IDF

Faunistic Studies in Southeast Asian and Pacific Island Odonata

A Journal of the International Dragonfly Fund

1-11

Rory A. Dow & Belden Giman

Odonata from the Glenealy Belaga Oil Palm Plantation Area, Belaga, Kapit Division, Sarawak, Borneo

published 20.07.2025

No. 48

ISSN 2195-4534

The International Dragonfly Fund (IDF) is a scientific society founded in 1996 for the improvement of odonatological knowledge and the protection of species.
Internet: http://www.dragonflyfund.org/

This series intends to contribute to the knowledge of the regional Odonata fauna of the Southeastern Asian and Pacific regions to facilitate cost-efficient and rapid dissemination of faunistic data.

Southeast Asia or Southeastern Asia is a subregion of Asia, consisting of the countries that are geographically south of China, east of India, west of New Guinea and north of Australia. Southeast Asia consists of two geographic regions: Mainland Southeast Asia (Indochina) and Maritime Southeast Asia.

Pacific Islands comprise of Micronesian, Melanesian and Polynesian Islands.

Editorial Work:	Martin Schorr, Milen Marinov and Rory Dow
Layout:	Martin Schorr
IDF-home page:	Holger Hunger
Printing:	Colour Connection GmbH, Frankfurt
Impressum:	Publisher: International Dragonfly Fund e.V., Schulstr. 7B, 54314 Zerf, Germany. E-mail: oestlap@online.de
Responsible editor:	Martin Schorr
Cover picture:	The holotype of *Oligoaeschna platyura* (from the Naturalis Biodiversity Center Collection).
Photographer:	Original photograph taken by K.D.B. Dijkstra

Published 20.07.2025

Odonata from the Glenealy Belaga Oil Palm Plantation Area, Belaga, Kapit Division, Sarawak, Borneo

Rory A. Dow[1,2] & Belden Giman[3]

[1]Institute of Biodiversity and Environmental Conservation, Universiti Malaysia Sarawak, 94300 Kota Samarahan, Sarawak, Malaysia

[2]Naturalis Biodiversity Centre, P.O. Box 9517, 2300 RA Leiden, The Netherlands

Email: rory.dow230@yahoo.co.uk

[3]Glenealy Plantations Sdn. Bhd., Lot 367, Block 38, Kemena Industrial Estate, P.O. Box 2517, 97000, Bintulu, Sarawak, Malaysia

Abstract

Belaga District in Sarawak's Kapit Division has been poorly studied for Odonata, with almost all work done in the district at altitudes of 700-1400m a.s.l. in mountainous terrain. Here we describe the results of sampling of Odonata carried out at the Glenealy Belaga Oil Palm Plantations, located just below the Dulit Range in Belaga District, conducted in May 2024. The sampled sites are in a relatively (for Belaga District) low lying area (sampled sites in the range ca. 160-230m a.s.l.). The plantation straddles the Belaga River and includes areas of High Conservation Value Forest and a riparian buffer around the Belaga River. Sampled locations in the three estates forming the plantation are listed and indicated on a map. All 53 species collected during the survey are listed, with additional comments where appropriate. Five of the species were recorded from Kapit Division for the first time and a further **15** (for a total of 20) were recorded from Belaga District for the first time. The most significant records are those of *Coeliccia kenyah, Oligoaeschna platyura, Macromia corycia* and the true *Pornothemis serrata*, these are discussed in the Discussion.

Key words: Odonata, Borneo, Sarawak, Kapit, Belaga, High Conservation Value Forest, Oil Palm, riparian buffer, *Oligoaeschna, mutata, platyura*.

Introduction

Belaga District in Sarawak's Kapit Division has been poorly studied for Odonata, with published records only from just inside the district on Mount Dulit (the main, high ridge of which runs along the Miri-Kapit Division boundary) in Kimmins (1936) and Dow et al. (2013), some locations in the upper part of the Balui River basin (Dow & Ngiam 2014), the Kastima logging area (Dow & Stokvis 2018) and the "Stone Park" area (location K12 in Dow et al. (2015), this area is now within Batu Laga National Park)) where only one day of fieldwork work has been conducted. The majority of this work has been at altitudes of 700-1400m a.s.l. and almost all has been in mountainous terrain. Dow (2021) lists 97 species in total from Belaga District.

