This makes the third Coccid believed to be found on ly on Loranthaceæ; the others are Diaspis visci, Schr., on Viscum, in Europe, and Pulvinaria dendrophthoræ, Ckll., on Dendrophthora, in Jamaica.

Las Cruces, New Mexico, U.S.A., May 1894.

IV.—On a Small Collection of Odonata (Dragonflies) from Queensland, with Descriptions of Five new Species. By W. F. Kirby, F.L.S., F.E.S., Assistant in Zoological Department, British Museum (Natural History), South Kensington.

THE British Museum has lately received one or two collections of insects of various orders from Mr. Gilbert Turner, of Mackay, Queensland, among which were twenty species of dragonflies; and as five of these appear to be new and others interesting from the locality or otherwise, I thought it might be useful to publish a list of them.

#### Libellulidæ.

## LIBELLULINÆ.

## Pantala flavescens.

Libellula flavescens, Fabr. Ent. Syst. Suppl. p. 285 (1798).

An almost cosmopolitan species, found in all parts of the world except Europe.

## Tramea Rosenbergii.

Tramea Rosenbergii, Brauer, Verh. zool.-bot. Ges. Wien, xvi. p. 564 (1866).

The known localities are Ceram (Brauer), New Caledonia, and Moreton Bay (Brit. Mus.).

## Rhyothemis graphiptera.

Libellula graphiptera, Ramb. Ins. Névr. p. 45 (1842).

A common Australian species.

## Rhyothemis chloë, sp. n.

Long. corp. 30 millim.; exp. al. 68 millim.; long. pter. 2 millim.

Female. - Body pale greenish bronze; head above and

behind, as well as the rhinarium, rather darker; the face otherwise testaceous; legs inclining to rufous brown or blackish.

Wings yellowish hyaline, pterostigma dark reddish brown; tips of all the wings beyond light brown, fore wings with twelve or thirteen antenodal and eleven or twelve postnodal cross-nervures; sectors of the arculus just connected at their base; triangle rather wide, with one or two cross-nervures, followed by four or five rows of cells, decreasing and then increasing; two supra-triangular nervures; subtriangular space consisting of five to seven cells; the base and more or less of the supra-triangular space and upper part of the triangle clouded with brown; a large smoky-brown patch on the costa, extending from just beyond the nodus over four cells on the inner side of the nodus, and down to at least the upper sector of the arculus. Hind wings with two large cupreous-brown blotches at the base, separated by a narrow yellowish hyaline band; the upper one extends much beyond the triangle, and on the costa is more or less continuous as far as the blotch on the nodus, which nearly corresponds to that of the fore wings; the lower blotch is narrowly or not at all bordered outside with hyaline, and extends nearly to the lower sector of the triangle or further. In one specimen there is a dark spot on the subnodal sector, halfway between the dark blotch on the nodus and the clouded tip of the wings.

Hab. Mackay, Queensland.

Described from two female specimens.

Allied to R. amaryllis, Selys, but easily distinguished by the large dark blotch on the nodus of both wings.

# Rhyothemis princeps, sp. n.

Long. corp. 28-32 millim.; exp. al. 52-64 millim.; long.

pter.  $2\frac{1}{2}$  millim.

Head purplish above, face testaceous, rhinarium black, labrum yellow; thorax and abdomen black in the male, the former with a slight greenish-coppery reflexion on the sides; in the female reddish, the incisions and last three joints of the

abdomen black; legs black.

Wings rather long and narrow, cupreous brown, iridescent, darkest in the male, with a large vitreous spot on the costa beyond the nodus in all the wings, a corresponding one on the opposite margin, and a third at the tip of the wings; the apical spot varies much in size and is wanting in the only male; in some of the specimens there are one or two more scattered vitreous dots.

Fore wings with ten to eleven antenodal cross-nervures, the last not continuous, generally with pale spaces between; eight to ten postnodal cross-nervures; pterostigma dark testaceous or black; triangle long, rather narrow, with three cross-nervures, and followed by five or six cells, increasing; two supra-triangular nervures; cells of the subtriangular space numerous.

Hab. Mackay, Queensland.

Described from one male and four female specimens.

Probably allied to R. regiæ and chalcoptilon, Brauer. Very like R. cuprina, Kirb., from Sierra Leone, in general appearance.

Rhyothemis Turneri, sp. n.

Rhyothemis resplendens, var., Selys, Mitth. Mus. Dresd. iii. p. 301 (1878).

