

V. — THE DRAGONFLY-FAUNA OF TRINIDAD IN THE BRITISH WEST INDIES (ODONATA).

BY D. C. GEIJSKES. LEIDEN, HOLLAND. (WITH 4 TEXTFIGURES).

PART II.

Subordo: Anisoptera.

Fam. AESCHNIDAE.

Subfam. Gomphinae.

Genus: Gomphoides Selys.

The little material of the interesting family of *Gomphinae* we know from this island, is represented by a few specimens of the genus *Gomphoides*. In the year 1929 on July 13 and some days afterwards, two specimens, one male and one female of different species were taken by myself on a small river in the mountains near Mt. St. Benedict. Since these captures no *Gomphoides* was seen again, all the time I stayed in Trinidad. Mr. E. B. WILLIAMSON in Michigan, from whom I got information when determining my *Gomphoides*-specimens, wrote me in this connection, that he was just working at a revision of the genus and not able (March 17, 1930) to name my Trinidad specimens. About one year afterwards in a letter dated Jan. 13, 1931, Mr. WILLIAMSON wrote me, that two *Gomphoides*-specimens were received from Trinidad from the collector BELMONTES in Brasso, a male in a consignment for his own collection and a female in a collection consigned to Dr. WALKER in Toronto, which specimen was forwarded to him by Dr. WALKER. In his last letter of April 6, 1932, Mr. WILLIAMSON noted on the *Gomphoides*-specimens: "As to Trinidad *Gomphoides*, I think there are two species in all the material to date. I have no reason to think the Trinidad *Gomphoides* represent anything new, so I believe naming of the scanty material can well await the completion of my study if that meets with your approval".

Subfam. Aeschninae.

Gynacantha nervosa Rambur.

Trinidad: Coll. Williamson — Baracon Chaguanas 7. III. 1912, 1 ♀.
Coll. Geijskes — Mt. Thabor 18. VII. 1929, 6 larvae, hatched
26/30. VII. '29 4 ♂, 2 ♀. Same loc. 9. VIII. 1929, 15 larvae,

hatched 9/27. VIII. 1929, 7 ♂, 8 ♀; Mt. St. Benedict 26. VIII. 1930, 1 ♀ (fr. Maurus Maingot).

Length abd. (excl. app.) ♂ 51—54, hindw. 50—53, app. sup. 7—7³/₄, pt. fr. w. 4³/₄—5¹/₂. ♀ abd. 47—56, hdw. 49—57¹/₂, app. sup. 6—6¹/₄, pt. fr. w. 4³/₄—5¹/₂¹).

Wingvenation as follows: Anal triangle in males with three cells.

In the most anterior row of cells in anal loop three cells in males and females. Between anal loop and anal triangle just posterior to A two cells, sometimes three cells. In females between anal loop and anal hindmargin just posterior to A four-or five cells. Triangle in males $\frac{8.6}{6.7}$ $\frac{8.9}{9.7}$ $\frac{9.9}{7.9}$ $\frac{9.8}{8.6}$ $\frac{10.7}{8.7}$; in ♀♀ $\frac{9.9}{7.8}$ $\frac{9.9}{7.6}$ $\frac{7.7}{7.6}$. Between Rs and M₂ two rows of cells, sometimes only a single double cell and in one male three wings have a single row of cells except the left front wing.

G. nervosa is one of the most common Aeschnine dragonflies of Trinidad. They appear at twilight between 5.30—6.30 p. m. and are often rather numerous feeding on small flies and mosquitoes around the houses.

At the top of Mt. Thabor many mature larvae of this species were dredged in a very small pool and hatched some days afterwards at home (s. postea *Tr. caribbea*).

Gynacantha tenuis Martin.

Trinidad: coll. Geijskes — Mt. Thabor 5. IX. 1929. 1 ♂ (fr. Maurus Maingot).

Length abd. ♂ (excl. app.) 41.5, hindw. 40, app. 4.5, pt. fr.w. 3.5.

Wingvenation as follows: in front and hindwing only a single row of cells between M₂ and Rs. In anal loop of hindw. the most anterior row divided into three cells, between anal loop and anal triangle just posterior to A one cell. Anal triangle with 3 cells.

The margins of the genital fossa, on abd. segm. 2, anterior to the point of convergence on one side with three on the other side with four small teeth and no teeth posterior to the point of convergence. Auricles with four or six denticles.

The green and blue colours on the body of this teneral specimen are somewhat faded and pale, but it is indicated as a distinct *tenuis* by the structural marks. The curved appendages well agree with the figures given by WILLIAMSON (Misc. Publ. Mus. Zool. Mich. July 2, 1923 (pp.

1) One of the females hatched at Mt. St. Benedict (7. IX. 1929) is of a very small size (abd. 47, hindw. 49) and has the appendages broken, but is certainly *nervosa*.

28—30) and are quite different from the figure given by MARTIN (*Aeschnines* Coll. Selys fasc. XX. p. 176 fig. 179) which may belong to another species as has been pointed out already by WILLIAMSON (l.c.).

Gynacantha membranalis Karsch.

Trinidad: Mt. St. Benedict 13. V. 1930. 1 ♀; 19. X. 1930, 1 ♀,
(fr. Maurus Maingot).

Length abd. ♀ (excl. app.) 64—66, hindw. 65—67, app.? (broken),
pt. fr.w. 6.

Wingvenation ♀: anterior row of cells in the anal loop of hindwing with three (in one wing with four) cells. Between anal loop and anal hindmargin just posterior to A_1 , four cells. Triangle $\frac{11.13}{9.11}$, $\frac{12.12}{9.10}$. Between R_s and M_2 in front wing a single row of cells with five to ten double cells; hindw. a single row of cells, in one wing only one double cell. Antenodal crossveins of the second series basal to the first thickened antenodal: $\frac{2.2}{2.1}$, $\frac{2.2}{2.3}$.

The species is easily recognizable by the brown tinged wings and the basal dark brown area occupying in front wing the costal space till the fourth or fifth antenodal crossvein, the median space proximal from arculus to the second cubito-anal crossvein, and cubito-anal space to the first or second crossvein; in hindwing costal and subcostal space as far as the fifth antenodal crossvein, all the median space, the cubito-anal space to the third crossvein and from here downward to the third cell of anal hindmargin. The faded brown of the wings is more concentrated at costal margin from base to pterostigma, both in front- and hindwing.

The two specimens have the appendages broken and colours on thorax and abdomen mostly spoiled. There is noted on the papers by the collector: „Specimen taken on the wing. Sides stripped with light blue dots. In dissecting the ♀ I found many eggs, they are of a light yellow in colour”. (13. V. '30), and on the following one: „Taken on the wing, feeding on large flies in the evening. Mt. St. Ben. Oct. 19. 1930”.

Triacanthagyna caribbea Williamson.

Triacanthagyna caribbea Williamson, E. B., Misc. Publ. Mus. Zool. Michigan, July 2, 1923, pp. 22—24, pl. I, fig. 3 (wingvenation), pl. IV. fig. 15 (ventral view sec. abd. segm. ♀), fig. 18 (hamular processes) pl. V fig. 23 (app. ♂).

Trinidad: (Coll. Geijskes — Mt. Thabor 18. VII. 1929, 2 ♂; 19. VII. 1929, 1 ♂; 11. VIII. 1929, 1 ♀ (larva) hatched at Mt. St. Ben. 28. VIII. 1929.

Length abd. ♂ (excl. app.) 41, hindw. 38—41, app. sup. 6, pt. fr.w. 3.9; ♀ abd. 41, hdw. 41, app. 7, pt. fr.w. 4.5.

Wingvenation as follows: In nine of the twelve wings of males one row of cells throughout between M_2 and R_s , in one wing one double cell, in one another two double cells and in the other one three double cells. In females all wings with one row of cells. There are three cells in the most anterior row of cells in the anal loop and two cells just posterior to A between the anal loop and the anal triangle in males. Anal triangle with 3 cells. The hindwing of the female has 3 cells in the anal loop and four cells posterior to A from wing base to anal loop.

One of the males has the dark humeral stripe on thorax not connected with the middorsal dark area, as a result the isolated green on dorsum is widely confluent with the lateral green. An exact comparison of these specimens with the original description gives some differences in the abdominal pale spots as: on 2 segm. P. L. quadrangular, not joined with the auricle or A. M. L.; on 3 A. L. not reaching the transverse carina, but half the distance to the carine, M. D. and P. D. still conspicuous on 6.

In the pool at the top of Mt. Thabor mentioned more than once, already we found on July 18, 1929 a few individuals of *Triacanthagyna caribbea* resting in hanging position on the surrounding shrubs. By netting one specimen the other ones arose in an erratic flight up and down over the water contrasting by the brilliant green of their bodies. A few weeks before many larvae were dredged out of the muddy water, for the greater part belonging to *Gynacantha nervosa*, two of which were of a much smaller size in spite of their mature stage. By hatching out afterwards (Aug. 28, '29) one of those proved to be a ♀ of *Tr. caribbea*, distinguished by the dissimilar colour of the 2nd and 3rd femora, the shape of the area enclosed by the lateral and ventral carina and the not constricted abd. segm. 3.

Triacanthagyna ditzleri Williamson.

Triacanthagyna ditzleri Williamson, E. B., Misc. Publ. Mus. Zool. Michigan, July 2, 1923, pp. 19—22, pl. 1 fig. 2 (wingvenation), pl. V, fig. 23 (app.), pl. IV, fig. 13 (ventral view 3rd abd. segm.). Trinidad: Coll. Geijskes — Mt. St. Benedict 21. IX. 1929, 1 ♂ (fr. Maurus Maingot).

Length abd. ♂ (excl. app.) 40, hindw. 35, app. 5, pt. fr.w. 3.5.

Wingvenation: In front- and hindwing between M_2 and R_s only a

single row of cells. There are two cells in the most anterior row in the anal loop and two cells posterior to A between the anal loop and the anal triangle. Left hindwing has four cells in the anal triangle, in right hindwing three cells.

The dark markings on thorax and the typical green spots on abdomen of this specimen are as given in the description of WILLIAMSON (l. c.) from a ♂ from Palma Sola in Venezuela.

Triacanthagyna satyrus Martin.

Gynacantha satyrus ♂, Martin, R., in Coll. de Selys Longchamps, Aeschnines fasc. XX. 1909, pp. 177—178, fig. 181 (app. ♂).

Triacanthagyna satyrus Williamson, E. B., Misc. Publ. Mus. Zool. Mich., July 2, 1923, pp. 25—26, pl. IV fig. 20 (Hamular process ♂), pl. V fig. 25 (app.).