Here we describe the results of sampling of Odonata carried out at the Glenealy Belaga Oil Palm Plantations, located just south of the Dulit Range in Belaga District (Figure 1). In contrast to most sampling of Odonata in Belaga District until now, this area, although hilly, is relatively low lying (sampled sites in the range ca. 160-230m a.s.l.) The plantation straddles

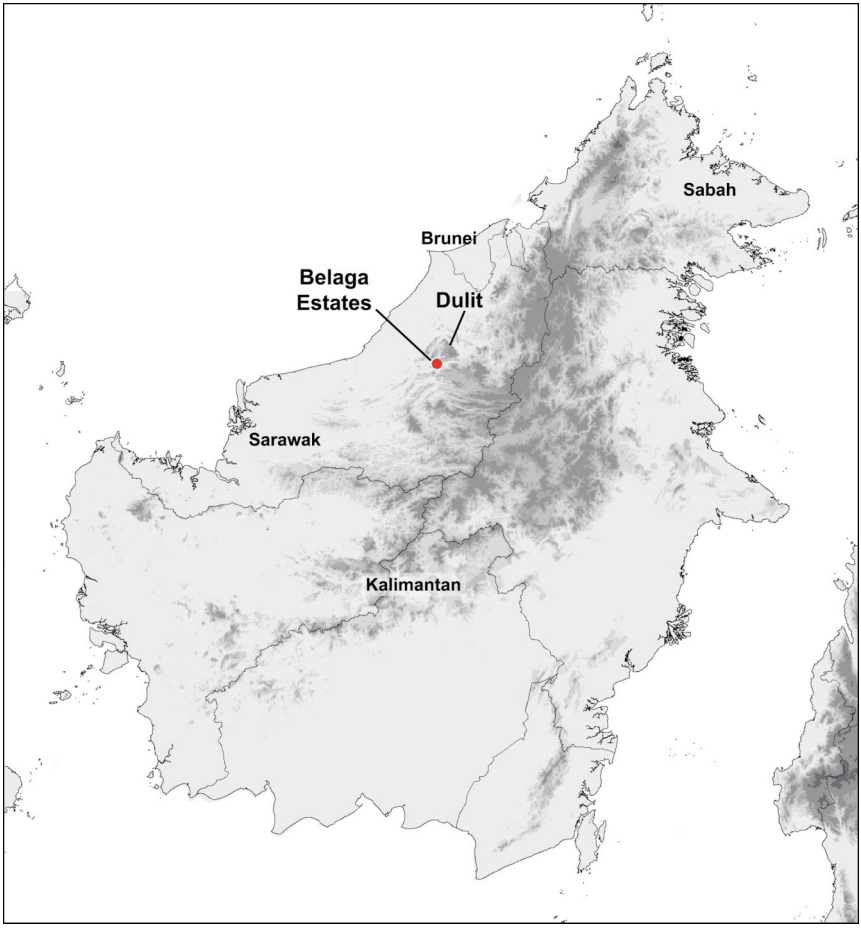

Figure 1. Map showing the position of the Belaga Estates in Borneo. Mount Dulit is also indicated.

the Belaga River and includes areas of High Conservation Value Forest (HCVF) and a riparian buffer around the Belaga River. The Sekiwa Forest Management Unit (FMU) is just to the north of the estates and shares part of its boundary with them. A forest recovery area is situated just south of the estates. Sampling was mainly conducted in the HCVF and riparian buffers, with some sampling within Oil Palm or in open areas around the three estates (the individual estates are referred to as Belaga 1, 2 and 3 hereafter). The survey was conducted in May 2024.

Locations

The following codes for groups of samplings sites are used below. The list is organised by estate. Coordinates are given to four decimal places and approximate altitudes are included.

Figure 2 shows an overview of the locations sampled with the three estates and natural forest indicated.

