

This article was downloaded by: [UQ Library]

On: 23 November 2014, At: 19:47

Publisher: Taylor & Francis

Informa Ltd Registered in England and Wales Registered Number:  
1072954 Registered office: Mortimer House, 37-41 Mortimer Street,  
London W1T 3JH, UK



## Annals and Magazine of Natural History: Series 8

Publication details, including instructions  
for authors and subscription information:

<http://www.tandfonline.com/loi/tnah14>

### III.—The collections of William John Burchell, D. C. L., in the Hope Department, Oxford University Museum

J.C. Moulton <sup>a</sup>

<sup>a</sup> Magdalen College , Oxford

Published online: 08 Sep 2009.

To cite this article: J.C. Moulton (1909) III.—The collections of William John Burchell, D. C. L., in the Hope Department, Oxford University Museum , *Annals and Magazine of Natural History: Series 8*, 3:13, 7-20, DOI: [10.1080/00222930908692539](http://dx.doi.org/10.1080/00222930908692539)

To link to this article: <http://dx.doi.org/10.1080/00222930908692539>

PLEASE SCROLL DOWN FOR ARTICLE

Taylor & Francis makes every effort to ensure the accuracy of all the information (the "Content") contained in the publications on our platform. However, Taylor & Francis, our agents, and our licensors make no representations or warranties whatsoever as to the accuracy, completeness, or suitability for any purpose of the Content. Any opinions and views expressed in this publication are the opinions and views of the authors, and are not the views of or endorsed by Taylor & Francis. The accuracy of the Content should not be relied

upon and should be independently verified with primary sources of information. Taylor and Francis shall not be liable for any losses, actions, claims, proceedings, demands, costs, expenses, damages, and other liabilities whatsoever or howsoever caused arising directly or indirectly in connection with, in relation to or arising out of the use of the Content.

This article may be used for research, teaching, and private study purposes. Any substantial or systematic reproduction, redistribution, reselling, loan, sub-licensing, systematic supply, or distribution in any form to anyone is expressly forbidden. Terms & Conditions of access and use can be found at <http://www.tandfonline.com/page/terms-and-conditions>

collate the recorded examples and gain some insight into the general principles underlying the irregularities.

Since the above was written, Dr. Calman has shown me a living specimen of the edible crab, *Cancer pagurus*, with no oviducal aperture on the left side. All the other external features of the animal were as in the normal female.

II.—*Description of a new Lemonia.*

By the Hon. WALTER ROTHSCHILD, Ph.D.

*Lemonia taraxaci terranea*, subsp. n.

This very distinct local form was taken by Dr. Jordan and myself at Le Lautaret, Hautes Alpes, in August 1908, at light. We secured nine specimens, all males.

♂. Differs from *L. taraxaci taraxaci* in having all the wings brownish clay-colour instead of dull yellow. Thorax brownish orange; antennæ yellow; abdomen black above, orange below. Wings below as above, only paler; fringe orange-buff. Some specimens are also paler above than the type, with the costa broadly buffish.

9 ♂♂, Le Lautaret, Hautes Alpes, 2000-2300 metres, 1st-2nd August, 1908.

III.—*The Collections of William John Burchell, D.C.L., in the Hope Department, Oxford University Museum.*

IV. *On the Lepidoptera Rhopalocera collected by W. J. Burchell in Brazil, 1825-1830.* By J. C. MOULTON, of Magdalen College, Oxford.

[Continued from ser. 8, vol. ii. p. 195.]

VI. *NYMPHALINÆ* (continued).

*Eubagis (Dynamine) agacles*, Dalm.

Bz. 581. I. [21. 10. 25]. = 836. Minas Geraës. "*Pap[ílio]*."

In a rossa at Discoberto, and along a channel (on the margin of the forest) which conducts water to the house."

10. 11. 25. = 837. Minas Geraës.

Bz. 24. 3. 27. = 838. "Pascuis prope sylvulis." On road W. beyond Praça da Alegria. Vicinity of S. Paulo.

Under this date in Westwood's list is written the word "Pascuis."

27. 4. 27. = **839**. S. Paulo.

Bz. 27. 4. 27. = **840**. S. Paulo.

9. 5. 27. = **841**. Near the Convénio da Luz. S. Paulo.

26. 8. 27. = **842**. R. Pardo to Cubatão. (As **731**.) A label on this specimen bears Westwood's number "Nymph. 79," and the following note in his handwriting:—"Eub. cœnus, ♀ vel var."