Trinidad: Coll. Geijskes — Mt. Thabor 9. VIII. 1929, 1 ♂ larva, hatched 17. VIII. 1929.

Length abd. (excl. app.) 42, hindw. 40.5, app. 6, fr.w. pterostigma 3.8.

Wingvenation ♂: frontwings with a single double cell in the row between M_2 and Rs; anal loop in the anterior row 3 cells and two cells posterior to A between the anal loop and the anal triangle. Three cells in the anal triangle.

The larva was taken together with one of *Tr. carribbea* (s. antea) and many of *G. nervosa* in the above mentioned small pool on Mt. Thabor. In spite of his immature state, the imago could be distinguished as a distinct *satyrus* by the form of the hamular process, the presence of a large patch of black spines on the posterior border of genital fossa and the shape of the abdominal appendages, being identical with the figures given by WILLIAMSON (l. c.).

Triacanthagyna septima Selys.

Trinidad: Coll. Williamson — San Juan 2. III. 1912, 1 ♀;
Coll. Geijskes — Mt. St. Benedict 3. III. 1929, 1 ♂.

Length abd. ♂ (excl. app.) 40, hindw. 35, pt. fr.w. 3.5, app. 4.5.

Wingvenation ♂: between M_2 and Rs only a single row of cells; there are three rows of cells between M_4 and M_{spl} both in the front- and hindwing. It has two cells in the most anterior row of cells of the anal loop; posterior to A between the anal loop and the anal triangle are two cells. The anal triangle has two cells.

The male in my collection is a teneral specimen with thorax and first three segments of abdomen dull green and the dark markings light brown. The insect was taken in a garden at midday, clinging to a shrub.

Triacanthagyna trifida Rambur.

Trinidad: Coll. British Museum — Royal Botanic. Gard., 1 ♂
(W. E. Broadway).

In his report on the Odonata from Trinidad in the British Museum, Mr. KIMMINS D. E. has noted on the species in a letter dated Nov. 10. 1930: „It is actually a ♂ *Triacanthagyna trifida* Ramb. and is the only specimen of this species we have from Trinidad”.

Coryphaeschna adnexa Hagen.

Trinidad: Coll. Williamson — St. Joseph 11. III. 1912, 3 ♂.

For the mention of this species in Trinidad, I am indebted to Mr. E. B. WILLIAMSON, Michigan, who was kind enough to inform me of his capture in the island, recorded in a letter of March 17, 1930.

Coryphaeschna virens Rambur.

Trinidad: Coll. P. P. Calvert ex coll. Selys — 1 ♂ (CALVERT, Biol. Centr. Am. Neur. p. 187).

Coll. Geijskes — Tunapuna (St. Michael Est.) 29. VIII. 1929,
1 ♂ 1 ♀ (fr. Maurus Maingot); same loc. 15. VII. 1930, 1 ♂
(on the wing) (fr. Maurus Maingot).

Length abd. + app. ♂ 57—60, hindw. 49—53, pt. 4.5—5, app. 5.5—6; ♀ abd. (app. broken) 58, hindw. 55, pt. 4.5.

It was undoubtedly this species of which I observed more than once in the ravine near Mt. St. Benedict in the afternoon, that a ♂, flying high in the air over the wood, came down to the water of a basin of a dammed small stream and tipped in the water like a swallow, then to go up again just as if it would try to drink. FR. MAURUS MAINGOT noted on capturing the ♂ and ♀ at St. Michael Est: „I caught them both on the wing and I had to use a very long stick, as they were flying very high in the air”.

Staurophlebia reticulata Burm. subsp. *obscura* Walker.

Staurophlebia reticulata obscura Walker E. M. Canadian Entomologist Dec. 1915, p. 391.

Trinidad: Coll. Williamson — Baracon Chaguanas 7. III. 1912,
7 ♂ 3 ♀.

Length of body ♂ 92—98 (average 94.4), abdomen app. 71—76.5 (average 73.5), hindw. 60—66.5 (average 63.5).

♀ length of body 88.5—97, abdomen (excl. app.) 63—68.5, hindw. 65.5—71, app. 6.5—7.

The new subspecies for this country proposed by Dr. WALKER is based on the coloration of the body being bluish green in life with very pronounced dark markings and some slight differences in the average number of certain crossveins and cells in the wingvenation. It must be understood as a geographical race more related to the typical form from Guiana, than to the subspecies *guatemalteca*, described from a single male from Guatemala.

Anax amazili Burmeister.

Trinidad: Coll. Geijskes ex. coll. Agr. Coll. — St. Clair Expl. Sta. X. 1920 A. R. 1 ♀; Mt. St. Benedict 6. VI. 1931, 1 ♀ (fr. MAURUS MAINGOT).

Length abd. + app. ♀ 48, hindw. 50, pt. 5.

When looking over the material of Odonata in the collection of the Imp. Agr. Coll. in Trinidad, I detected a ♀ of this species which has been kindly offered for my collection by Mr. F. W. URICH. A second damaged specimen was sent by fr. MAURUS MAINGOT in June 1931 with the note: "The large specimen with half its abdominal segments off, I took down by the basin in a semiliving condition; I think that a bird must have made a chance at it as its prey."

Fam. LIBELLULIDAE.

Subfam. Libellulinae.

Orthemis ferruginea Fabricius.

Trinidad: Coll. Selys — 1 ♂ 1 ♀.

Coll. Williamson — Cunapo River 27.II.1912, 7 ♂ 2 ♀; St. Joseph River 28.II.1912, 2 ♀; S. Juan 2.III.1912, 2 ♂; Diego Martin River 3.III.1912, 1 ♀; Pitch lake 9.III.1912, 1 ♂ 1 ♀.

Coll. Geijskes — Mt. St. Benedict 4.II.1929, 2 ♂; 14. II. 1929, 1 ♀; 10. VII.1929, 1 ♂ 1 ♀ (fr. Maurus Maingot); 15. VII. 1929, 1 ♂; 19. VII. 1929, 1 ♂, 8/15. VIII. 1929, 2 ♂ 1 ♀; 22. VIII. 1929, 2 ♂; 29. VIII. 1929, 3 ♂ 1 ♀; Mt. Thabor 13. VIII. 1929, 1 ♂; Siparia 23. VII. 1929, 1 ♂; St. John 15. VIII. 1929, 2 ♂; Caroni River Station 21. VIII. 1929, 17 ♂, 10 ♀.

Coll. Walker — Sangre Grande 16/26. I. 1930, 1 ♂ 2 ♀.

Length abd. + app. ♂ 29—36, hindw. 36—42, pt. fr.w. 0.5—0.6.
" " " ♀ 27—32, " 37—43, " " " > 5—6.

A teneral male from Caroni River Station has the labium in median dark brown and the yellow stripes in the brown of thorax as follows: over the middorsal carina a narrow yellow line directed backward between the wing in a broad streak of the same colour. Lateral stripe 1 distinct, in lower part wider and following the humeral suture to the upper part of infra-episternum; stripe 2 vaguely, 3 very distinct not reaching the upper margin, 4 vaguely, 5 triangular, 6 very distinct. Abdominal segm. 1—3 lateral yellow, for the rest light brown. Wingtops smoked to the distal end of pterostigma. Legs brown, tarsae black. Other tenerals from the same locality have the yellow areas very diffuse or absent and the last segments of abdomen reddish tinged. Adults are of a beautiful red, entirely covered with pruinescence.

Teneral females are very similar to the males, the pale stripes on thorax a little wider, 1 and 4 most distinct. Abdomen light brown, segm. 1—7 with a lateral yellow stripe, pterostigma unicolorous grey.

In semi-adult individuals thorax entirely brown without paler markings or the lateral stripes if present fading into one another as 2 and 3, 5 and 6.

Adults with thorax dark brown, on middorsal carina a very narrow pale line lateral stripes hardly visible and faded. Abdomen dark brown with the first 3 segments olive coloured, the last four or five segm. reddish tinged, lateral yellow stripe to the fifth or sixth segment. Pterostigma dark brown.

var. ♀ *sulphurata* Hagen.

Trinidad: Coll. Petersen — Belmont 26. XI. 1907, 1 ♀.

Coll. Geijskes — St. John 15. VII. 1929, 1 ♀; 16. VIII. 1929, 1 ♀;

Caroni River Station 21. VIII. 1929, 2 ♀.

Length abd. + app. ♀ 32—33.5 hindw. 41—42, pt. < 6—6.

Labium in median dark brown, sides yellow. A narrow pale line at middorsal carina, lateral stripe 1 on thorax distinct or divided in 3 yellow spots, of which the lower one is the largest; other lateral stripes well developed and wider than in ♀ type-form. Legs dark brown, tarsae black.

Once I observed a ♀ in oviposition, tipping with the end of abdomen into the water of a small pool while a ♂ about two feet in vertical line above this ♀ was "standing" in the air following exactly every movement of the female (Mt. St. Ben., 15. VIII. 1929, 3 p.n.). At Caroni River, *ferruginea* was quite numerous, resting on dry bamboo sticks with many other dragonflies in the Indian gardens on the bank of the river.

Orthemis cultriformis Calvert.

Trinidad: Coll. Williamson — Arima 4. III. 1912, 1 ♂.

Coll. Walker — Sangre Grande 28. II. 1929, 1 ♂; 29/30. I. 1930, 3 ♂.

Length abd. + app. ♂ 28—30, hindw. 33—34, pt. 4—>4.

The specimens in coll. WALKER are adult with the thorax dark brown to black pruinosed on dorsum. Lateral stripes 3 and 6 diffuse, while in two specimens the 5th stripe is reduced to a dorsal spot at the upper margin, largely separated from the 6th. Abdomen red, the first three segments brown on dorsum with a middorsal yellow stripe on segm. 1 and 2. Sides of segm. 1—3 yellowish green. Segm. 3—7 red. interrupted at the basal and apical ends by a transverse black ring and on each side of the middorsal carina a dark to black band the length of the segments. Segm. 8 with the black longitudinal bands confluent, 9 and 10 entirely black.

Orthemis concolor Ris.

Orthemis attenuata Ris in Coll. Zool. Selys Longchamps, Libellulinen fasc. XI, p. 281, 292 (pars) 1910.

Orthemis concolor Ris ibidem fasc. XVI, p. 1105—1107, 1916.

Trinidad: Coll. Williamson — S. Juan 2. III. 1912, 1 ♂, Baracon Chaguanas 7. III. 1912, 1 ♂.

Coll. Geijskes — Caroni River Station 21. VIII. 1929, 12 ♂, 7 ♀.

Length abd. + app. ♂ 31—35, hindw. 33—37, pter. fr. w. < 4—4.5.

" " " " ♀ 33—35, " 35—37, " " " 4.5—4³/₄.