Belaga 1 Estate

1. Muddy, low gradient stream in HCVF (accessed at 3.0339N, 114.0808E, ca. 183m a.s.l.):
   a. Narrow, open, drain-like section beside road.
   b. Inside forest (but with the canopy very opened up around the first part of the stream).
   c. Tiny high gradient tributary.
   d. Forest pool near stream.
2. Valley below church:
   a. Pool in an otherwise dry streambed or in forest nearby.
   b. High gradient part of stream (highest point reached: 3.0246N, 114.0781E, ca. 230m a.s.l.)
   c. Open, low gradient part of the stream.
3. Open ponds:
   a. A large fishpond (3.0225N, 114.0781E, ca. 180m a.s.l.)
   b. A smaller pond near 3a.

Belaga 2 Estate

4. Replanting area at edge of Sungai Belaga Riparian Buffer/HCVF (3.0388N, 114.0568E, ca. 186m a.s.l.)

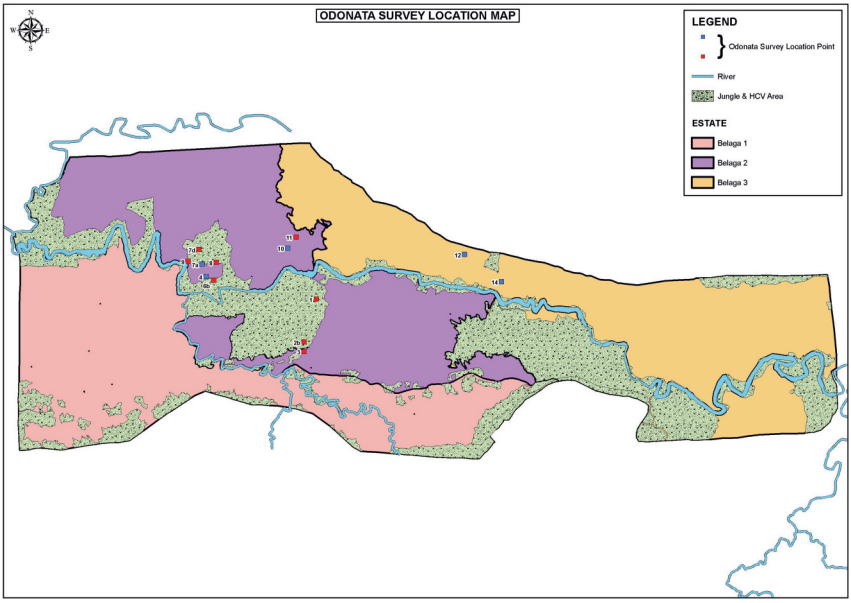

Figure 2. Overview of locations sampled in the Glenealy Belaga Oil Palm Plantation Area in 2024.

5. Very tiny stream accessed from 4, in Sungai Belaga Riparian Buffer/HCVF.
6. Stream further along road from 4, in Sungai Belaga Riparian Buffer/HCVF:
    a. Upper part.
    b. Swampy pool in 6a (3.038N, 114.0584E, ca. 190m a.s.l.)
    c. Flooded (by high water levels in Sungai Belaga) lower part.
7. Long stream in HCVF:
    a. Open flooded part at edge of Oil Palm (3.0415N, 114.0559E, ca. 195m a.s.l.)
    b. Same stream in forest, mostly with deep mud substrate.
    c. Upper, less muddy part.
    d. At head of one high gradient branch of upper part (3.0447N, 114.0552E, ca. 210m a.s.l.)
    e. Tiny tributary.
8. A tiny stream in HCVF not far from 7 (3.0419N, 114.059E, ca. 210m a.s.l.)
9. Tributary of Sungai Belaga, flooded by the river (3.0421N, 114.0529E, ca. 185m a.s.l.)
10. Outside vehicle workshop (3.045N, 114.0746E, ca. 167m a.s.l.)
11. Ponds (3.0474N, 114.0764E, ca. 178m a.s.l.)

Belaga 3 Estate

12. Stream on slope of foothills of Dulit Range, just below the Sekiwa FMU, in Oil Palm (3.0436N, 114.1131E, ca. 205m a.s.l. at point entered).
13. In Oil Palm near 12.
14. Stream (3.0377N, 114.1211E, ca. 172m a.s.l.) near Belaga 3 Estate buildings:
    a. Above road, open or at edge of rubber trees.
    b. Below road, running through Oil Palm.
15. Marshy areas near to 14b.