24. 10. 27. = **843**. Meiaponte to S. Joaquim (Joaq. Alves).

Bz. a. 24. 8. 28. = **844**. Retiro. "All at the rivulet near the house at Retiro." Between Goyaz and Jeraguá.

20. 9. 29. = **845**. Pará. S.E. of S. Jozé.

Westwood's list (N. 79) agrees.

*Eubagis (Dynamine) cœnus*, F.

4. 11. 25. 2 = **846, 847**. Minas Geraës. (As **559**.)

Bz. 11. 1. 27. = **848**. Cubatão.

Bz. 1. 8. 27. = **849**. "On the road." Between Jundiáhy and Capivary.

Bz. + 25. 8. 27. 2 = **850, 851**. Ollaria to Rio Pardo.

25. 8. 27. 2 = **852, 853**. As above. A label on **852** bears Westwood's number N. 80, and the following note in his handwriting:—"Eub. Cœnus, Donovan. Ins. Ind."

a. 26. 8. 27. 2 = **854, 855**. R. Pardo to Cubatão. (As **734**.)

Westwood's list (N. 80) agrees.

*Eubagis (Dynamine) athemon*, Linn.

Bz. 361. I. [15. 10. 25.] = **856**. Minas Geraës. "P[α-pilio]. At the Discoberto do Antonio Velho."

28. 10. 25. 2 = **857, 858**. Minas Geraës. (As **635**.)

No. **858** bears Westwood's number "Nymph. 78."

Westwood's list (N. 78) agrees.

*Eubagis (Dynamine) tithia*, Hübn.

Bz. + 1004. I. 27. 10. 25. = **859**. Minas Geraës. "P[α-pilio]. At San João de Nepomucena and on the road from Discoberto."

10. 11. 25. = **860**. Minas Geraës.

Bz. + a. 26. 8. 27. = **861**. R. Pardo to Cubatão. (As **734**.)

30. 10. 27. = **862**. Sapezal to Conceição. This specimen bears Westwood's number N. 83.

Westwood's list (N. 83) agrees.

*Eubagis (Dynamine) glauce*, Bates.

a. 24. 8. 28. ♂ = **863**. Retiro. "All at the rivulet near the house at Retiro." (As **844**.)

Westwood's list (N. 98) agrees, and the number, "Nym. 98," is also borne by **863**.

This specimen is unfortunately in very bad condition, thus rendering determination rather difficult. However, on comparing with specimens in the Godman-Salvin Collection and with Bates's description in the 'Journal of Entomology,' ii. p. 324, it seems nearly certain that the species is *E. glauce*.

*Eubagis (Dynamine) mylitta*, Cram., = *postverta*, Cram.

28. 10. 25. ♂ = **864**. Minas Geraës. (As **635**.)

24. 12. 25. ♂ = **865**. Rio de Janeiro. Aqueduct (on the first hill on the left). This specimen bears Westwood's number N. 84.

31. 12. 25. ♀ = **866**. Rio de Janeiro. (As **668**.)

10. 1. 26. 2, ♂ & ♀ = **867, 868**. Rio de Janeiro. Práia Grande and S. João de Carahý. **868** bears Westwood's number N. 82. (As **670**.)

Bz. 13. 3. 26. ♂ = **869**. "Aqueduct." Rio de Janeiro.

Bz. 15. 3. 26. ♀ = **870**. "Catombi." Rio de Janeiro. "Catombi, in plantis."

22. 3. 26. ♀ = **871**. Rio de Janeiro. Along the [Carioca] Aqueduct, to the head of the Valley of Laranjeiros.

Bz. 22. 3. 26. ♀ = **872**. Rio de Janeiro. (As **871**.)

Bz. 3. 4. 26. ♂ = **873**. Rio de Janeiro. "Along the Carioca Aqueduct."

Bz. 16. 3. 27. ♂ = **874**. Between Morumbi and S. Paulo.

No males in the above series have the black spot at the anal angle of the hind wing (upperside), which is a characteristic of most of the males in the Hope Collection, especially strongly marked in two from Chapada. In the British Museum also, the majority are without it; and in the Godman-Salvin Collection out of a large series only a small minority have it marked—noticeably in specimens from Chapada, Corumba, Peru, and Ecuador, where it is well defined. In one specimen from Paraguay it is very strongly marked.