In the series from Caroni Station there are two subjuv. males which correspond very well with the description of RIS of a subjuv. ♂ from one of the males in coll. WILLIAMSON, but more mature examples have the yellow thoracic markings as follows: antehumeral stripe lacking, or in the lower part as a very diffuse spot; lateral stripe 1 not reaching the upper margin, stripe 2 lacking, 3 wider as in subjuv. reaching the upper margin, but not connected above the stigma with 4, 4 present but faded, 5 and 6 not so wide as in subjuv., not connected with one another along the upper margin as in subjuv. One semi-adult ♂ has 1, 3 and 4 reduced, for the rest same as described above. Adults only with 3, 4 in lower part and 6, or thorax entirely red-brown without paler stripes. The subjuv. and semi-adult specimens have the postclypeus and the ventral part of frons yellow, frons above somewhat coppery gloss and abd. segm. 3—6 lateral with a very narrow yellow line, separated at base and apex from one

another. These individuals resemble the closely related *attenuata* Erichs. but differ by the colourpattern of thorax and the less bright frontal metallic colour.

♀ juv. — Labium yellow with a broad black streak in median, labrum dark brown, in the middle a basal yellow spot. Ante- and postclypeus light brown, sides and ventral part of frons yellow, above olive brown and bluish metallic gloss. Thorax lightbrown, middorsal carina with a yellow stripe faded in the upper part. Antehumeral and first lateral yellow stripe in lower end confluent, stripe 2 present only as a yellow point at the upper end of humeral suture; 3 well developed not reaching the upper margin, 4 reduced in upper part to nearly the middle, wider than 3, 5 faded, 6 distinct and wide following the ventral edge of metepimeron dorsally vaguely connected with 5.

Abdominal segm. 1—3 yellow, 3—10 black with a middorsal narrow yellow line to segm. 8. Legs brown or black in the extreme parts, first femora at inner side yellow. Wings hyaline, smoked at top to distal end of pterostigma; base light brown, extending in fr.wing over the entire width to half the cubito-anal crossvein, in hindw. to the cubito-anal crossvein, ending just at the end of membranula. Pterostigma grey unicolorous.

A semi-adult female shows some differences as: labrum with two yellow spots, antehumeral stripe vaguely the entire length, first lateral stripe reaching dorsal margin, 3 wider and partly confluent with 4 in the upper part, 5 and 6 confluent also. First abd. segm. with two black streaks on dorsum each side of the carina. Pterostigma dark brown. One ♀ has the antehumeral stripes as a narrow line and not connected with the first lateral stripe. Another one has on abd. seg. 4—7 the narrow middorsal pale line reduced to half the length of each segment.

Adulti have the thorax entirely brown without paler marks and abdomen black with the exception of the middorsal line and the enlarged parts of segm. 8.

I found this species common near the Caroni River resting on dry sticks. The flight is erratic and quick, but they are often easy to catch on their resting places. More than once, when I missed one with my net, it immediately returned to the same spot, as to give me another chance.

Zenithoptera americana Linnaeus.

Trinidad: Coll. Williamson — Cumuto 8. III. 1912, 6 ♂.

Coll. Geijskes — Aripo Savannah 21. III. 1922, 1 ♂ (ex. coll.

Agr. Coll.). Mt. St. Benedict 5. I. 1929, 1 ♂ (fr. Maurus Maingot);

Guaico 12. VI. 1930, 1 ♂. (fr. Maurus Maingot).

Coll. Walker — Sangre Grande 19. 25. I. 1930, 3 ♀.

Length abd. + app. ♂ 15—15.5, hindw. 20—21, pter. fr.w. 3.5.
 " " " ♀ 13—14, " 20—21, " " " 3.5.

This remarkable blue winged species inhabits swamps in woodland. There was a note on the specimen from Guaico by fr. MAURUS M.: "It is quite a rare species, I almost took it for a butterfly, because it flies and rests just as one. They are not difficult to net."

Perithemis mooma Kirby.

Perithemis mooma Kirby, Ann. & Mag. Nat. Hist. (6), 4. p. 233, 1889.

Perithemis domitia form. *mooma*, Calvert Biol. C. Am. Neur. p. 314, tab. VI, figs. 19—27. 1907.

Perithemis domitia var. ♀ *mooma*, Ris in Libellulinen fasc. XI. p. 338, fig. 185, 1910, fasc. XVI (deux. part.) p. 1116.

Perithemis mooma, Ris Misc. Publ. Mus. Zool. Mich. no. 21, Sept. 2, 1930. pp. 21—26. (A Revision of the Libelluline genus *Perithemis*).

Trinidad: Coll. Ris — Cunapo River, St. Joseph River, Diego Martin River, Febr. 27, 28, 29, 1912 4 ♂ (ex. coll. Williamson).
 Coll. Geijskes — Erin 25. VII. 1929, 4 ♂; Guaico 20. VIII. 1929, 6 ♂, 1 ♀; St. Augustine 21. VIII. 1929, 1 ♂, 2 ♀; St. Joseph 23. VIII. 1929, 2 ♀; Bonier Arouca 2/5. XII. 1930, 4 ♂ (fr. Maurus Maingot).

Coll. Walker — Sangre Grande 1, 2. II. 1930, 2 ♂.

Length abd. + app. ♂ 13—14.5, hindw. 16.5—19.5, pt. fr.w. 2—2.5.
 " " " " ♀ 12—14, " 17.5—19, " " " 2.3—2.5.

The species of the genus *Perithemis* are well marked by the golden yellow wings and their small size. They are common in many places on local pools and in swampy grounds or along running water. The different forms stated for the polychromous females in the species and the unsatisfactory division of the genus are puzzled out by Ris in his revision of the genus (l. c.), by which we are now able to number the species in a right way.

To the Trinidad specimens of *mooma* apply the smaller material, known from Venezuela and Columbia. The wings of the males are without any dark spot, while in the females the yellow and dark brown bands are of a variable extent. In one female from St. Augustine, only light yellow bands are present at the level of the quadr. and at the nodus, confluent in the costal space only.

It seems that *mooma* inhabits swamps or stagnant pools in the plain, were it is often common throughout the year.

Perithemis domitia Drury.

Libellula domitia Drury Ill. Nat. Hist. 2. t. 45, fig. 4, 1773.

Perithemis domitia Calvert Biol. C. Am. Neur. 1907, p. 310—311 (pars!).

Perithemis domitia Ris in Libellulinen fasc. XI. 1910, p. 333—338 (pars!).

Perithemis domitia Ris Misc. Publ. Mus. Zool. Mich. 21, Sept. 1930, pp. 26—31.

Trinidad: Coll. Ris — Diego Martin River. 29. II. 1912. 1 ♂ (ex. coll. Williamson).

Coll. Geijskes — Mt. St. Benedict ravine 12. I. 1929, 2 ♂ (fr. Maurus Maingot); 30. XII. 1930, 2 ♂, 1 ♀ (fr. Maurus Maingot); Sangre Grande 5. 13. 14. VII. 1930, 4 ♂ 1 ♀ (G. Belmontes).

Length abd. + app. ♂ 14—15, hindw. 18.5—20, pt. fr.w. > 2—2.5.

" " " " ♀ 14 , " 20.5—21, " " " 2.5—< 3.

Wings in the males unicoloured golden yellow, those from Mt. St. Ben. more hyaline in the basal half in front- and hindwing both; those from Sangre Grande more rich golden coloured. The two females are quite different. The specimen from Mt. St. Ben. has the wings hyaline with a yellow streak in the costal space only to three cells distal from the nodus in fr.w. and to four cells in hindw.; apex brown bordered, in hindwing the most. In the specimen from Sangre Grande the basal part to two cells distal from nodus in fr.w. and to three cells in hindw. yellow coloured and in costal space four and five cells distal to the nodus in fr.w. and hindw. respectively; the yellow colour darkest at the distal end with a darker spot at the splitting of Rs—M₂ both in fr. and hindw. Apex brown bordered, in hindw. more pronounced.

The specimens on Mt. St. Benedict were taken along a small stream in the ravine.

Perithemis electra Ris.

Perithemis cornelia Ris in Libellulinen fasc. XI. pp. 343—344, 1910, suppl. 1117—1119, 1916, (pars!).

Perithemis electra Ris Misc. Publ. Mus. Zool. Mich. 21, pp. 33—36, Sept. 1930.

Trinidad: Coll. Williamson — Cumuto 6. III. 1912, 2 ♂.

Coll. Ris — Cumuto 10. III. 1912, 1 ♂ (ex. coll. Williamson).

Coll. Geijskes — Siparia 24. 26. VII. 1929, 2 ♂; Sangre Grande 5. 11. 12. 14. 15. VII. 1930, 22 ♂, 2 ♀ (G. Belmontes).

Coll. Walker — Sangre Grande 2. II. 1930, 1 ♂.

Length abd. + app. ♂ 14—15, hindw. 18—20, pt. fr.w. 2.
 " " " " ♀ 13 , " 19.5—20, " " > 2.

The large series before me corresponds in both sexes quite well with the typical form described by Ris from Columbia and Venezuela and is very uniform.

I collected this species on small streams in woodland near Siparia, where it was not common.

Perithemis thais Kirby.

Perithemis thais Kirby, Trans. Zool. Soc. London 12, p. 324, 1889.

Length abd. ♂ 13, hindw. 16 : 6.5, pt. 1.5.

Trinidad: Coll. Williamson — Cumuto 8. III. 1912, 1 ♂; Arima 4. III. 1912, 3 ♂.

Coll. Ris — Arima 4. III. 1912. 1 ♂ (ex. coll. Williamson).

Coll. Walker — Sangre Grande 1930, 1. II. 1 ♂; 2. II, 1 ♂;

11. II, 1 ♂ (t $\frac{0.0}{0.1}$).

Nephepeltia phryne Perty.

Trinidad: Coll. Williamson — Arima 4. III. 1912, 17 ♂, 1 ♀; Cumuto 8. 10. III. 1912, 44 ♂.

Coll. Geijskes — Guaico 17. 20. VIII. 1929, 4 ♂; Caroni River Station 21. VIII. 1929, 2 ♀; Sangre Grande 12. VII. 1930, 2 ♂; 3. VIII. 1930, 1 ♂ (G. Belmontes).

Coll. Walker — Sangre Grande 24—28. I. 1930, 2 ♂, 5 ♀.

Length abd. + app. ♂ 15—16.5, hindw. 17—18, pt. fr.w. 1.5.

" " " " ♀ 13—14 , " 17.5—18, " " 1.5.

This small species inhabits swamps and streams in the plains where it may be common in several localities. In their habits they remember a *Micrathyria* reposing on dry sticks. One of the males from Guaico has Anq $\frac{7.7}{5.5}$, other ones $\frac{6.6}{5.5}$.