Species recorded

An * after the species name indicates a first record from Belaga District, an ** indicates a first record for Kapit Division made during the survey in May 2024. Specimens were collected by the first author, Frankie Eban, Louis Robert and Joko.

Zygoptera

Platystictidae

1. *Drepanosticta rufostigma* (Selys, 1886)

Usually the most common member of the Platystictidae in the lowlands of Sarawak, but not common in the area reported on here.

2b – ♂♂, 15.v.2024.

2. *Drepanosticta versicolor* (Laidlaw, 1913)

5 – ♂♂, ♀, 13.v.2024. **7d** – ♂, 14.v.2024. **7e** – ♂♂, 14.v.2024. **8** – ♂♂, 15.v.2024.

3. *Telosticta longigaster* Dow & Orr, 2012

2b – ♂, 15.v.2024. **7b** – ♂, 14.v.2024.

Euphaeidae

4. *Euphaea impar* Selys, 1859

1b – ♂, 13.v.2024. **2b** – ♂, 15.v.2024. **7c** – ♂, 14.v.2024.

Philosinidae

5. *Rhinagrion borneense* (Selys, 1886)

7b – ♂, 14.v.2024.

Argiolestidae

6. *Podolestes orientalis* Selys, 1862 *

6b – ♂, 13.v.2024.

Calopterygidae

7. *Vestalis amaryllis* Lieftinck, 1965

1b – ♂, 13.v.2024. **7c** – ♂♂, 14.v.2024.

Chlorocyphidae

8. *Heliocypha biseriata* (Selys, 1859)

1b – ♂♂, 13.v.2024. **2b** – ♂, ♀, 15.v.2024. **7b** – ♂, 14.v.2024. **14b** – ♂, 16.v.2024.

Platycnemididae

9. *Coeliccia kenyah* Dow, 2010

A species with a relatively restricted range from Brunei and Miri Division to Kapit Division; Belaga and Mount Dulit are probably the core of the range of the species.

7d – ♂, ♀ (teneral), 14.v.2024.

10. *Coeliccia nigrohamata* Laidlaw, 1918

1c – ♂♂, 13.v.2024. **2b** – ♂, 15.v.2024. **5** – ♂♂, 13.v.2024. **6a** – ♂♂, 13.v.2024. **7c** – ♂♂, ♀, 14.v.2024. **7e** – ♂, 14.v.2024. **8** – ♂♂, ♀, 15.v.2024.

11. *Copera vittata* (Selys, 1863)

1b – ♂♂, 13.v.2024. **5** – ♀, 13.v.2024. **6a** – 2 ♂♂, 13.v.2024. **6b** – ♂, 13.v.2024. **6c** – ♂, 13.v.2024. **7b** – ♂♂, ♀, 14.v.2024. **8** – ♂♂, 15.v.2024.

12. *Prodasineura hyperythra* (Selys, 1886)

7a – ♂♂, 14.v.2024. **7b** – ♂, 14.v.2024.

13. *Prodasineura verticalis* (Selys, 1860)

14b – ♂, 16.v.2024.

Coenagrionidae

14. *Aciagrion borneense* Ris, 1911 *

11 – ♂, 15.v.2024.

15. *Agriocnemis femina* (Brauer, 1868)

1a – ♂♂, ♀♀, ♂+♀, 13.v.2024. **3b** – ♂♂, 13.v.2024. **11** – ♀, 15.v.2024. **14a** – ♂, 16.v.2024.

16. *Archibasis tenella* Lieftinck, 1949 **

7c – ♂, 14.v.2024.

17. *Archibasis viola* Lieftinck, 1949 **

6c – ♂♂, 13.v.2024.

18. *Argiocnemis* sp. *

A common (in Sarawak) species in lowland forest, but possibly unnamed, see Note 40 in (Dow 2021).

6c – ♂, 13.v.2024. **9** – ♂♂, ♀, ♂+♀, 15.v.2024.

19. *Ceriagrion cerinorubellum* (Brauer, 1865)

1a – ♂, 13.v.2024. **14b** – ♀, 16.v.2024.