Westwood's list (N. 82 and N. 84) adds three more individuals captured:—

12. 3. 26. Rio de Janeiro. "Aqueduct." (Under N. 84.)

1. 4. 26. Rio de Janeiro. "In the valley of Catumbi." (Under N. 82.)

9. 5. 27. S. Paulo. Near the Convénito da Luz. (Under N. 82.)

*Eubagis (Dynamine) arene*, Hübn.

7. 4. 29. ♀ = 875. Porto Real (Nacional).

26. 5. 29. ♂ = 876. "Silva." Between Itabóca and Baião. North of the falls of Guariba.

Westwood's list (N. 97) agrees, and both specimens bear this number.

This species is unrepresented in the British Museum.

*Epicalia (Catonephile) acontius*, Linn.

4. 12. 28. ♀ = 877. Porto Real. Walk to the Igarapé. "Papiliones, caught in the woody campo; but the long-wing[ed] one is only found in forests in the shade." As yet the identity of "the long-winged one" has not been established, but as the working out of the collection progresses no doubt this will become apparent.

This specimen bears Westwood's number (N. 32), and his date agrees: in his list Westwood wrote "*Epicalia Pierretti*, ♀." *Epicalia pierretti*, Dbl. & Hew., is an allied species.

*Epicalia (Catonephile) penthia*, Hew.

8. 2. 26. ♂ = 878. Organ Mtns. (In a ride to the Cattle Pounds and the Milho Roça.)

This specimen bears Westwood's number (N. 11).

- Bz. 13. 3. 26. ♀ = 879. Rio de Janeiro.

13. 3. 26. ♀ = 880.

Both these specimens bear Westwood's number (N. 10).

- a. 29. 8. 27. ♂ = 881. Cérvo. (As 527.)

Westwood's list (N. 10 and N. 11) agrees.

*Nica flavilla*, Godt.

- Bz. 189. I. [8. 9. 25]. = 882. Rio de Janeiro. "*Papilio*. Along the Aqueduct."

27. 1. 26. = 883. Rio de Janeiro.

- Bz. + 7. 3. 26. 2 = 884, 885. Rio de Janeiro. "At Catombí."

7. 3. 26. 2 = 886, 887. Rio de Janeiro. "At Catombí."

9. 3. 26. 2 = 888, 889. Rio de Janeiro. A label on 889 bears Westwood's number "Nym. 94," and the following note in his handwriting:—"Nica flavilla, God., 406, Hb. Samml., Ex. Sch."

- Bz. 9. 3. 26. = 890. Rio de Janeiro.

10. 3. 26. 3 = 891-893. „

Bz. 12. 3. 26. = 894. " Carioca Aqueduct." Rio de Janeiro.

Westwood's list reads 12. 3. 25, an obvious slip, because Burchell did not land at Rio till 18. 7. 25.

16. 3. 26. = 895. Rio de Janeiro. (As 647.)

21. 3. 26. = 896. " Along the Carioca Aqueduct."

26. 8. 27. = 897. R. Pardo to Cubatão. (As 731.)

This specimen bears the number N. 12\*, and is mentioned under it in Westwood's list. It is the only specimen under that number.

21. 2. 28. = 898. Goyaz. W.N.W. beyond Forca. " All in woods."

Westwood's list (N. 94 and N. 12\*) agrees.

*Temenis laothoë*, Cram., f. *ariadne*, Cram.

30. 10. 25. = 899. Minas Geraës. " (In the forest). On the N.E. side of the arraial of São João de Nepomucéna."

This specimen bears Westwood's number N. 12.

4. 11. 25. = 900. Minas Geraës. (As 559.)

These two specimens are under a separate number (N. 12) in Westwood's list.

Bz. + 25. 8. 27. = 901. Ollaria to Rio Pardo.

a. 29. 8. 27. 2 = 902, 903. Cérvio. (As 527.)

1. 9. 27. = 904. " On the road." Veravínha to França [Villa Franca].

28. 10. 27. = 905. " In sylvia." S. Joaquim to Sapezál.

a. 24. 8. 28. = 906. Retiro. " All at the rivulet near the house at Retiro." Between Goyaz and Jeraguá.

This specimen bears Westwood's number " Nym. 93."

Bz. p. 24. 8. 28. = 907. Retiro. (As 514.)

p. 24. 8. 28. = 908. Retiro. (As 514.)