Oligoclada walkeri Geijskes.

Oligoclada walkeri Geijskes Entomologische Berichten, DI. VIII, n°. 178, pp. 213—214, Mrt. 1931.

Oligoclada walkeri Borrer Misc. Publ. Mus. Zool. Mich. n°. 22, Apr. 1931, pp. 35—38, figs. 10, 24, 44, 59, 65, 71, 81.

Trinidad: Coll. Walker — Sangre Grande; 1930, 4. III, 1 ♂; 24.

III, 1 ♂; 25. III, 4 ♂; 26. III, 5 ♂ (one of which is the type);
29. III, 2 ♂; 30. III, 5 ♂; 2. IV, 2 ♂.

Length abd. + app. ♂ 16—17, hindw. 20.5—21, pt. fr.w. < 2.

To the ample descriptions of Borrer (l. c.) in his excellent study on the genus, I have nothing to add. As has been pointed out, the species is well marked by the swollen posterior margin of occiput, „appearing in dorsal view to have a broad truncate projection extending caudad, the edge of which is straight except for a small notch or furrow in the center” (p. 18, key). *walkeri* is very closely related to *umbricola* Borr. and they are placed together in one group (V) by BORRER on account of their penis structure.

In spite of their systematic relation, they are widely separated from a geographical point of view as far as it is known. *umbricola* has been reported from Venezuela and Columbia, *walkeri* from Guiana and the Amazonian region.

In so far as no other species of *Oligoclada* has been found in Trinidad it is the only species known outside the continent of South America. Therefore its appearance in Trinidad may be called somewhat surprising. While the species of *Perithemis* from this country are undoubtedly Venezuelan-Columbian derivatives, we have in this species of *Oligoclada* before us a stream-dwelling dragonfly derived from the Guianian-Amazonian fauna.

Uracis fastigiata Burmeister.

Trinidad: Coll. Mus. Hamburg, 1 ♀, V. 1897 (O. Burger).

Coll. Geijskes — Sangre Grande 14. VIII. 1930, 1 ♂ (G. Belmontes).

Coll. Walker — Sangre Grande 13/18. II. 1929, 4 ♂, 3 ♀; 14,
VIII. 1929, 2 ♂; 1. II. 1930, 1 ♂; 3. II. 1930, 1 ♂.

Length abd. + app. ♂ 24—26, hindw. 28.5—31.

” ” excl. valv. vulv. ♀ 24—26, hindw. 28—32.

Males, with dark wingtops in their largest extent, in fr.w. to one cell proximal pterostigma, in hd.w. to proximal end of stigma; in females (subjuv.) to half pterostigma, in hindw. a little shorter, not so dark as in male.

Uracis imbuta Burmeister.

Trinidad: Coll. Selys 1 ♂, 1 ♀.

Coll. Mus. Hamburg — Port of Spain 29. V. 1897, 2 ♂ (O. Burger).

Coll. Petersen—Silkeborg — Belmont 24. XI. 1907, 1 ♂, 1 ♀.

Coll. Morton — Belmont 23. XI. 1907, 1 ♂.

Coll. Williamson — St. Joseph River 28. II/11. III. 1912, 2 ♂, 1 ♀; Arima 4. III. 1912, 32 ♂, 27 ♀; Maracas River 5. III. 1912, 1 ♂; Cumuto 6. III. 1912, 6 ♂.

Coll. Geijskes — Mt. St. Benedict 12. I. 1929, 1 ♂, 2 ♀ (fr. Maurus Maingot); 13. VII. 1929, 1 ♂; Siparia 23. VII. 1929, 1 ♂, 1 ♀; Guaico 20. VIII. 1929, 2 ♂; Caroni River 21. VIII. 1929, 8 ♂, 4 ♀; Cumuto 5. XII. 1930, 1 ♀ (fr. Maurus Maingot).

Coll. Walker — Sangre Grande 14. II. 1929, 1 ♀; 16. II. 1929, 1 ♀; 15. IV. 1929, 1 ♀; 17. VI. 1930, 1 ♂; 2. IV. 1930, 1 ♂.

Length abd. + app. ♂ 20—23, hindw. 23—27.

” ” ” ♀ 19—21.5, ” 23.5—27.

Dark wingtops in most of the specimens reduced, only the extreme margin one or two cells proximal brown tinged. Quite hyaline wings in teneral not rare. Two males and one female have the wingtops brown to half the stigma, in hindwings a little shorter. One female (Mt. St. Ben.) undoubtedly belonging to this species has the wingvenation as follows: $t. \frac{2.1}{4.1}$, $ht. \frac{0.0}{1.1}$, $Cuq \frac{2.2}{5.5}$.

U. imbuta is a common species throughout, preferring open rivers, small streams with a rank grassvegetation on the banks, but it inhabits also swamps (Guaico, Cumuto). The individuals are mostly observed resting in the grassvegetation, where the teneral are hardly visible, the adulti, however, often conspicuous by their pruinescence.

Anatya guttata Erichson.

Trinidad: Coll. Williamson — St. Ann River 1. III. 1912, 1 ♀; Baracon Chaguanas 7. III. 1912, 6 ♂, 3 ♀.

Coll. Walker — Sangre Grande 24, 29, 30. I. 1930, 2 ♂, 3 ♀; 2, 23, 24, 26. II. 1930, 1 ♂, 3 ♀.

Coll. Geijskes — Sangre Grande 15. VIII. 1930, 1 ♂, (G. Belmontes).

Length abd. ♂ (excl. app.) 21—24, hindw. 22—24, pt. 2—>2.

” ” ♀ ” ” 19—22, ” 23—25, ” 2—2.5.

Micrathyria didyma didyma Selys.

Libellula didyma Selys, Hist. Cuba, p. 453, 1857.

Micrathyria pruinosa Kirby, Ann. Mag. N. Hist. (6) 14, p. 267, 1894.

Micrathyria didyma didyma Ris, in Libellulinen fasc. XII. p. 429—431, 1911, fasc. XVI. p. 1142—1144, fig. 659, 660, 1916.

Trinidad: Coll. Geijskes — Mt. Thabor 8. XI. 1930, 1 ♂, 1 ♀ („taken on wing”) (fr. Maurus Maingot).

Length abd. + app. ♂ 23, hindw. 26, pt. 2.5.

" " " ♀ 22, " 27, " 2.8.

The two examples are of a very small size, which is well in accordance with the description of *pruinosa* by KIRBY, which is identical with *didyma didyma*, as has been pointed out by RIS. Without any hesitation the male may be recognised at once by the genitalia and the female is fully alike the male in the wing-venation by which it is undoubtedly referable to this species.

Micrathyria didyma laevigata Calvert.

Micrathyria didyma laevigata Calvert, Ann. Carn. Mus. Vol. VI, no. 1, pp. 231—232, 1909.

Micrathyria didyma laevigata Ris, Libellulinen fasc. XII, p. 431, 1911, fasc. XVI, p. 1144, fig. 661, 1916.

Trinidad: Coll. Geijskes — Sangre Grande 5. VII. 1930, 5 ♂, 11. VII. 1930, 3 ♂; 12. VII. 1930, 4 ♂; 5. VIII. 1930, 3 ♂.

Length abd. + app. ♂ 24—26, hindw. 26—28.5, pt. 2.5—<3.

The specimens are distinct *laevigata*. They were compared with two examples of *hypodidyma* Calv. from Nietherohy in Brazil and were found to be different from the subspecies as stated by CALVERT and RIS (l. c.). Two males have ht in left-frontwing free and another one in discoidal field of right-hindwing one cell reaching from M_4 to Cu_1 . In all the other specimens ht in fr.w. is two celled and no single cell in discoidal field of hindwing is reaching from M_4 to Cu_1 .

Micrathyria dythemoides Calvert.

Micrathyria dythemoides Calvert, Ann. Carn. Mus. Vol. VI, no. 1, pp. 232—234, pl. VII, fig. 135. (genitalia ♂), 1909.

Micrathyria dythemoides Ris, Libellulinen fasc. XII, p. 435.

Trinidad: Coll. Geijskes — Caroni River Station 21. VIII. 1929, 1 ♀.

Length abd. ♀ 27, hindw. 32, pt. 3.

This single female has given some trouble. On account of the wing-venation it belongs to the *Micrathyria didyma*-complex proposed by RIS and arranged in a key for the males in his Libellulinen fasc. XVI, p. 1141. And as far as females may be recognized by this key, it runs out to B with regard to the width of the wings. (In my specimen length and width of fr.w. 32—7, hdw. 31—9). Further it has neither the same venation nor the same colourpattern of thorax as any of the following species. A careful examination of the wings of *Cambridgei* Kirby, figured by RIS (fig. 663, p. 1145) shows many points of agreement, but the colourpattern of thorax is quite different in my specimen from that species. At least the description of CALVERT (l. c.) for this species applies fully

to it, so that I believe it is really *dythemoides*. I have found the following differences in the wingvenation as given in the description by CALVERT of a female from Surinam: anq $12\frac{1}{2}.11\frac{1}{2}$ (Calv. 10—11 in fr.w.), pnq $\frac{98}{9.9}$ (Calv. in fr.w. 7—8). In the original description the length of abdomen in female is 24, while in my specimen it is 27, hindw. 30 in my specimen 32.

Micrathyria spinifera Calvert.

Trinidad: Coll. Williamson — Arima 4. III. 1912, 1 ♂.

Known to me only from the record of RIS in Libellulinen fasc. XVI, p. 1147, 1916 as to occur in Trinidad.

Micrathyria atra Martin.

Trinidad: Coll. Geijskes — Mt. Thabor 19. VII. 1929, 1 ♂ (ad.).

Length abd. + app. ♂ 26, hindw. 33, pt. 3.5.

The yellow thoracic stripes are smaller than figured by CALVERT (Biol. C. Am. tab. 9, fig. 13) and described by RIS (Lib. fasc. XII, p. 436—437). The first one along the humeral suture only in the lower part present and no yellow spot on the upper part of mesepimeron between the humeral suture and the obsolete first lateral suture. A beautiful male was taken on a forestpath on Mt. Thabor (2500 ft.) north of Mt. St. Benedict. It is the only specimen seen from this species.

Micrathyria ocellata dentiens Calvert.

Trinidad: Coll. Williamson — S. Juan 2. III 1912, 1 ♂, 1 ♀.

Coll. Geijskes — Caroni River Station 21. VIII. 1929, 1 ♂, 12 ♀; St. Joseph 2 ♀; Sangre Grande 5. VII. 1930, 5 ♂, 2 ♀; 10. VII. 1930, 2 ♂, 12. VII. 1930, 7 ♂; 14. VII. 1930, 2 ♂; 15. VII. 1930, 4 ♂, 1 ♀; 5. VIII. 1930, 3 ♂, (G. Belmontes).

