces), 4mi S. Mill Bank, St. Thomas Parish, 750 ft. elev., John Crow Mts., Jamaica, 19 Jan 1992.

Fabaceae species at ca. 150m elevation along the rough road running south from Comfort Castle and Mill Bank into the John Crow Mountains (Fig. 1), and also at a point ca. 6 mi (ca. 70m elevation) south along the road from Port Antonio towards Comfort Castle. The tiny adults of this hairstreak fed on the flowers of the Fabaceae species and also perched on its leaves, and were active from before 0800 hours (near Port Antonio) to as late as 1700 hours (near Mill Bank).

The sixth author of the present note observed but did not capture several butterflies resembling *T. azia* at the southeast end of Dallas Mountain in St. Andrew Parish, Jamaica, on 20 Apr 1967. The locality was on a small hilltop near Cane River Falls, with *Lantana reticulata* the attractant. In Jul and Aug 1979, Turner collected over two dozen *T. azia* near the top of Dallas Mountain, a mile northwest of his original sight record in 1967. Females outnumbered males 3 to 1. Both males and females were nectaring on the white flowers of *Acacia villosa* (Fabaceae) shrubs, and on the yellow flowers of *Acacia macracantha* (Fabaceae) trees. The latter tree was attracting non-nectaring activity by the females, but no eggs were found.

In addition to the above records, John Shuey reported to Turner that he collected a worn female of *T. azia* in St. Ann Parish, at Nammee Bay, Jamaica, in Oct 1985. Turner took a worn female

(and saw two other specimens) at Duncans, Trelawney Parish, on 15 Jan 1992. Both of these sites are new parish records in Jamaica.

Tmolus azia is a tiny inconspicuous hairstreak (8-9mm in FWL) which is easily overlooked because of its subdued coloration and weak flight. It may best be observed on flowers such as *Acacia* or *Melilotus alba*. In Florida, it uses lead plant (*Leucaena leucocephala* Fabaceae) as a larval host (Minno and Emmel, 1992), but probably feeds on many weedy species of Fabaceae. It is obviously capable of interisland transport, and ready establishment in new areas. The occurrence along roadsides in Jamaica, Hispaniola, and other apparently newly colonized areas in the 1970's and 1980's may not be an artifact of collector bias for accessible collecting areas. This distribution may instead reflect the species' easy spread in disturbed habitats where its weedy larval host plants and nectar sources provide a fertile landing ground for occasional "founder" individuals blown along by the Caribbean winds.

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