Instead of 906, 907, 908, Westwood's list (N. 93 except for 899, 900 mentioned above) gives two specimens dated a. 24. 8. 27 and p. 24. 8. 27 (the first probably mistaken for 906, and the second for either 907 or 908).

In the British Museum this insect is placed as the *ariadne* form of *laothoë*; in the Godman-Salvin collection as the *laothoë* form of *ariadne*. *Laothoë* and *ariadne* were both described by Cramer in the same work, but inasmuch as *ariadne* appears on the later page, it would seem that *laothoë* should stand.

*Epiphile oreá*, Hübn.

9. 2. 26. = 909. Organ Mtns. (By the river Pacaqué.)

*Bz.* p. 24. 8. 28. = **910**. Retiro. (As **514**.)

Westwood's list (N. 9) agrees, and this number is borne by both specimens.

*Libythina cuvierii*, Godt.

10. 10. 27. = **911**. Bomfim to Forquilha.

Westwood's list (N. 100) agrees, and his number is on this specimen. Burchell's example is a good deal smaller than any in the British Museum series.

*Myscelia orsis*, Drury.

*Bz.* + 8. 11. 25. ♂ = **912**. "Sylvatica" on the English label, "Pap<sup>s</sup>. sylvat." on Brazilian label. Minas Geraës.

10. 11. 25. ♀ = **913**. Minas Geraës.

12. 3. 26. 3 ♂ = **914, 915, 916**. Rio de Janeiro. "Aqueduct."

Westwood's list gives two more of this date (under N. 14).

*Bz.* 1056. [17. 3. 26]. ♀ = **917**. Rio de Janeiro. "Along the Carioca aqueduct, and descending the high hill (mentioned 31. 1. 26) into the Valley of Catombi.—But they were mostly along the Aqueduct; and only a few on the hill."

A further note on this date says:—"Papiliones. These 3 species frequent the woods." [The Satyrine butterfly *Euptychia ocirrhoe*, F., Ann. Mag. N. H., May 1904, p. 362, and the Nymphaline *Myscelia orsis*, Drury.] As yet it has been impossible to find out the third species here mentioned.

17. 3. 26. 3 ♂ 1 ♀ (**920**) = **918-921**. Rio de Janeiro. (As above.)

Westwood's list gives altogether two specimens numbered 1056 (under N. 13 and N. 14), four with 17. 3. 26 under N. 14 and one under N. 13. **919** and **921** bear Westwood's number N. 14.

18. 3. 26. ♀ = **922**. Rio de Janeiro. "Along the Carioca Aqueduct."

20. 3. 26. ♀ = **923**. Rio de Janeiro. "Along the Carioca Aqueduct."

This specimen bears Westwood's number N. 13.

Westwood's list gives another specimen captured on this and the previous date. His list contains a specimen of each date under N. 13 and a similarly dated pair under N. 14.

21. 3. 26. ♀ = **924**. Rio de Janeiro. "Along the Carioca Aqueduct."

3. 4. 26. ♀ = **925**. „ "Along the Carioca Aqueduct."

Westwood's list gives three altogether of this date, two under N. 14 and one under N. 13.

20. 9. 26. ♀ = **926**. "Sylva." Santos. "In the forest above the Monastery of S. Bento."

26. 9. 26. ♀ = **927**. Santos. In a walk to the Chapel on Montserrat. "These Papiliones very plentiful in the woods."

Westwood's list (N. 13) includes a date, 29. 9. 26, probably an erroneous copy of 26. 9. 26, which is otherwise unaccounted for. Except for the above additions his list (N. 13 and N. 14) agrees.

*Eunica bechina*, Hew.

4. 12. 28. = **928**. Porto Real (Nacional). Walk to the Igarapé. "Papiliones, caught in the woody campo; but the long-wing[ed] one is only found in forests in the shade." See note on **877**.

Bz. + 28. 3. 29. ♀ = **929**. Porto Real. This specimen bears Westwood's number N. 15\*.

Westwood's list (N. 15\*) agrees.

*Eunica maia*, F.

Bz. 558. II. [19. 10. 25]. ♂ = **930**. Minas Geraës. "*Papilio*."

Westwood's list gives another of this date.

Bz. + 896. V. 25. 10. 25. 4 ♂ = **931-934**. Minas Geraës. "*Papilio*". At Discoberto, near João Pedro's house."

896. 25. 10. 25. ♂ = **935**. Minas Geraës. One of the above without the Brazilian label.

This specimen bears Westwood's number N. 15\*\*.