Length abd. + app. ♂ 23—24, hindw. 24—25, pt. 2.5.

 " " " ♀ 18—20, " 23—26, " 2.5—2 $\frac{3}{4}$

The specimens show considerable variation in the colourpattern of thorax. In some of the males the pale stripes are very broad with the result that the total area of dark colours is less than the pale area on the same parts, while in a few others they are very small with the result that the total area of dark colours is greater than the total pale area on the same parts (s. fig. 19 and 20). For the rest they are between these two forms. The palest agree more with the subspecies *quicha* Calv.

but they belong to *dentiens* on account of their larger brown stripes on thorax and the greater prominence of the proximal inferior tooth of the superior appendages.

In the females we have the same variation shown in the figures 21 and 22.

One of the males has ti in fr. w. $\frac{2.3}{}$, two females $\frac{2.3}{}$ and one female $\frac{3.2}{}$. (Caroni R. St.).

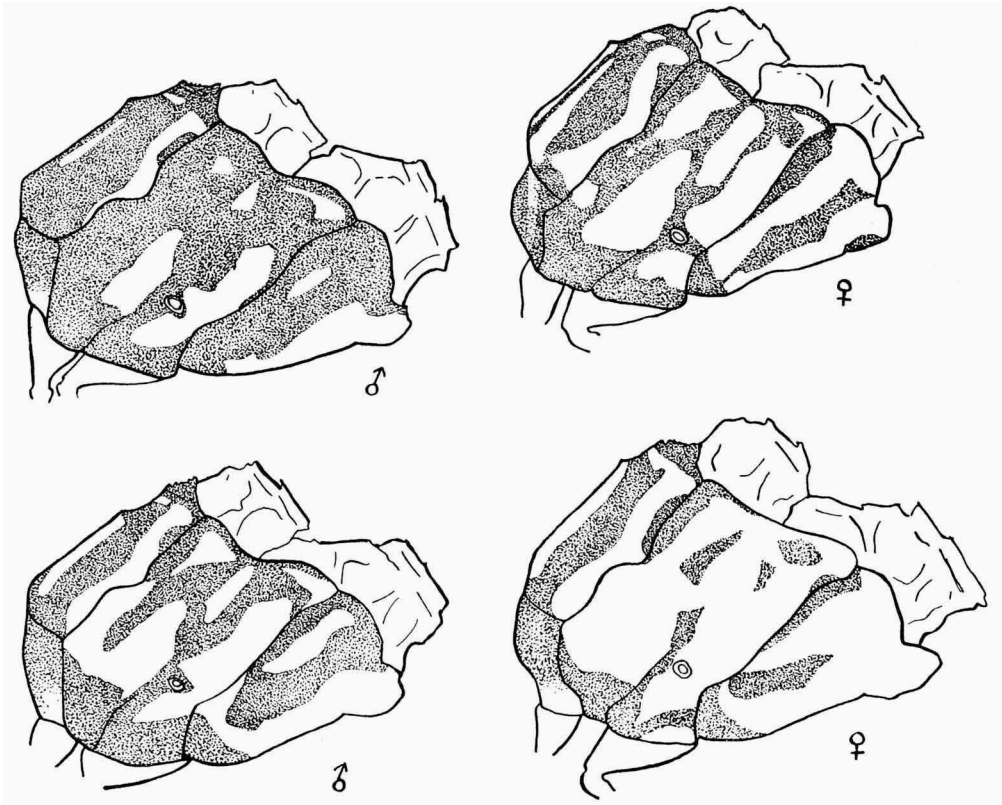


Fig. 19 and 20. *Micrathyria ocellata dentiens* Calv. Trinidad, Brasso. Colour-pattern of thorax, males. (Original).

Fig. 21 and 22. *Micrathyria ocellata dentiens* Calv. Trinidad, Brasso. Colour-pattern of thorax, females. (Original).

Micrathyria catenata Calvert.

Trinidad: Coll. Williamson — Pitch-lake 9. III. 1912, 2 ♂.

Length abd. ♂ 22, hindw. 22, Pt. 2.

Known to me only from the record of Ris in Libellulinen fasc. XVI, 1916, p. 1149, as to occur in Trinidad.

Micrathyria mengeri Ris.

Micrathyria Mengeri Ris, Libellulinen fasc. XVI, pp. 1149—1151, figs. 666—667 (genitalia and appendages ♂) 1916.

Trinidad: Coll. Geijskes — Sangre Grande 12. VII. 1930, 1 ♂ (G. Belmontes).

Length abd. + app. ♂ 24, hindw. 25, pt. 2.5.

The single male fully agrees in genitalia and appendages with the figures given by Ris (l. c.). However there are a few differences in the wing venation as follows: ti $\frac{2.3}{}$, Anq $\frac{8\frac{1}{2}, 8\frac{1}{2}}{7.7}$, arculus between anq 1 and 2 at the distal third. The pale markings on abdominal segments 3—7 reduced; 5 has only a very small lateral yellow line and 6 is all black. For the rest it is quite according to the original description.

Micrathyria aequalis Hagen.

Trinidad: Coll. Morton — 2 ♂.

Coll. Williamson — Diego Martin River 3. III. 1912, 1 ♂; Baracon Chaguanas 7. III. 1912, 1 ♂.

Coll. Geijskes — Caroni River Station 21. VIII. 1929, 1 ♀.

Coll. British Museum — Royal Bot. Gard., 1 ♂ (J. H. Hart).

Length abd. ♀ 17.5 hindw. 22.5, pt. 2.5.

The female in my collection has the yellow stripes on sides of thorax larger than the dark stripes between them. There is a dark stripe along the humeral suture forked in its upper end, a smaller one on the stigma also forked in its upper end and partly confluent with one of the branches from the humeral stripe, a faded stripe on the second lateral suture and a larger one over the middle of metepimeron.

Micrathyria eximia Kirby.

Trinidad: Coll. Williamson — Arima 4. III. 1912, 1 ♂; Cumuto 6. 8. 10. III. 1912, 25 ♂.

Coll. Geijskes — Guaico 20. VIII. 1929, 7 ♂, 2 ♀; 12. VI. 1930, 1 ♂ (fr. Maurus Maingot).

Length abd. + app. ♂ 16—17, hindw. 19.5—20, pt. 2.

" " " ♀ 15 " 20 " 2 $\frac{1}{4}$.

My specimens of the species agree more with the Brazilian specimens than with those from Columbia. The yellow markings on thorax and abdomen well developed specially in the females. Mature males with apical half of lateral and ventral side of thorax and first three abdominal segments pruinosed. Costal side of t. in frontwings a little broken.

In the swampland near Guaico *eximia* was common, resting on dry twigs.

Erythrodiplax umbrata Linnaeus.

Trinidad: Coll. Selys — 1 ♀.

Coll. Mus. Hamburg and Ris — Port of Spain, 2 ♀ (isochrome).

Coll. British Museum — Royal Botanic. Gard. ♂, ♀? (W. E. Broadway).

Coll. Williamson — St. Joseph River 28. II, 11. III. 1912, 4 ♂, 2 ♀ (1 ♀ isochrome); S. Juan 2. III. 1912, 2 ♂.

Coll. Geijskes — Mt. St. Benedict 12. I. 1929, 1 ♂, 3 ♀ (fr. Maurus Maingot); Penal (ricefields) 26. VII. 1929, 9 ♂, 16 ♀ (10 ♀ andromorph); Siparia 23/26. VII. 1929, 2 ♂; Erin 25. VII. 1929, 2 ♂; St. John 16. VIII. 1929, 2 ♂; Guaico (swamp) 20. VIII. 1929, 1 ♂, 1 ♀ (andromorph); Caroni River Station 21. VIII. 1929, 3 ♂, 4 ♀.

Coll. Walker — Sangre Grande 13. 14. VIII. 1929, 2 ♀ (andromorph).

Length abd. ♂ 22.5—25, hindw. 25—28.

 " " ♀ 25—28, " 29.5—32.

It is one of the most common species in Trinidad and in the West Indies throughout, inhabiting the plains, the ricefields, swamps and muddy streams, sometimes flying up in the mountains to more than 500 ft. (Mt. St. Benedict). In the females we have two forms: the *heterochromatic*-form with the wings hyaline and the tips diffus brown to the distal end of the stigma or less, and the *isochromatic*-form with the wings coloured as in the male (andromorph), crossed by a large dark brown band from nodus to one or two cells proximal the stigma or some less. In very immature specimens these bands are of a light yellow colour in the males as well as in the isochromatic females.

One of the males (Mt. St. Ben. 12. I. 1929) has between M_4 — M_{spl} in the frontwings three double cells and in the right hindwing one double cell.

Erythrodiplax castanea Burmeister.

Trinidad: Coll. Williamson — Arima 4. III. 1912, 1 ♂, 1 ♀; Cumuto 8. 10. III. 1912, 4 ♂.

Coll. Geijskes — Guaico 17. VIII. 1929, 15 ♂, 2 ♀; 12. VI. 1930, 4 ♂ (fr. Maurus Maingot).

Length abd. ♂ 16.5—19, hindw. 21.5—24, pt. > 2—2.5.

 " " ♀ 17—19, " 23—24, " 2.5.

All the specimens in my collection have t in front and hindwing both two celled (except the left frontwing of one male) and 2 cuq in the hindwings of about half the number of specimens.

This species inhabits swamps as there are near Cumuto and Guaico etc. where it is not uncommon.

Erythrodiplax lenti Ris.

Erythrodiplax lenti ♂ Ris, Libellulinen fasc. XVI, pp. 1156—1157, 1916.

Trinidad: Coll. Williamson — Cumuto 8. III. 1912, 2 ♂.

Known to me only from the description of RIS (l. c.); the species has not been found elsewhere up to the present time and is known only from the two males mentioned above.

Erythrodiplax ochracea ochracea Burmeister.

Trinidad: Coll. Williamson — Baracon Chaguanas 7. III. 1912, 3 ♂.
Coll. Geijskes — Erin 25. VII. 1929, 1 ♂; Penal 26. VII. 1929, 1 ♂, 1 ♀.

Length abd. ♂ 19—22, hindw. 22—26, pt. 3—3¹/₄.

" " ♀ 19 , " 24 , pt. 3.

My specimens are of a small size in comparison with examples from Brazil and Guatemala. In Erin one male was taken on a small stream near the coast and in Penal we took the male and female in the ricefields.

Erythrodiplax ochracea aequatorialis Ris.