20. *Pseudagrion microcephalum* (Rambur, 1842)

3a – ♂♂, 13.v.2024. **11** – ♂, 15.v.2024. **14a** – ♂, ♀, 16.v.2024.

21. *Pseudagrion perfuscatum* Lieftinck, 1937

1a – ♂♂, 2 (♂+♀), 13.v.2024. **7a** – ♂♂, 14.v.2024. **14b** – ♂♂, 16.v.2024.

22. *Stenagrion dubium* (Laidlaw, 1912)

1c – ♂, 13.v.2024. **2b** – ♂♂, 15.v.2024.

23. *Xiphiagrion cyanomelas* Selys, 1876

The common, lowland form (form A as defined by Dow et al. 2021) with very short antehumeral stripes.

11 – ♂, 11.v.2024.

Anisoptera

Aeshnidae

24. *Anax guttatus* (Burmeister, 1831)

3a – ♂♂, 16.v.2024.

25. *Oligoaeschna platyura* Lieftinck, 1940 **

This species had been known only from a few records from East Kalimantan made in the 1930s, an equally old record from the east of Sabah, two records from Brunei made between 1990 and 2000 (Orr 2001) and a single record from Limbang Division made in 2022 (Dow & Singa 2022). A single male was found in forest, although it agrees with *O. platyura* in some respects it differs significantly in others, coming closer to the even more poorly known *O. mutata* Lieftinck, 1940 (known only from one location in East Kalimantan). The entire genus requires revision and a conservative course is taken here - the specimen from Belaga is treated as *O. platyura* for the time being. The holotype of *O. platyura* is shown on the cover.

2a – ♂, 15.v.2024.

Gomphidae

26. *Ictinogomphus decoratus melaenops* (Selys, 1858) *

1a – ♂, 13.v.2024. **3a** – ♂, 13.v.2024; ♂, 16.v.2024.

27. *Leptogomphus* sp. cf *coomansi* Laidlaw, 1936 *

A problematic taxon, probably a distinct species but very similar to *L. coomansi*. The single male collected was perched on horizontally on a short stick protruding from wet leaf litter at the head of a stream.

7d – ♂, 14.v.2024.

Macromiidae

28. *Epophthalmia vittigera* (Rambur, 1842) *

3a – ♂, 13.v.2024; ♂, 16.v.2024.

29. *Macromia corycia* Laidlaw, 1922

A single male was found flying over a narrow, steep sided stream in Oil Palm, the stream runs out from old growth forest in the Sekiwa FMU.

12 – ♂, 16.v.2024.

Libellulidae

30. *Agrionoptera insignis* (Rambur, 1842) *

2a – ♂, 15.v.2024.

31. *Brachydiplax chalybea* Brauer, 1868

1a – ♂, 13.v.2024. **3b** – ♂, 13.v.2024. 11 – ♂, 15.v.2024. **15** – ♀, 16.v.2024.

32. *Cratilla metallica* (Brauer, 1878)

1d – ♂, 13.v.2024. 2a – ♂, ♀, 15.v.2024.

33. *Diplacodes trivialis* (Rambur, 1842) *

10 – ♀, 15.v.2024.

34. *Lyriothemis biappendiculata* (Selys, 1878)

5 – ♂♂, 13.v.2024. **7b** – ♂♂, 14.v.2024. **7c** – ♂, 14.v.2024. **8** – ♂, 15.v.2024.

35. *Nannophya pygmaea* Rambur, 1842 *

14a – ♂, 16.v.2024.

36. *Neurothemis fluctuans* (Fabricius, 1793)

1a – ♂♂, 13.v.2024. **11** – ♂♂, 15.v.2024. **14b** – ♂, 16.v.2024.

37. *Neurothemis ramburii (*Brauer, 1866) *

11 – ♂, 15.v.2024.

38. *Neurothemis terminata* Ris, 1911 *

1a – ♂, 13.v.2024.

39. *Orchithemis pulcherrima* Brauer, 1878

6a – ♂, ♀, 13.v.2024. **14a** – ♂, 16.v.2024. **15** – ♂, 16.v.2024.