Long. corp. 12-14 millim.; exp. al. 44-48 millim.; long.

pter.  $1\frac{1}{2}$  millim.

Four specimens (three males and a female), almost precisely alike, the opaque colouring in the fore wings extending only just beyond the nodus on the fore wings, instead of two cells beyond, but ceasing five to seven cells before the pterostigma on the hind wings, instead of only two or three, as in typical resplendens; the opaque part of the wing is shot with brilliant blue in the males, more or less bordered with black; in the female it is cupreous, with the larger oval vitreous patch in the hind wings covering rather more than three cells on each side of the upper sector of the arculus; the smaller patch only covering part of one on each side of the nodal sector.

Hab. Mackay, Queensland.

De Selys noticed this form as a variety from a single male in the collection of Mr. M'Lachlan. I have not thought it necessary to give a detailed description, but think that the constancy of the characters in the four specimens now received entitle it to be considered distinct from typical resplendens, which the British Museum possesses from New Guinea. There is also a female from Batchian in the Museum agreeing with R. Turneri in the opaque part of the wing ceasing just beyond the nodus; but the opaque part ceases on the hind wings four cells before the pterostigma, and the hyaline spots are much larger and more conspicuous. This form was also regarded by De Selys as a variety of R. resplendens, but may prove to be distinct when more specimens are obtained.

## Neurothemis stigmatizans.

Libellula stigmatizans, Fabr. Syst. Ent. p. 421. n. 5 (1775).

A considerable number of specimens of both sexes; they Ann. & Mag. N. Hist. Ser. 6. Vol. xiv. 2

exhibit no great amount of variation, and I am inclined to think that many neuropterists (myself included) have been too hasty in putting together insects which appear to be constant in their own localities, as mere forms of *N. stigmatizans* and *fluctuans*, Fabr.

# Trithemis bipunctata.

Libellula (Diplax) bipunctata, Brauer, Reise d. Novara, Neur. p. 86 (1866).

Two specimens received from Mr. Turner. There is also a pruinose blue male, which probably belongs to this species, if it ever assumes that colour.

## Trithemis rubra.

Trithemis rubra, Kirby, Trans. Zool. Soc. Lond. xii. p. 328 (1889). Two specimens in Mr. Turner's collection.

## Crocothemis servilia.

Libellula servilia, Drury, Ill. Ex. Ent. i. pl. xlvii. fig. 6 (1773).

A single specimen of this common East-Indian and Australian species.

# Brachydiplax australis, sp. n.

Long. corp. 27 millim.; exp. al. 47 millim.; long. pter. 2 millim.

Male.—Head black behind, with two confluent yellow spots behind what Charpentier calls the "cuneus," the small space filling up the space between the eyes behind; upper part of the head metallic green, except at the sides; lower part yellow; mandibles (except at base), lower edge of the rhinarium (rising into a spot in the middle), and suture of the labium black. Thorax black and yellow, as is also the base of the abdomen, which is yellow beneath and blue above beyond the base of the third segment; thorax mostly blackish above, beneath the blue dusting (in young specimens it would probably be æneous); pleura yellow, with four black, separate, slightly æneous stripes; legs black; pectus mostly black and shining, slightly æneous, and intersected by yellowish sutures; anal appendages as long as the last two segments, slightly hairy, not dentated.

Wings clear hyaline, with black nervures; fore wings with six antenodal and five postnodal cross-nervures, the first two postnodals not continuous; pterostigma dull yellow, between black nervures, triangle not traversed, followed by two rows of cells, increasing; subtriangular space consisting of one cell; hind wings with the base of the triangle not quite coin-

ciding with the arculus.

Described from a single male specimen. If this was completely mature the blue pulverulescence would probably obliterate all trace of yellow markings; but the female and newly-emerged male are both probably yellow and æneous black, without any trace of blue.

This is the first species of the genus described from Australia. It is probably allied to B. denticauda, Brauer, &c.

# Zyxomma petiolatum.

Zyxomma petiolatum, Ramb. Ins. Névr. p. 30 (1842).

A single specimen, perhaps a little darker than Indian specimens, but otherwise hardly differing from them.

### Orthetrum sabina.

Libellula sabina, Drury, Ill. Ex. Ent. i. pl. xlviii. fig. 4 (1773).

An abundant species from India to Australia.

# Orthetrum nigrifrons, sp. n.

Long. corp. 46 millim.; exp. al. 70 millim.; long. pter. 5 millim.