Trinidad: Coll. Williamson — Arima 4. III. 1912, 3 ♂, 1 ♀; Cumuto 6. 8. III. 1912, 4 ♂, 1 ♀; Pitch-lake 9. III. 1912, 1 ♂, 1 ♀.
Coll. Geijskes — Mt. St. Benedict 21. VII. 1929, 1 ♂; Guaico 17. 20. VIII. 1929, 5 ♂; 12. VI. 1930, 2 ♂ (fr. Maurus Maingot).
Coll. Walker — Sangre Grande 22. I. 1930, 1 ♂; 1. II. 1930, 1 ♂; 18. II. 1930, 1 ♂; 21. II. 1930, 1 ♂ (G. Belmontes).

Length abd. ♂ 18.5—22, hindw. 22—25.5, pt. < 3— > 3.

" " ♀ ? , ? , ? .

This subspecies inhabits swampy land; in Guaico we found it together with *E. castanea* and *basalis*. About the specimen from Mt. St. Benedict (500 ft.) I don't remember anything.

Erythrodiplax unimaculata de Geer.

Trinidad: Coll. Geijskes — Penal 26. VII. 1929, 1 ♂; Caroni River Station 21. VIII. 1929. 1 ♂.

Coll. Walker — Sangre Grande 6. III. 1930, 1 ♂.

Length abd. ♂ 20.5—21.5, hindw. 21.5—24.5, pt. 3.

♂ juv. — Head yellow, frons above brilliant metallic blue green. Thorax yellow, dorsum with dark brown spots and points or more equal and a coppery gloss. Humeral and second lateral suture marked with a dark line and between those just before stigma a brown stripe forked in its upper end. Wings hyaline with a light brown basal spot, extending in frontwing to arculus, in hindwing to third anq and proximal half of t. Abdomen yellow, marked with black.

♂ ad. — The yellow of the teneralis replaced by a dark brown colour on the thorax. The basal wing spots dark brown, extending in fr.w. to arculus, in hindw. to distal end of t. Abdomen entirely blue pruinose.

The specimen from Penal was taken in the ricefields, that of Caroni River Stat. on the bank of the river.

Erythrodiplax connata fusca Rambur.

Trinidad: Coll. Selys — 2 ♂.

Coll. Williamson — Cunapo River 27. II. 1912, 1 ♂, 1 ♀; Diego Martin River 29. II. 1912. 1 ♂; S. Juan 2. III. 1912, 2 ♂; Arima 4. III. 1912, 3 ♂, 4 ♀; Cumuto 6. 8. III. 1912, 4 ♀; Pitch-Lake 9. III. 1912, 2 ♂, 1 ♀; Blumenau Sta. Catarina 18 ♂, 15 ♀.

Coll. Geijskes — Penal 26. VIII. 1929, 1 ♂, 1 ♀; St. John 16. VIII. 1929, 2 ♂, 4 ♀; Guaico 17. 20 — VIII. 1929, 1 ♂, 2 ♀; same loc. 12. VI. 1930, 2 ♂ (fr. Maurus Maingot); Caroni River Station 21. VIII. 1929, 4 ♀; Mt. Thabor (2500 ft.) 5. IX. 1929. 2 ♂ (fr. Maurus Maingot); Bonier Arouca 2. XII. 1930. 6 ♂, 3 ♀ (fr. Maurus Maingot); Sangre Grande 5. VIII. 1930, 3 ♂, 1 ♀ (G. Belmontes).

Coll. Walker — Sangre Grande 18. II. 1929, 1 ♂; 1. III. 1929. 1 ♂.

Length abd. ♂ 17—19, hindw. 22—23.5, pt. < 3—3.

” ” ♀ 16—18, ” 21—23, ” 2.5—3.

It is a common species throughout, inhabiting the plains especially, sometimes arising in the mountains to 2500 ft (Mt. Thabor).

One of the males (Guaico) has in the left hindwing one row of cells between A_1 — A_2 instead of two.

Erythrodiplax basalis Kirby.

Micrathyria basalis Kirby, Ann. Mag. Nat. Hist. (6), 19, p. 610, tab. 12, fig. 1, 1897.

Erythrodiplax basalis Ris, Libellulinen fasc. XII, p. 516, fig. 306, 1911, fasc. XVI. p. 1160, 1916.

Trinidad: Coll. Williamson — Arima 4. III. 1912, 7 ♂; 1 ♀; Cumuto 8. III. 1912, 4 ♂, 3 ♀.

Coll. Geijskes — Guaico 17. 20. VIII. 1929, 19 ♂, 6 ♀; same loc. 12. VI. 1930, 3 ♂, 4 ♀ (fr. Maurus Maingot); Caroni River Station 21. VIII. 1929, 1 ♂; Sangre Grande 5. VIII. 1930, 1 ♀ (G. Belmontes).

Coll. Walker — Sangre Grande 18. I. 1930, 1 ♂; 19/25. I. 1930, 2 ♂, 1 ♀; 1. III. 1930, 1 ♂.

Length abd. ♂ 16—19, hindw. 18—21, pt. 2.5—< 3.

” ” ♀ 15—19, ” 18.5—23, ” > 2—3.

Teneral females have a light brown or golden diffuse ending basal spot, in frontwing to arculus, in hindwing to the proximal end of t, or less. More adult ones have the basal spot smaller and dark brown as in the male, extending in frontwing to Cuq and in hindwing to A₂ in the median space. Thorax at the sides and abdomen entirely pruinosed.

One of the males from Guaico has two rows of cells between A₁—A₂ in the hindwings, the shape of the genitalia, however, indicates that it really belongs to *basalis*. In the frontwings of two males and two females from Guaico, there are two rows of cells in the discoidal space to one cell before the level of the nodus.

The species was common in the swamp near Guaico, where we took it together with *E. castanea*, *ochracea aequatorialis*, *connata fusca* and *Micrathyria eximia* Kirby.

Erythemis credula Hagen.

Trinidad: Coll. Williamson — Pitch-Lake 9. III. 1912, 6 ♂.

Known to me only from the record of R18 in Libellulinen fasc. XVI, p. 1173, 1916, as to occur in Trinidad.

Erythemis peruviana Rambur.

Trinidad: Coll. Geijskes — Sangre Grande 1930, 5. VII. 1 ♂; 11. VII, 2 ♂; 12. VII, 1 ♂ 14. VII, 2 ♂; 15. VII, 1 ♀; 16. VII, 1 ♂, 1 ♀; 3. VIII, 2 ♂, 3 ♀; 5. VIII, 2 ♂, 3 ♀ (G. Belmontes).

Coll. Walker — Sangre Grande 1929, 18. II, 1 ♂, 1 ♀; 22. II, 1 ♀; 1. III, 1 ♂.

Length abd. ♂ 24—25, hindw. 27—28, pt. 3—3.5.

” ” ♀ 23—24, ” 28—28.5, pt. > 3—3.5.

Erythemis mithroides Brauer.

Trinidad: Coll. British Museum — 1 ♂.

Coll. Williamson — Maracas River 5. III. 1929, 1 ♂.

Coll. Geijskes — Sangre Grande 14. VII. 1930, 1 ♀; 15. VII. 1930, 1 ♂ (G. Belmontes).

Length abd. ♂ 25, hindw. 29, pt. 2.5.

 " " ♀ 25, " 31, " 3.

The brown basal wing spots in the male from Sangre Gr. in fr.w. to one third the first anq and to cuq and to nearly two cells in anal field, in hindw. to first anq and the proximal third between cuq and t, right downward to A_3 and curved inward in the anal field to the hindmargin at a distance from the end of membranule as far as the length of the membranule itself. In the female from Sangre Grande the basal wing spots are less pronounced and paler than in the male, in fr.w. to one-fourth the distance to the first anq and to one third cuq, covering in anal field one cell; in hindwing to half the first anq and the proximal third of the distance between cuq and t, curved inward in the anal field to the hindmargin at a distance of four cells down the end of the membranule.

Erythemis plebeja Burmeister.

Trinidad: Coll. British Mus. — Royal Bot. Gard. ♂, ♀ (?) (W. E. Broadway).

Coll. Williamson — Diego Martin River 29. II, 10. III. 1912, 5 ♂; St. Ann River 1. III. 1912, 1 ♂; S. Juan 2. III. 1912, 6 ♂, 1 ♀.

Known to me as to occur in Trinidad only from the record of RUS in Libellulinen fasc. XVI, p. 1174, 1916 and from the enumeration of the material represented in the British Museum by Mr. KIMMINS kindly sent to me in a letter dated Aug. 25, 1930.

Erythemis haematogastra Burmeister.

Trinidad: Coll. Williamson — Arima 4. III. 1912, 1 ♂.

Coll. Geijskes — Sangre Grande 16. VII. 1930, 1 ♀ (G. Belmontes).

Coll. Walker — Sangre Grande 14. III. 1930, 1 ♀.

Length abd. ♀ 31—35, hindw. 33.5—36, pt. 3.5.

Lepthemis vesiculosa Fabricius.

Trinidad: Coll. Imp. Agr. Coll. Trinidad — St. Augustine 5. XII. 1926, 1 ♂.
Coll. Selys — 1 ♀.

Brachymesia batesi Kirby.

Cannacria Batesi Kirby, Trans. Zool. Soc. London, 12, pp. 300, 341, tab. 53, fig. 1; 57, fig. 9, 1889.
Cannacria fumipennis Currie, Proc. Washington Acad. Sc., 3, p. 387, fig. 31—34, 1901.
Brachymesia Batesi Muttkowski, Bull. Publ. Mus. Milwaukee, 1, 1, p. 169, 1910.

Trinidad: Coll. Selys — Port of Spain, 1 ♂.

Known to me as to occur in Trinidad only from the record of Ris in Libellulinen fasc. XIV, p. 736, 1912.

Dythemis sterilis Hagen.

Libellula tessellata ♂ Rambur Névr. p. 89, 1842 (pars).
Dythemis sterilis Hagen, Syn. Neur. N. Am., p. 317, 1861 (pars).
Dythemis Broadwayi Kirby, Ann. Mag. Nat. Hist. (6) 14, p. 227, 1894.
Dythemis velox var. *sterilis* Calvert, Proc. Boston Soc., 28, p. 310, 1898 (pars).
Dythemis velox Calvert, Biol. Centr. Am. Neur., p. 272, 1906 (pars).
Dythemis velox Ris, Libellulinen fasc. XV, pp. 841—843, 1913 (pars).
Dythemis sterilis idem, ibidem fasc. XVI, pp. 1205—1206, 1916.

Trinidad: Coll. Selys — 1 ♀.

Coll. British Mus. — Royal Botanic. Gard. ♂, ♀(?) (W. E. Broadway, type of *D. Broadwayi* Kirby).