40. *Orthetrum chrysis* (Selys, 1891)

6c – ♂, 13.v.2024. **13** – ♂, 16.v.2024. **14b** – ♂, 16.v.2024.

41. *Orthetrum glaucum* (Brauer, 1865)

2c – ♂, 15.v.2024.

42. *Orthetrum sabina* (Drury, 1773) *

4 – ♀, 13.v.2024. **11** – ♂, ♀, 15.v.2024.

43. *Orthetrum schneideri* Förster, 1903

7b – ♂, 14.v.2024.

44. *Orthetrum testaceum* (Burmeister, 1839)

4 – ♂♂, ♀, 13.v.2024.

45. *Pornothemis serrata* Krüger, 1902 **

This is the true *P. serrata* (two other very similar, as-yet-unnamed species also occur in Sarawak). *Pornothemis serrata* appears to be very localised in occurrence, favouring swampy

lowland forest around and close to rivers.

6b – ♂, 13.v.2024. **6c** – ♂♂, 13.v.2024.

46. *Rhythemis aterrima* Selys, 1891 **

A local and uncommon species in Sarawak, most often found at low pH waters and sometimes at open pools within freshwater swamp forest. The Belaga population is atypical in its habitat (found at a large pond) but it is likely that additional populations exist in the alluvial forest around the Belaga River. Fig. 3 shows one of the individuals collected (posed).

3a – ♂♂, 13.v.2024; ♂, 16.v.2024.

Figure 3. *Rhythemis aterrima* male posed after collection at the pond at location 3a. Photo by Frankie Eban and Louis Robert.

Figure 4. *Trithemis festiva* male at location 14a. Photo by Frankie Eban and Louis Robert.

47. *Rhyothemis phyllis* (Sulzer, 1776) *

1a – ♂, 13.v.2024. **3a** – ♂♂, 13.v.2024. **11** – ♂, 15.v.2024.

48. *Rhyothemis triangularis* Kirby, 1889 *

1a – ♂♂, 13.v.2024.

49. *Tetrathemis hyalina* Kirby, 1889 *

1b – ♂♂, 13.v.2024. **6b** – ♂, 13.v.2024. **6c** – ♂, 13.v.2024. **9** – ♂♂, 15.v.2024.

50. *Trithemis aurora* (Burmeister, 1839)

4 – ♀, 13.v.2024. **11** – ♂♂, 15.v.2024. **14a** – ♂♂, ♀, 16.v.2024.

51. *Trithemis festiva* (Rambur, 1842)

Figure 4 shows a male at the location in Belaga 3 Estate where this species was found.

14a – ♂♂, ♀, 16.v.2024.

52. *Tyriobapta torrida* Kirby, 1889

1b – ♂, 13.v.2024. **7b** – ♂, 14.v.2024. **7c** – ♂, 14.v.2024. **9** – ♂, ♀, 15.v.2024.

53. *Urothemis signata insignata* (Selys, 1872)

3a – ♂, 13.v.2024.

Discussion

Fifty-three species of Odonata from 12 families were recorded in the survey reported on here. Five of the species were recorded from Kapit Division for the first time (*Archibasis tenella, Archibasis viola, Oligoaeschna platyura, Pornothemis serrata* and *Rhyothemis aterrima*) and a further 15 (for a total of 20) were recorded from Belaga District for the first time. As noted in the Introduction, Belaga District has been poorly studied for Odonata to-date, so the large number of new additions is to be expected.

A number of the records made during the survey in Belaga District are particularly interesting and/or significant. We discuss some such records in the next few paragraphs.

Coeliccia kenyah was an expected species for the area (see the remarks under the species in the list above above) but it appears to occur in small fragmented populations, is barely represented in Sarawak's currently gazetted totally protected areas and is mostly a lowland species (in contrast to several of the other members of the *Coeliccia borneensis* (Selys, 1886)–group which are more common in upland areas); these factors mean that *C. kenyah* is more vulnerable to habitat loss than the other members of the same species group, for which reason it is currently considered Near Threatened (NT) on the IUCN Red List.