Male.—Head black, sutures of the rhinarium and labrum yellowish, face smooth and shining, frontal tubercle bifid, thorax black or blue-black, abdomen blue, legs black. Wings clear hyaline, very narrowly stained with saffron at the base of the hind wings; pterostigma long, yellow, between black nervures, not remarkably thickened, nervures mostly blackish, except the costal nervure between the nodus and pterostigma, which is testaceous; it is also testaceous in front from the base to the nodus: fore wings with eleven antenodal crossnervures, the last not continuous, and with nine or ten postnodal nervures, the first two not continuous; triangle moderately long and broad, followed by three rows of cells increasing; subtriangular space consisting of three cells; no supra-triangular nervules, nodal and subnodal sectors not much waved; hind wings with the triangle not traversed. Anal appendages of moderate length; the lower one broad, truncated, nearly as long as the others.

Described from two male specimens. Much resembles O. triangularis, De Selys, but smaller, and the want of

2%

supra-triangular nervures on the fore wings and the untraversed triangle of the hind wings will at once distinguish it.

## Orthetrum villosovittatum.

Libellula villosovittata, Brauer, Verh. zool.-bot. Ges. Wien, xviii. p. 167 (1868).

The collection contained four specimens of a species which I regard as O. villosovittatum, although it is less yellow at the base than Brauer's description appears to indicate. There is a supra-triangular nervure, and the triangles of all the wings are traversed, points on which the description says nothing.

### Orthetrum bramineum.

Libellula braminea, Fabr. Ent. Syst. Suppl. p. 284 (1798).

This species is very common throughout Australia, and the description of Fabricius would apply very fairly to the female or immature male. I have therefore added a more full description of the adult male. If I have correctly identified Fabricius' insect, it is a true Orthetrum, and not a Nesoxenia.

Long. corp. 43 millim.; exp. al. 68 millim.; long. pter.

5 millim.

Male.—Head yellow, frontal tubercle concave; thorax lighter or darker olive, with five dark reddish or black stripes above, one on the central carina and two on each side, of which the lower one is often hidden by the pruinosity which covers the sides and under surface of the thorax in adult examples, and partly extends to the legs, which are black, striped below with testaceous; abdomen pruinose blue; anal appendages as long as the ninth segment, lower appendage two thirds as long as the upper ones. Wings with twelve to fifteen antenodal cross-nervures, the last continuous, and nine to ten postnodal cross-nervures; pterostigma moderately long and broad, yellow, between black nervures, the uppermost thick, the apical half of the wings clouded with smoky yellow; nodal and subnodal nervures considerably waved; triangle of moderate size, with one cross-nervure and a supra-triangular nervure, followed by three rows of cells, increasing; supratriangular space consisting of three cells; triangle of hind wings not traversed.

The female and immature male are yellow, with five reddishbrown lines on the thorax, and the sutures of the abdomen black, with a broad brown band running along each side; the legs are also streaked with black, and the smoky yellow cloud on the outer half of the wings is either much reduced or, in a

few cases, entirely obsolete.

#### CORDULIINÆ.

Hemicordulia australia.

Cordulia australia, Ramb. Ins. Névr. p. 146 (1842).

A single female specimen, much darker than those previously in the collection of the British Museum.

Æschnidæ.

GOMPHINÆ.

GOMPHINA.

Ictinus australis.

Ictinus australis, Selys, Bull. Acad. Belg. (2) xxxv. p. 769 (1873). A single specimen.

ÆSCHNINÆ.

Æschna brevistyla.

Æschna brevistyla, Ramb. Ins. Névr. p. 205 (1842).

A common species, and the only Australian representative of typical Æschna.

## Agrionidæ.

CŒNAGRIONINÆ.

Micronympha aurora.

Agrion (Ischnura) aurora, Brauer, Verh. zool.-bot. Ges. Wien, xv. p. 510 (1865).

A single discoloured specimen, apparently belonging to this species.

V.—Descriptions of some new Species of Agaristidæ. By Herbert Druce, F.L.S.

### AGARISTA.

Agarista Goldiei, sp. n.

Male.—Primaries black, with a large elongated white band beyond the middle, which does not reach either margin; the fringe black: secondaries white, broadly bordered with black, the base black; the fringe white at the apex. Head, palpi, antennæ, thorax, and abdomen black, the abdomen banded



Kirby, W. F. 1894. "On a small collection of Odonata (dragonflies) from Queensland, with descriptions of five new species." *The Annals and magazine of natural history; zoology, botany, and geology* 14, 15–21.

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