29. 10. 25. ♂ = **936**. Minas Geraës. "In the forest on the S.E. side of S. João de Nepomucena."

4. 11. 25. ♂ = **937**. Minas Geraës. (As **559**.)

Westwood's list (N. 15\*\*) adds another specimen captured 10. 10. 27. Bomfim to Forquílho. He also includes the next species. His dates agree.

*Eunica mygdonia*, Godt.

10. 4. 28. ♂ = **938**. Goyaz. Caminho de Carréira. (As **733**.)

Westwood's date agrees.

*Eunica taurione*, Hübn.

7. 11. 25. = **939**. Minas Geraës.

Westwood's list (N. 15) agrees, and his number is borne by this specimen.

*Eunica volumna*, Godt., = *tithonia*, Feld.

10. 10. 27. = **940**. Bomfim to Forquilha.

Westwood's list (N. 99) agrees, and his number is on this specimen.

*Eunica caresa*, Hew.

4. 11. 25. = **941**. Minas Geraës. (As **559**.) Westwood's number (N. 31) is borne by this specimen.

Westwood's date (under N. 31) agrees, but he gives the name "*Myselfia sydonia*." A label on the specimen bears in Westwood's handwriting :—"Mys. Sydonia, Godt., 416?"

*Eunica margarita*, Godt.

20. 6. 27. = **942**. "Rita." Vicinity of S. Paulo. Westwood's number "Nym. 96" is on this specimen.

Westwood's list (N. 96) gives two specimens captured on this date.

*Anartia amalthea*, Linn.

Bz. 349. III. [15. 10. 25]. 2 = **943, 944**. Minas Geraës. "*P[apilio]*. (Visa quoque ad Rio de Janeiro.) At the Discoberto do Antonio Velho."

Westwood adds another of this date.

Bz. + 895. III. 25. 10. 25. 3 = **945, 946, 947**. Minas Geraës. "*Papilio*. At Discoberto, near João Pedro's house."

14. 1. 26. 3 = **948, 949, 950**. Rio de Janeiro. (As **698**.)

27. 1. 26. = **951**. Rio de Janeiro.

31. 1. 26. 2 = **952, 953**. Rio de Janeiro. (As **474**.)

9. 2. 26. = **954**. Organ Mtns. (By the river Pacaquê.)

12. 2. 26. = **955**. Organ Mtns.

Bz. + a. 25. 2. 26. = **956**. "Frexaes." Organ Mtns. Burchell sometimes wrote "Frexaes" for "Frechál."

a. 25. 2. 26. = **957**. "Frexaes." Organ Mtns. See note on **956**.

Bz. + 26. 2. 26. = **958**. Organ Mountains. Near Magé.

28. 2. 26. = **959**. Organ Mountains. On the Rio Magé.

Westwood's list adds another of this date.

1. 3. 26. = **960**. Organ Mtns. Along the River Magé, upwards to the Fazenda da Lagóa. Westwood's list adds three more individuals captured on this date.

Bz. + 2. 3. 26. = **961**. Rio de Janeiro or Organ Mtns.

Westwood's list gives another of this date.

7. 3. 26. 2 = **962, 963**. Rio de Janeiro. "At Catombí."

10. 3. 26. = **964**. Rio de Janeiro.

16. 3. 26. ♂ = **965**. Rio de Janeiro. (As **647**.)

This specimen bears Westwood's number (N. 1).

16. 3. 26. **966**. Rio de Janeiro.

Bz. 15. 9. 26. = **967**. Santos. "Papil. at edge of the forest at S. Bento Monastery."

19. 9. 26. = **968**. Santos.

Westwood's list gives two more individuals captured on this date.

a. 29. 8. 27. = **969**. Cérvó. (As **527**.)

9. 1. 28. 3 = **970, 971, 972**. Goyaz. By the Horta etc.

4. 3. 28. 5 = **973-977**. Goyaz. "Caught by the rio Vermelho, near the Carioca aqueduct: by C[ongo]."

Bz. 2. 2. 29. = **978**. Porto Real. "On the western side of the Tucantins."

19. 2. 29. = **979**. Porto Real.

18. 12. 29. = **980**. "in locis apertis." Pará. Rivulet above arsenal.

Form *amalthæa*, L., in British Museum.