Oligoaeschna platyura is a poorly known species and while its exact habitat requirements are not known it certainly appears to be a species of lowland forest and to be both scarce and very local in occurrence; possibly its preferred breeding habitat is alluvial forest. *Oligoaeschna platyura* is currently considered Vulnerable on the IUCN Red List, although the record here and that from Limbang Division, made after the current Red List assessment was published, extend the known range of the species somewhat, there is no strong case to change the threat category that the species is placed in.

Macromia corycia now appears to be a more common species than it did at one time, with new records made fairly frequently and the current NT threat assessment might need revision in the near future (also see the comment on this taxon in note 74 in Dow et al. 2024). The record from the Belaga 3 Estate is interesting because the single male was collected while flying over a small stream with Oil Palm to the bank, as far as we are aware this is the first record of this species outside of natural forest. Given the proximity of old growth forest upstream in the Sekiwa FMU it is however likely that the *Macromia* was merely feeding over the section of stream within Oil Palm, with its breeding habitat upstream in the old growth forest. Larval sampling is desirable at the location where the *Macromia* was found to see if it is actually breeding outside of the old growth forest.

Pornothemis serrata is currently considered to be Data Deficient on the IUCN Red List but this is mostly due to taxonomic issues that are now resolved (although the results

have yet to be published). It appears that the true *P. serrata* breeds in swampy lowland forest (often around or near to rivers) and is a very locally occurring species, its habitat is already highly fragmented and is certainly decreasing rapidly in extent across its range and it is not particularly well represented in totally protected areas, so that when it's threat status is revisited it is unlikely to be a Least Concern species.

The presence of species such as *Coeliccia kenyah, Oligoaeschna platyura* and *Pornothemis serrata* in the riparian buffers and/or HCVF in the Belaga Estates demonstrates the value of such conservation efforts. Riparian buffers and areas of old growth forest protected as HCVF within plantations will play an increasingly important role in the conservation of lowland forest Odonata in the coming decades.

Acknowledgements

The collecting reported on here was done under research permits issued by the Sarawak Forestry Corporation (SFC). Samling and Glenealy Plantations arranged and facilitated the survey. Frankie Eban and Louis Robert, and an estate worker known only as Joko, did an admirable job as field assistants. Figure 1 was made using DIVA GIS, Figure 2 was made by the GIS Section of Glenealy Plantations.

References

Dow, R.A., 2021. An annotated checklist of the Odonata (Insecta) known from Sarawak with records to district level. Sarawak Museum Journal LXXX1, No. 101 (New Series); Special Issue 10: 313–422.

Dow, R.A., R. Ahmad, S.G. Butler, C.Y. Choong, J., Grinang, Y.F. Ng, R.W.J. Ngiam, G.T. Reels, P.O.M. Steinhoff & J. Unggang, 2021. Previously unpublished Odonata records from Sarawak, Borneo, part VI: Miri Division including checklists for Niah, Lambir Hills, Loagan Bunut and Pulong Tau National Parks. Faunistic Studies in South-East Asian and Pacific Island Odonata 36: 1–94.

Dow, R.A., C.Y. Choong, J. Grinang, P. Lupiyaningdyah, R.W.J. Ngiam & V.J. Kalkman, 2024. Checklist of the Odonata (Insecta) of Sundaland and Wallacea (Malaysia, Singapore, Brunei, Indonesia and Timor Leste). Zootaxa 5460(1): 1–122. https://doi.org/10.11646/zootaxa.5460.1.1

Dow, R.A. & R.W.J. Ngiam, 2014. Odonata from logged and unlogged forest in the Ulu Balui and Ulu Baleh, Kapit Division, Sarawak, in June and September 2013. International Dragonfly Fund Report 73: 1–48.

Dow, R.A., G.T. Reels & S.G. Butler, 2013. Odonata of the Dulit Range in Sarawak, Malaysian Borneo. Notulae odonatologicae 8(1): 8–14.

Dow, R.A., G.T. Reels & R.W.J. Ngiam, 2015. Previously unpublished Odonata records from Sarawak, Borneo, Part III. Sri Aman, Sibu and Kapit Divisions. Faunistic Studies in South–East Asian and Pacific Island Odonata 9: 1–34.