Coll. Williamson — Cunapo River 27. II. 1912, 1 ♂; St. Joseph River 28. II. 1912, 6 ♂, 3 ♀; Diego Martin River 29. II. 1912, 3. 10. III. 1912, 9 ♂; St. Ann River 1. III. 1912, 3 ♂, 1 ♀; S. Juan 2. III. 1912, 19 ♂, 2 ♀; Arima 4. III. 1912, 1 ♂; Maracas River 5. III. 1912, 1 ♀.

Coll. Geijskes — St. Michael Est. 15. VII. 1929, 1 ♀; Erin 25. VII. 1929, 3 ♂; Caroni River Station 21. VIII. 1929, 5 ♀; Bonier Arouca 2. XII. 1930, 4 ♂ (fr. Maurus Maingot); Sangre Grande 30. VII. 1930, 1 ♂, 12. VIII. 1930, 1 ♂; 14. VIII. 1930, 2 ♂; 17. VIII. 1930, 1 ♂ (G. Belmontes).

Length abd. ♂ 25—28, hindw. 27—30, pt. < 3—3.5.
" " ♀ 24—30, " 26—31.5, " < 3—3.5.

In general the specimens are of a small size and with the wing tops very little smoked, especially in the males. Ris (1916) describes a probable hybride specimen (male) in the coll. Williamson from Diego Martin River as follows: yellow dorsal stripes on each side of segm. 4—7 less than half the length of the segment itself; labrum for the greater part black, a dark line on the postclypeus; frons redbrown in front with a distinct metallic blue; vertex dark brown, blue gloss, wings hyaline. Length abd. 25, hindw. 28, pt. < 3.

The species inhabits streams in the plains, where it is often common, its flight is rapid and it rests on dry sticks in the sun, the abdomen elevated and the wings drooping.

Dythemis multipunctata Kirby.

Libellula tessellata Rambur. Névr., p. 89, 1842 (pars).

Dythemis sterilis Hagen, Syn. Neur. N. Am., p. 317, 1861 (pars).

Dythemis tabida Hagen, Syn. Neur. N. Am., p. 317, 1861 (nomen nudum).

Dythemis multipunctata Kirby, Ann. Mag. Nat. Hist. (6) 14, p. 265, 1894.

Dythemis nigra ♀ Martin, Ann. Soc. Ent. France, 66, p. 590, 1897.

Dythemis velox var. *sterilis* Calvert, Proc. Boston. Soc., 28, p. 310, 1898 (pars).

Dythemis velox var. *tabida* Calvert, ibidem, 28, p. 310. 1898.

Dythemis velox Calvert, Biol. C. Am. Neur., p. 272, 1906 (pars).

Dythemis velox Ris, Libellulinen fasc. XV, pp. 841—843, 1913 (pars).

Dythemis multipunctata Ris, ibidem fasc. XVI, pp. 1206—1208, 1916.

Trinidad - Coll. Selys — 1 ♂.

Coll. Williamson — Cunapo River 27. II. 1912, 3 ♂, 1 ♀; St. Joseph River 28. II. 1912, 1 ♂; Diego Martin River 29. II, 10. III, 1912, 2 ♂, 2 ♀; St. Ann River 1. III. 1912, 5 ♂; S. Juan 2. III. 1912, 10 ♂; Arima 4. III. 1912, 3 ♂, 3 ♀; Maracas River 5. III. 1912, 4 ♂, 1 ♀; Cumuto 6. III. 1912, 1 ♂, 1 ♀. Coll. Geijskes — Mt. St. Benedict 14. 15. 17. 20. VII. 1929, 11 ♂, 1 ♀; St. John 16. VIII. 1929, 1 ♂; Caroni River Station 21. VIII. 1929, 1 ♀; St. Michael Est. 23. IX. 29, 1 ♂, 1 ♀ (fr. Maurus Maingot); Sangre Grande 1930, 30. VII, 3 ♂; 12. VIII, 1 ♂; 17. VIII, 3 ♂ (G. Belmontes).

Coll. Walker — Sangre Grande 1930, 29. I, 1 ♀; 30. I, 1 ♀; 1. II. 1 ♀; 14. II, 1 ♀; 19. II, 1 ♂; 21. II, 1 ♂; 6. III, 1 ♀.

Length abd. ♂ 23—26, hindw. 26—30, pt. < 3—> 3.
 " " ♀ 22—25, " 27—29, " 3—> 3.

This species inhabits streams more in the mountains than in the plains, where I found it common at several places. Its habits are very similar to those of *D. sterilis* Hagen, flying on the wateredge and around big stones in the stream and resting on dry twig tips in sun, abdomen elevated and wings drooping.

Dythemis cannacioides Calvert.

Trinidad: Coll. Williamson — S. Juan 2. III. 1912, 1 ♂; Cumuto 6. III. 1912, 2 ♂.

Coll. Geijskes — Bonier Arouca 2. XII. 1930, 1 ♂ (fr. Maurus Maingot); Sangre Grande 17. VIII. 1930, 1 ♂ (G. Belmontes).

Coll. Walker — Sangre Grande 13. II. 1930, 1 ♂ (G. Belmontes).

Length abd. ♂ 26—29, hindw. 30—34, pt. 3—3.5.

The males in coll. Williamson have as far as Ris has mentioned (Libellulinen fasc. XVI, p. 1208, 1916) only one row of cells between Rs—Rspl in hindwing. The males in my collection have the wingvenation as follows: $t \frac{1.1}{0.0}$, $cuc \frac{1.1}{2.2}$, $anq \frac{11\frac{1}{2} \cdot 13\frac{1}{2}}{9.9}$, double cells between Rs—Rspl $\frac{1.2}{0.0}$ (Bonier Arouca) and: $t \frac{1.1}{0.0}$, $cuc \frac{1.1}{2.2}$, $anq \frac{13\frac{1}{2} \cdot 12\frac{1}{2}}{9.10}$, double cells between Rs—Rspl $\frac{4.2}{1.1}$ (Sangre Grande).

The male in coll. Walker has: $t \frac{1.1}{0.0}$, $cuc \frac{1.1}{1.1}$, $anq \frac{12\frac{1}{2} \cdot 12\frac{1}{2}}{10.9}$ (right fr.w. with the 12th incompl. and the 13th compl.), double cells between Rs—Rspl $\frac{1.2}{0.0}$.

Brechmorhoga praecox grenadensis Kirby.

Brechmorhoga grenadensis Kirby, Ann. Mag. Nat. Hist. (6) 14, p. 265, 1894.

Brechmorhoga praecox grenadensis Ris, Libellulinen fasc. XVI, p. 1210, fig. 683, 1916.

Trinidad: Coll. Williamson — St. Joseph River 28. II. 1912, 7 ♂, 7 ♀; Diego Martin River 29. II. 1912, 1 ♀.

Coll. Geijskes — Mt. St. Benedict 3. VIII. 1929, 1 ♀; Mt. Thabor 5. IX. 1929, 1 ♂, 1 ♀ (fr. Maurus Maingot); Sangre Grande 17. VIII. 1930, 2 ♂ (G. Belmontes).

Length abd. ♂ 30—35, hindw. 27—29, pt. 1.5—2.
" " ♀ 32—35, " 30—32, " 2—2.5.

The males in my collection have t in fr.w. crossed or not so as follows;
t $\frac{0.0}{0.0}$ $\frac{0.1}{0.0}$ $\frac{1.1}{0.0}$; in the females t $\frac{0.1}{0.0}$ $\frac{1.1}{0.0}$. One teneral female (Mt. St. Ben.) has a distinct light brown apical spot in the front wings to the distal half between pterostigma and nodus. Basal wing spots in fr.w. to first anq and a little over cuq; in hindw. also and to the end of membranula. In the adult female these spots are smaller, the wings distal from t somewhat yellow tinged and the apical spot in fr. wing more diffuse and not so dark. Males with the wings hyaline, in the costal space very light yellow to half first anq. and in median space to half cuq in fr. and hindw. both.

The species inhabits clear streams in the mountains, especially places with many ripples and small waterfalls. The female from Mt. St. Benedict was soaring to and fro over the road to a height of about 5 feet for a long time in the early morning.

Brechmorhoga nubecula Rambur.

Libellula nubecula ♀ Rambur, Névr., p. 122, 1842.

Dythemis nubecula Hagen, Syn. Neur. N. Am., p. 317, 1861.

Macrothemis catharina Karsch, Berlin Ent. Ztschr., 33, pp. 364—366, 1890.

Brechmorhoga grenadensis Calvert, Proc. Boston Soc., 21, p. 315, 1898.

Brechmorhoga nubecula id., ibid. 28, pp. 313—314, tab. 1, fig. 18, tab. 2, fig. 22, 1898.

Brechmorhoga nubecula Ris, Libellulinen fasc. XV, pp. 863—864, 1913, fasc. XVI, p. 1212, 1916.

Trinidad: Coll. Williamson — St. Ann River 1. III. 1912, 1 ♀; Maracas River 5. III. 1912, 1 ♂; Cumuto 6. III. 1912, 2 ♂.

Coll. Geijskes — Mt. St. Benedict 12. I. 1929, 1 ♀ (fr. Maurus Maingot); 14. 15. 20. VII. 1929, 1 ♂, 2 ♀; 10. X. 1929, 1 ♀ (fr. Maurus Maingot); Mt Thabor 8. XI. 1930, 1 ♂ fr. Maurus Maingot); Sangre Grande 17. VIII. 1930, 1 ♂ (G. Belmontes).

Length abd. ♂ 27—30, hindw. 27—28, pt. < 2.
" " ♀ 27—29, " 30—32, " 2—> 2.

A very mature female (10. X. 1929) has the wings entirely brown tinged especially on the veins, the other females have the wings tinged not so dark and the apical spot more contrasting with the other parts

of the wing. The species inhabits the same places as the foregoing species and has also the same habits.

Macrothemis pseudimitans Calvert.

Trinidad: Coll. Williamson — St. Joseph River 28. II, 11. III. 1912, 2 ♂, 1 ♀; S. Juan 2. III. 1929, 1 ♂, 1 ♀; Maracas River 5. III. 1912, 1 ♂.

Coll. Geijskes — Mt. St. Benedict 14. 20. 21. 22. VII. 1929, 3 ♂, 2 ♀ (one pair in coitu); Bonier Arouca 2. XII. 1930, 1 ♂ (fr. Maurus Maingot); Sangre Grande 17. VIII. 1930, 1 ♂ (G. Belmontes).

Length abd. ♂ 25—26, hindw. 27—27.5, pt. < 2.

" " ♀ 24—26, " 26.5—29, " < 2—2.