With the exception of **980**, all the above specimens are named form *rocselia*, Esch., in British Museum. The form *amalthæa* seems to be more prevalent in Trinidad, Honduras, Guiana, and Bolivia. In Colombia an intermediate form exists. The difference between them is that the subapical white bar of the fore wing of f. *rocselia* is replaced in f. *amalthæa* by faint and indistinct white spots.

Westwood's list (N. 1) omits **969**, and adds two specimens captured respectively, 8. 2. 26, Organ Mtns., and 5. 2. 29, Porto Real. The dates otherwise agree.

No date. = **981**. Placed by Westwood in his list of *Anartia jatrophe*, Linn. Considering the obvious differences between these two species, it is, perhaps, probable that Burchell's label has become displaced from the original specimen. There is no *A. jatrophe* without a date in the collection, and there is no *A. amalthæa* mentioned in Westwood's list without a date.

*Anartia jatrophae*, Linn.

10. 1. 26. 3 = **982, 983, 984.** Rio de Janeiro. (As **670.**)  
 14. 1. 26. = **985.** Rio de Janeiro. (As **698.**)  
 26. 1. 26. = **986.** „ Morro de Ladéira and Catombý. (As **672.**)  
*Bz.* + 27. 1. 26. = **987.** Rio de Janeiro.  
 31. 1. 26. = **988.** (As **474.**)  
 26. 2. 26. 2 = **989, 990.** Organ Mtns. Near Magé.  
 Westwood's list gives another of this date.  
 1. 3. 26. = **991.** (As **960.**)  
 9. 3. 26. = **992.** Rio de Janeiro.  
 19. 3. 26. = **993.** „ “In the valley of Catombí.”  
*Bz.* 27. 3. 26. = **994.** Rio de Janeiro. From the Village of São Domingos to the island of Boa Viagem. “On the main-land about Fort Boa Viagem.”  
 27. 3. 26. 3 = **995, 996, 997.** (As **994.**)  
 Westwood's list gives another specimen captured on this date. On **995** his label gives both catalogue numbers (N. 5 and 34) and the name “*Anartia Jatrophae*, Linn.”  
 14. 4. 27. = **998.** Near S. Paulo. In the Campo beyond Boa Morte.  
 26. 4. 27. 15 = **999-1013.** Vicinity of S. Paulo.  
**1001** bears Westwood's label N. 5.  
*Bz.* 26. 4. 27. 2 = **1014, 1015.** Vicinity of S. Paulo.  
 Westwood's list adds three more specimens of this date.  
 6. 5. 27. = **1016.** Vicinity of S. Paulo.  
 20. 6. 27. = **1017.** “Rita.” Vicinity of S. Paulo.  
 20. 6. 27. = **1018.** Vicinity of S. Paulo.  
*Bz.* 20. 6. 27. = **1019.** Vicinity of S. Paulo.  
 Westwood's list gives two more specimens captured on this date.  
 23. 6. 27. = **1020.** “Rita.” Vicinity of S. Paulo.  
 9. 1. 28. = **1021.** Goyaz. By the Horta, etc.  
 18. 1. 28. = **1022.** Goyaz. Rio Manoel Mines, etc.  
 23. 1. 28. = **1023.** Goyaz.  
 30. 4. 28. = **1024.** Goyaz.  
*Bz.* + 29. 1. 29. = **1025.** Porto Real (Nacional). “Caught on the bank of the Tucantins, while measuring the base line.”  
*Bz.* + 19. 5. 29. = **1026.** Araguáy. [S. João da Araguay.]  
*Bz.* + 7. 6. 29. = **1027.** Sta. Anna. Rio Tocantins, between Baião and Pará.

1386. 26. 6. 29. 2 = **1028, 1029.** Pará, near my house (Pombo roçinha).

Bz. + 1386. 26. 6. 29. = **1030.** Pará, near my house (Pombo roçinha).

Bz. + 17. 7. 29. = **1031.** Pará.

23. 7. 29. = **1032.** Pará, between my house and the City.

21. 9. 29. = **1033.** Pará.

Westwood's list adds three individuals captured 10. 2. 27, 24. 4. 27, 7. 6. 27, near S. Paulo; and one, 4. 3. 28, Goyaz. "Caught by the rio Vermelho, near the Carioca aqueduct; by C[ongo]."

Westwood had put this species under two numbers (N. 5 and N. 34), and against these he wrote the name *Anartia jatrophe*, and against N. 34 the additional note "Same as N. 5."

*Junonia (Precis) hübnéri*, Kirb.