Dow, R.A. & H. Singa, 2022. Previously unpublished Odonata records from Sarawak, Borneo, part IX: More Odonata from Limbang Division, including the first records from Gunung Buda National Park. International Dragonfly Fund Report 173: 1–32.

Dow, R.A. & F.R. Stokvis, 2018. Odonata from Gunung Melatai and two other locations in Kapit Division, Sarawak, with a review of the genus *Heliogomphus* in Borneo, Peninsular Malaysia and Singapore. International Dragonfly Fund Report 122: 1–25.

Kimmins, D.E., 1936. The Odonata of the Oxford University Sarawak expedition. Journal of the Federated Malay States Museum 18: 65–108.

Orr, A.G., 2001. An annotated checklist of the Odonata of Brunei with ecological notes and descriptions of hitherto unknown males and larvae. International Journal of Odonatology 4(2): 167–220.

INSTRUCTION TO AUTHORS

Faunistic studies of South-East Asian and Pacific islands Odonata is a journal of the International Dragonfly Fund (IDF). It is referred to as the journal in the remainder of these instructions. Transfer of copyright to IDF is considered to have taken place implicitly once a paper has been published in the journal.

The journal publishes original papers only. By original is meant papers that: a) have not been published elsewhere before, and b) the scientific results of the paper have not been published in their entirety under a different title and/or with different wording elsewhere. The republishing of any part of a paper published in the journal must be negotiated with the Editorial Board and can only proceed after mutual agreement.

Papers reporting studies financially supported by the IDF will be reviewed with priority, however, authors working with Odonata from the focal area (as defined on the back page of the front cover) are encouraged to submit their manuscripts even if they have not received any funds from IDF.

Manuscripts submitted to the journal should preferably be in English; alternatively German or French will also be accepted. Every manuscript should be checked by a native speaker of the language in which it is written; if it is not possible for the authors to arrange this, they must inform the Editorial Board on submission of the paper. Authors are encouraged, if possible, to include a version of the abstract in the primary language of the country in which their study was made.

Authors can choose the best way for them to submit their manuscripts between these options: a) via e-mail to the publisher, or b) on a CD, DVD or any other IBM-compatible device. Manuscripts should be prepared in Microsoft Word for Windows.
While preparing the manuscript authors should consider that, although the journal gives some freedom in the style and arrangements of the sections, the editors would like to see the following clearly defined sections: Title (with authors names, physical and e-mail addresses), Abstract, Introduction, Material & Methods, Results, Discussion, Acknowledgments and References. This is a widely used scheme by scientists that everyone should be familiar with. No further instructions are given here, but every author should check the style of the journal.

Authors are advised to avoid any formatting of the text. The manuscripts will be stylised according to the font type and size adopted by the journal. However, check for: a) all species names must be given in italic, b) the authority and year of publication are required on the first appearance of a species name in the text, but not thereafter, and c) citations and reference list must be arranged following the format below.

Reference cited in the text should read as follows: Tillyard (1924), (Tillyard 1924), Swezey & Williams (1942).

The reference list should be prepared according to the following standard:
Swezey, O. & F. Williams, 1942. Dragonflies of Guam. Bernice P. Bishop Museum Bulletin 172: 3-6.
Tillyard, R., 1924. The dragonflies (Order Odonata) of Fiji, with special reference to a collection made by Mr. H.W. Simmonds, F.E.S., on the Island of Viti Levu. Transactions of the Entomological Society London 1923 III-IV: 305-346.

Citations of internet sources should include the date of access.

The manuscript should end with a list of captions to the figures and tables. The latter should be submitted separately from the text preferably as graphics made using one of the Microsoft Office products or as a high resolution picture saved as a .jpg .tif or .ps file. Pictures should be at least 11 cm wide and with a minimum 300 dpi resolution, better 360 dpi. Line drawings and graphics could have 1200 dpi for better details. If you compose many pictures to one figure, please submit the original files as well. Please leave some space in the upper left corner of each picture, to insert a letter (a, b, c...) later. Hand-made drawings should be scanned and submitted electronically. Printed figures sent by the post could be damaged, in which case authors will be asked to resubmit them.

Manuscripts not arranged according to these instructions may also be accepted, but in that case their publication will be delayed until the journal’s standards are achieved.