

and to half-way between submedian cross-vein and triangle in the Altamira example; costal edge of stigma of front wing 2.5–3.3 mm. The colour-differences perhaps indicate that these males are younger than the type.

♀ (hitherto undescribed). The female from "Choco, New Granada," referred to *bicolor*, Erichs., by Hagen<sup>3</sup> is before me and is probably this species. Entire body luteous or yellowish, the following markings blackish: a median labial band 1.3 mm. wide, margins of the ante-alar sinus, carinae and sutures of the abdominal segments, most of the superior surfaces of the femora and of the first and second tibiae, tarsi. Remainder of the legs reddish. Appendages .75 mm. long. Tips of the wings smoky-brown inward as far as the level of the distal end of the stigma; ante- and postcubitals as in the males; other details on page 330.

*Hab.* MEXICO, Altamira in Tamaulipas (*Hoag, coll. P. P. C.*: 1 ♂), Campeche (*Dubosc, coll. Selys*).—COLOMBIA, Barranquilla<sup>2</sup>, Choco (*Schott*<sup>3</sup>, *M. C. Z.*: 1 ♀); PERU, Jurimaguas (*coll. Selys*); BRAZIL, Coary (*ibid.*), São Paulo de Olivença (*ibid.*), Minas Geraes (*coll. R. Martin*); PARAGUAY, Concepcion (*H. H. Smith, Carn. Mus. Pittsb.*: 2 ♂).

The data quoted from the collections of MM. de Selys and R. Martin have been kindly furnished by Dr. F. Ris (*in litt.*, 9. ix. 05).

Taken in June (Altamira), August<sup>2</sup> (Barranquilla), and December (Concepcion).

The female differs from that of *peruviana* by the absence of antehumeral stripes and the coloration of the face; from that of *attala* by the reduction of the black markings on the abdomen to the sutures and carinae; from that of *simplicicollis* subsp. *collocata* by the presence of yellow on the hind wings.

#### 4. *Erythemis attala*.

*Libellula attala*, Selys, in Sagra's Hist. Cuba, Ins. p. 445 (1857)<sup>1</sup>.

*Mesothemis attala*, Hagen, Syn. Neur. N. Amer. p. 172 (1861)<sup>2</sup>; Kirby, Ann. & Mag. Nat. Hist. (6) xix. p. 607 (1897)<sup>3</sup>; Calvert, Proc. Calif. Acad. Sci. (3), Zool. i. pp. 407–408 (1899)<sup>4</sup>; Prinzessin Therese, Berl. ent. Zeitschr. xlv. p. 262 (1900)<sup>5</sup>.

*Libellula annulata*, Ramb. Névr. p. 78 (1842)<sup>6</sup> (in part., not of Beauvois \*).

*Mesothemis annulata*, Martin, Boll. Mus. Zool. Anat. Comp. Torino, xi. no. 240, p. 1 (1896)<sup>7</sup>.

*Libellula annulosa*, Selys, in Sagra's Hist. Cuba, Ins. p. 445 (1857)<sup>8</sup>.

*Libellula mithra*, Selys, l. c. p. 446 (1857)<sup>9</sup>.

*Mesothemis mithra*, Hagen, Syn. Neur. N. Amer. p. 172 (1861)<sup>10</sup>; Proc. Bost. Soc. Nat. Hist. xi. p. 293 (1867)<sup>11</sup>.

The view advanced elsewhere<sup>4</sup> that these names represent individual variations and not distinct species, or even subspecies (geographical races), receives additional support from the present material. Thus the males from Atoyac alone show a gradual transition from those in which the blackish-brown spot at the base of the hind wings reaches out to the first antecubital and the level thereof (*attala*, *mithra*), to those in which it reaches to the second antecubital, arculus, and triangle (*annulosa*); the maximum width of the hind wing in this series is 9.5–10.5 mm. Very nearly the same minimum and maximum extents of the basal spot are exhibited by the males from Daule and Quevedo in Ecuador. Among the males from Brazil the minimum is also the same (*e. g.* Cachoeira, Sta. Anna), the maximum extent exceeds that found at Atoyac in that the spot reaches to the third antecubital and level thereof in one example from

\* "*Lib. annulata*, Beauvois, the type in the Selys Collection is a male of the African *Trithemis rubrinervis*—another puzzle for nomenclature."—Dr. F. Ris, in litt., 2. iii. 05.