Bz. 145. I. [16. 8. 25]. = **1034.** Rio de Janeiro. "*Papilio* [ilho]. Above the Teresa Convent; and on the woody hilly [hills] along the Aqueduct." Dry-season form.

7. 11. 25. = **1035.** Minas Geraës. Dry season.

10. 11. 25. 2 = **1036, 1037.** Minas Geraës. **1036** is dry side of intermediate; **1037** is much worn, but probably intermediate.

24. 12. 25. = **1038.** Rio de Janeiro. Aqueduct (on the first hill on the left). Dry season. Slightly inclined to intermediate.

Bz. + 1. 3. 26. 2 = **1039, 1040.** (As 960.) **1039** is intermediate side of dry; **1040** is a typical dry-season form.

1. 3. 26. = **1041.** (As 960.) Intermediate side of dry.

Bz. 15. 3. 26. = **1042.** Rio de Janeiro. "Catombi, in plantis." Intermediate.

17. 3. 26. = **1043.** Rio de Janeiro. (As 917.) Intermediate side of wet.

Bz. 20. 3. 26. = **1044.** Rio de Janeiro. "Along the Carioca Aqueduct." Wet season.

27. 3. 26. = **1045.** Rio de Janeiro. (As 994.) Wet season.

4. 3. 27. = **1046.** Morumbý. E<sup>a</sup>. of the mouse. Wet season.

9. 1. 28. = **1047.** Goyaz. By the Horta, etc. Intermediate.

18. 1. 28. = **1048.** Goyaz. Rio Manoel Mines, etc. Intermediate, inclined to dry.

*Ann. & Mag. N. Hist.* Ser. 8. Vol. iii.

4. 3. 28. = **1049**. Goyaz. "Caught by the rio Vermelho, near the Carioca Aqueduct, by C[ongo]." Wet season.
3. 4. 28. = **1050**. Goyaz. Caminho de Bacopary. Intermediate.
10. 4. 28. = **1051**. Goyaz. Caminho de Carréira. (As **733**.) Intermediate, inclined to wet.
- Bz. 4. 9. 28. = **1052**. "Very common in the Campos." Estiva to Fazenda seca. "Papiliones, at a rivulet on the road." Typical dry season.
8. 11. 28. = **1053**. Canga. Córrego Raiz. "At Corrego Raiz, drinking on the moist sand in the road where it crosses the rivulet." Intermediate.
- Westwood's list gives two specimens captured 8. 11. 28.
- Bz. 28. 11. 28. = **1054**. Porto Real (Nacional). Wet side of intermediate.
28. 11. 28. = **1055**. Porto Real. Intermediate.
- Bz. + 1265. 1. 12. 28. = **1056**. Porto Real. "*Papilio*. This merits most decidedly the name of *campestris*, as it is very common in all the Campo beyond and on this side of Goyaz, but I have always found it difficult to catch them which accounts for my collection possessing so few of so common a butterfly." Wet season.
- Burchell's ideas of an adequate series may be inferred from the fact that his collection contained twenty-six specimens (including three in Westwood's list and now missing) at the date when he spoke of the numbers as "so few."
- Bz. 30. 12. 28. = **1057**. Porto Real. Dry, inclined to intermediate.
- Bz. 2. 2. 29. = **1058**. Porto Real. "On the western side of the Tucantins." Dry season.
1316. 17. 2. 29. 2 = **1059, 1060**. Porto Real. "Feeding on the flowers of the Waltheria bushes" (v. H. 8632 x). See note on **663** in Ann. & Mag. Nat. Hist. ser. 8, vol. ii, p. 183. Worn, but probably dry.
17. 2. 29. = **1061**. Porto Real. Dry to intermediate.
11. 3. 29. = **1062**. Porto Real. Dry to intermediate. This and the above are very worn.
- Bz. + 28. 3. 29. = **1063**. Porto Real. Wet season.
18. 12. 29. = **1064**. "in locis apertis." Pará. Rivulet above Arsenal. Dry side of intermediate.

This specimen bears Westwood's number (N. 2); his list adds four more individuals, captured 31. 1. 26, Rio de Janeiro (as **474**); 7. 3. 26, Rio de Janeiro, "At Catombí"; 21. 9. 27, between Lauboso and Bomfim; and 20. 8. 29, Pará.

*Pyrameis myrinna*, Doubl.

Bz. + p. 25. 2. 26. = **1065**. Organ Mtns. Between Frechal and Magé.