One of the females has in the frontwings a light brown diffuse apical spot to half the distance between nodus and stigma; in another one there is a diffuse light brown band between nodus and t both in fr. and hindw. with no apical dark spot.

The species inhabits clear streams in or near the mountains. The males fly rapidly and they are often "standing" in the air on sunny spots over the water, suddenly emerging from the shadow.

Macrothemis imitans leucozona Ris.

Macrothemis imitans leucozona Ris, Libellulinen fasc. XV, pp. 885—887, 1913; fasc. XVI, pp. 1213—1214, 1916.

Trinidad: Coll. Williamson — Cunapo River 27. II. 1912, 3 ♂, 2 ♀; Diego Martin River 29. II. 1912, 1 ♂; S. Juan 2. III. 1912, 3 ♂, 2 ♀; Cumuto 6. III. 1912, 5 ♂, 1 ♀; St. Joseph River 11. III. 1912, 14 ♂, 14 ♀.

Coll. Geijskes — St. Joseph River 23. VIII. 1929, 1 ♂; Bonier Arouca 6. XII. 1930, 1 ♂ (fr. Maurus Maingot).

Length abd. ♂ 21—23, hindw. 21—24, pt. 1—> 1.

" " " 22—24, " 24—27, " > 1—1.5.

Ris (l. c.) noted from the Trinidad specimens in coll. Williamson, that the mesepimeral white spots on synthorax are not confluent at all by half the number of individuals (more in ♂ as in ♀). One of my males has also the mesepimeral white spots just interrupted above the stigma and in the other one they are confluent. The wings are in the proximal (basal) half very light yellow tinged to the level of the nodus.

Macrothemis hemichlora Burmeister.

Trinidad: Coll. Williamson — Cunapo River 27. II. 1912, 2 ♂, 8 ♀; Arima 4. III. 1912, 1 ♂, 1 ♀; Cumuto 6. III. 1912, 3 ♂, 4 ♀; Baracon Chaguanas 7. III. 1912, 1 ♀; St. Joseph River 11. III. 1912, 1 ♀.

Coll. Geijskes — Caroni River Station 21. VIII. 1929, 1 ♀.

Coll. Walker — Sangre Grande 21. II. 1930, 1 ♀.

Length abd. ♂ 22—23, hindw. 24—25, pt. 1.5.

 " " ♀ 22—22.5, " 25—29, " 1.5—2.

The female from Caroni River and Sangre Grande has the wings brown tinged as described by Ris under d. (Libellulinen fasc. XVI, p. 1214, 1916).

Macrothemis pumila Karsch.

Trinidad: Coll. Williamson — Cumuto 6. III. 1912, 6 ♂, 6 ♀.

Coll. Geijskes — Cumuto 5. XII. 1930, 1 ♂ (fr. Maurus Maingot).

Length abd. ♂ 16—18.5, hindw. 18—20.5, pt. <1 — > 1.

 " " ♀ 16, hindw. 20, pt. 1.

The male in my collection is of a very large size, however it is surely *pumila* and applies in full to the notes given by Ris of this species under c from the specimens in coll. Williamson (Libellulinen fasc. XVI, pp. 1218—1219, fig. 692, 1916).

Pantala flavescens Fabricius.

Trinidad: Coll. Selys — 1 ♂ Trinidad.

Coll. British Mus. — Royal Botanic. Gard. ♂, ♀ (?) (J. H. Hart).

Coll. Williamson — Arima 4. III. 1912, 1 ♂; Baracon Chaguanas 7. III. 1912, 1 ♀.

Coll. Geijskes — Mt. Thabor (2000 ft.) 18. VII. 1929, 1 ♂, 1 ♀; Mt. St. Benedict 22. VII. 1929, 1 ♂; St. Augustine 21.

VIII. 1929, 1 ♂; St. Joseph 23. VIII. 1929, 1 ♂; Sangre Grande 11. VIII. 1930, 1 ♀ (G. Belmontes).

Length abd. ♂ 31, hindw. 39—41, pt. fr.w. 3, hdw. 2.

 " " ♀ 34, " 40 " 3, " 2.5.

A common species throughout, but mostly hard to take. They prefer open places in wood-covered regions such as grassfields and along the railroads etc. On Mt. St. Benedict (500 ft.) this species was represented in July and August 1929 by a few individuals (six or less), soaring together to and fro for hours in the afternoon till sunset at a height of about 5 ft.

Tramea cophysa Hagen.

Trinidad: Coll. Selys — 1 ♀ Trinidad.

Coll. Williamson — Baracon Chaguanas 7. III. 1912, 1 ♀.

Coll. Geijskes — Penal 26. VII. 1929, 3 ♂, 1 ♀; Caroni River Station 21. VIII. 1929, 1 ♂; St. Joseph 23. VIII. 1929, 2 ♂, 1 ♀; St. Michaël Est. 29. VIII. 1929, 1 ♀ (fr. Maurus Maingot); Mt. Thabor 5. IX. 1929, 1 ♂ (fr. Maurus M.); Mt. St. Benedict 22, 28. IX. 1929, 2 ♂ (fr. Maurus M.).

Length abd. ♂ 30—32, hindw. 41—43, pt. fr. w. < 3—3, hindw. 2— > 2.

" " ♀ 31—32, " 41—45, " " " 3— > 3, " > 2.

The Trinidad specimens apply to the form *a*, separated by RIS (Libellulinen fasc. XVI, p. 972, 988—991, fig. 570, 1913), having in adults the wings tinged light brown, with a large brown basal spot in the hindwings to a little more than cuq.

The species was common in July and August 1929 and flying over open places at a height of about six or seven feet, mostly in large numbers together, soaring to and fro for many hours without settling. Sometimes *Pantala flavescens* Fabr. flies in quite a smaller number at the same place. When flying in this way it is a hard thing to catch them!

Tramea binotata Rambur.

Trinidad: Coll. Williamson — Cumuto 10. III. 1912, 1 ♂; Pitch-Lake 9. III. 1912, 3 ♂, 1 ♀.

Known to me as to occur in Trinidad only from the record of RIS in Libellulinen fasc. XVI, p. 1223, 1916. In the note he gives, the specimens have the basal spot in hindwing of variable size, from half cuq and 3—4 cells along the membranula to nearly cuq and in a convex line to anal margin. In the female as well as in the male these smaller spots are found.

Tramea abdominalis Rambur.

Trinidad: Coll. British Mus. Royal Botanic. Gard. ♂ (?) (J. H. Hart).

Mr. KIMMINS has listed this species in his report on the Trinidad dragonflies present in the British Museum. In so far as it is known to occur in most of the Antilles, it is not surprising to learn it occurs also in Trinidad, but it is noticeable that until now, neither WILLIAMSON nor any other collector has met it again.

Thauriphila argo Hagen.

Trinidad: Coll. Williamson — Cumuto 8. II. 1912, 3 ♂, 3 ♀.

Coll. Geijskes — Guaico 17, 20. VIII. 1929, 4 ♂.

Length abd. ♂ 28—32, hindw. 36—39, pt. fr.w. 3, hindw. 2.5.
" " ♀ 28 , " 35 , " " 3(?), " 2.5.

The specimens from Guaico were taken on the wing in a swamp near the railroad. When soaring to and fro and hunting after small insects they did not fly together, but each of them had a limited passage.

Ephidatia longipes cubensis Hagen.

Trinidad: Coll. Williamson — Pitch-Lake 9. III. 1912, 9 ♂.

Length abd. ♂ 23—25, hindw. 27—28, pt. 2.

Known to me as to occur in Trinidad only from the record of RUS in Libellulinen fasc. XVI, p. 1226, 1916.

Synopsis of the species known from Trinidad and dealt with in the first and in this part.

Calopterygidae.

Hetaerina caja Drury.
" *macropus* Selys.

Agrionidae.

Lestes tenuatus Ramb.
Mecistogaster ornatus Ramb.
Neoneura esthera Will.
Protoneura amatoria Calv.
" *calverti* Will.
Argia translata Hagen.
" *pulla* Hagen.
" *difficilis* Selys.
" *orichalcea* Hagen.
" *ierea* Geijskes.
Telagrion raineyi Will.
Leptagrion sp.
Aeolagrion dorsale Burm.
Enallagma coecum novae-hispaniae
Calv.
Acanthagrion kennedii Will.
" *ascendens* Calv.
Telebasis griffinii Martin.
" *sanguinalis* Calv.

Metaleptobasis byrsonima Will.
" *mauritica* Will.
" *manicaria* Will.
Ischnura ramburi Hagen.
Ceratura capreola Hagen.

Aeschnidae.

Gomphoides sp.
" sp.
Gynacantha nervosa Ramb.
" *tenuis* Martin.
" *membranalis* Karsch.
Triacanthagyna caribbea Will.
" *ditzleri* Will.
" *satyrus* Martin.
" *septima* Selys.
" *trifida* Ramb.
Coryphaeschna adnexa Hagen.
" *virens* Ramb.
Staurophlebia reticulata obscura
Walker.
Anax amazili Burm.

Libellulidae.

Orthemis ferruginea Fabr.

Orthemis cultriformis Calv.	Erythrodipl axochracea aequatori-
" concolor Ris.	alis Ris.
Zenithoptera americana L.	" unimaculata de Geer.
Perithemis domitia Drury.	" connata fusca Ramb.
" mooma Kirby.	" basalis Kirby.
" thais Kirby.	Erythemis credula Hagen.
" electra Ris.	" peruviana Ramb.
Nephepeltia phryne Perty.	" mithroides Brauer.
Oligoclada walkeri Geijskes.	" plebeia Burm.
Uracis fastigiata Burm.	" haematogastra Burm.
" imbuta Burm.	Lepthemis vesiculosa Fabr.
Anatya guttata Erichs.	Brachymesia batesi Kirby.
Micrathyria didyma didyma Selys.	Dythemis sterilis Hagen.
" " laevigata Calv.	" multipunctata Kirby.
" dythemoides Calv.	" cannacrioides Calv.
" spinifera Calv.	Brechmorhoga praecox grenadensis
" atra Martin.	Kirby.
" ocellata dentiens Calv.	" nubecula Ramb.
" catenata Calv.	Macrothemis pseudimitans Calv.
" mengeri Ris.	" imitans leucozona Ris.
" aequalis Hagen.	" hemichlora Burm.
" eximia Kirby.	" pumila Karsch.
Erythrodiplax umbrata L.	Pantala flavescens Fabr.
" castanea Burm.	Tramea cophysa Hagen.
" lenti Ris.	" binotata Ramb.
" ochracea ochracea	" abdominalis Ramb.
Burm.	Tauriphila argo Hagen.
	Ephidatia longipes cubensis Hagen.