18. 10. 26. = **1066**. Santos. In a walk from the Outeirinhos to the town.

Westwood's list (N. 3) makes this last date 28. 10. 26, probably a clerical error. He also places these two specimens in his list of the next species under the name of "*Vanessa Huntera*." These Burchell specimens have been compared with the types of *P. myrinna*, Doubl., in the British Museum.

*Pyrameis huntera*, Fabr., form *brasiliensis*, Moore.

10. 11. 25. = **1067**. Minas Geraës.

6. 12. 25. = **1068**. Rio de Janeiro. On the Corcovado Mountain. (As **667**.)

This specimen bears Westwood's number N. 3.

7. 6. 27. = **1069**. Vicinity of S. Paulo.

Westwood's list (N. 3) gives two more specimens, one captured 4. 11. 25, Minas Geraës (as **559**), and one 20. 6. 27, S. Paulo. He names it *Vanessa huntera*.

Mr. F. A. Heron, of the British Museum, kindly informs me that *brasiliensis* is the name given to the southern form of *huntera*, and he mentions the following chief points of difference:—in *huntera* there is no white in the cell of the fore wing, while in *brasiliensis* there is usually a white patch on the discocellulars; again, in the hind wing of *huntera* the eye-spots are usually confluent to form a postdiscal band, while in *brasiliensis* the eye-spots are well separated, and in some cases reduced to mere points. In the latter form also there is always a strongly marked discal band in both sexes, which is hardly ever found in *huntera* males, and never in the females.

*Eurema (Hypanartia) lethe*, Fabr.

9. 2. 26. 2 = **1070, 1071**. Organ Mtns. (By the River Pacaqué.)

a. 26. 8. 27. = **1072**. R. Pardo to Cubatão. (As **734**.)

This specimen bears Westwood's number N. 4\*.

Bz. + a. 28. 8. 27. = **1073**. "At Reíro." Just N. of R. Pardo.

Westwood's list (N. 4\*) adds another specimen, captured a. 29. 8. 27, at Cérvo. (As **527**.) Against this and the next species Westwood had written in his list the generic name "*Eurema*."

*Eurema (Hypanartia) bella*, Fabr.

4. 11. 25. = 1074. Minas Geraës. (As 559.)

Bz. 9. 3. 26. = 1075. Rio de Janeiro.

This specimen bears Westwood's number N. 4; his list adds another, captured 26. 11. 26 at Santos.

These two species, originally placed under one number (N. 4) in a clerk's handwriting, were differentiated by Westwood, who placed the examples of *lethe* under a new number (N. 4\*).

[To be continued.]

IV.—*Notes on the Genus Acerodon, with a Synopsis of its Species and Subspecies, and Descriptions of Four new Forms.* By KNUD ANDERSEN.

The Genus ACERODON.

*Type*.—*Pteropus jubatus*, Eschscholtz.

*Species*.—Six (nine recognizable forms), viz. *A. mackloti* (three subspecies), *gilvus*, *celebensis*, *humilis*, *lucifer*, *jubatus* (two subspecies).

*Range*.—Timor group (Timor, Flores, Alor, Sumba); Celebes group (Celebes, Selayar); Talaut Islands; Philippines\*.

*Differential characters*.—*Acerodon* differs from *Pteropus* by the combination of the following dental characters: (1) Posterior basal ledge of  $p_4$ ,  $m_1$ , and  $m_2$  extending along inner base of teeth as a broad, sharply defined shelf; this character is sufficient to distinguish *Acerodon* from any species of *Pteropus*, except *Pt. anetianus*, which possesses a perfectly similar inner basal ledge in the same teeth, but in every other respect is closely allied to the genuinely Pteropine *Pt. samoënsis*: (2) a well-developed antero-internal basal cusp in  $p^4$  and  $m^1$  (a similar, but smaller, antero-internal cusp developed in

\* The range of the "subgenus" *Acerodon* is stated by Matschie to be the Philippines, Gilolo, Batjan, Celebes, Flores, and Timor (Megachir. p. 99, 1899), and essentially the same distribution is given by Miller (Fam. & Gen. Bats, p. 59, 1907). Gilolo and Batjan must be excluded from the known range of the genus. The records of *Acerodon* from the Gilolo group are based on mistaken identifications of Gray's *Pteropus caniceps* and his *Pteropus mackloti* var. *batchiana*; the latter name is a synonym of the former, and *Pteropus caniceps* a perfectly typical *Pteropus*.