

NEOTROPICAL NYMPHALIDAE IN PHOTOGRAPHY

Part 1

GEORGE O. KRIZEK

2111 Bancroft Place, N.W., Washington, DC 20008, USA

ABSTRACT.—Presented here are 90 photographs from life of 78 species of Neotropical Nymphalidae, from Brazil, Costa Rica, Ecuador, Mexico, Peru, and Venezuela, mostly photographed on Emmel-Holbrook butterfly expeditions within the past 6-7 years.

KEY WORDS: *Adelpha, Anartia, Archeoprepona, Anthanassa, Batesia, Brazil, Callicore, Castilia, Cotonephele, Chlosyne, Colobura, Consul, Costa Rica, Diaethria, Dione, Doxocopa, Dynamine, Dryadula, Dryas, Ecuador, Ectima, Eresia, Eueides, Hamadryas, Heliconiinae, Heliconius, Hypanartia, Marpesia, Mazia, Memphis, Mexico, Nessaea, Ortilia, Panacea, Perisama, Peru, Philaethria, Podotricha, Pyrrhogryra, Siproeta, Smyrna, Telenassa, Temenis, Tigridia, Venezuela, Victoria, Zaretis.*

Nymphalidae are *anthropofiliac* and sometimes almost *domesticated* butterflies, often found in the immediate vicinity of human settlements, especially in the tropics. Attracted by the chemical stimulants produced by the decomposing organic waste products of human and animal metabolism, and also by the products of human sweat glands (salt, urea, fatty acids), they often aggregate around the entomologist-photographer, sitting on his body and sweat bespattered equipment (net handles, bags, parts of cameras, etc.). On these occasions they can be photographed relatively easily. The following 90 photographs of 78 species were taken over a period of 6-7 years on various Emmel-Holbrook butterfly expeditions, to Brazil, Costa Rica, Ecuador, Mexico, Peru, and Venezuela.

***Adelpha cytherea* (Linnaeus)**

Tinalandia, Ecuador, 8 May 1990 (male/female).

***Adelpha fufia* Fruhstorfer**

Rondonia, Brazil, 22 Mar 1991.

***Adelpha iphiclus* (Linnaeus)**

Rondonia, Brazil, 5 Nov 1989.

***Adelpha mesentina* (Cramer)**

Rondonia, Brazil, 5 Nov 1989.

***Adelpha pleasure* Hübner**

Rondonia, Brazil, 5 Nov 1989.

***Adelpha thesprotia* (Felder & Felder)**

Rondonia, Brazil, 20 Mar 1991.

***Adelpha paroeca* Bates**

Turrialba, Costa Rica, 15 May 1985 (sitting on white wall).

***Adelpha basiloides* Bates**

Puerto Vallarta, Mexico, 28 Feb 1988.

***Anartia amathea* (Linnaeus)**

Tinalandia, Ecuador, 8 May 1990.

***Anartia fatima* (Fabricius)**

Puerto Vallarta, Mexico, 24 Feb 1988.

***Archeoprepona demophon* (Linnaeus)**

Rondonia, Brazil, 3 Nov 1989.

***Anthanassa ardys* Hewitson**

Monte Verde, Costa Rica, 18 May 1985.

Fig. 12

***Anthanassa drusilla* Felder**

Tinalandia, Ecuador, 6 May 1990.

Fig. 13

***Batesia hypochlora* Felder & Felder**

Rondonia, Brazil, 4 Nov 1989.

Fig. 14

Same, lateral view

Fig. 15

***Callicore cylene* Doubleday**

Rondonia, Brazil, 18 Mar 1991.

Fig. 16

***Callicore eunomia* Hewitson**

Explorama Inn, Loreto, Peru, 21 Jul 1989.

Fig. 17

***Castilia eranites* Hewitson**

Tinalandia, Ecuador, 8 May 1990.

Fig. 18

***Castilia myia* Hewitson**

Puerto Vallarta, Mexico, 25 Feb 1988.

Fig. 19

***Catonephele mexicana* Jenkins & de la Maza**

Tinalandia, Ecuador, 8 May 1990 (male).

Fig. 20

Turrialba, Costa Rica, 14 May 1985 (female).

Fig. 21

***Catonephele sabrina* Hewitson**

Curitiba, Brazil, 16 Mar 1984 (male).

Fig. 22

***Catonephele salacia* Hewitson**

Rondonia, Brazil, 21 Mar 1991 (male).

Fig. 23

***Chlosyne gaudealis* Bates**

Turrialba, Costa Rica, 16 May 1985.

Fig. 24/25

***Colobura dirce* (Linnaeus)**

Explorama Inn, Loreto, Peru, 19 Jul 1989.

Fig. 26

***Consul fabius* (Cramer)**

Rondonia, Brazil, 3 Nov 1989 (dorsal basking).

Fig. 29

Same, sipping at cow feces (note background resemblance).

Fig. 27

Same, sitting on a leaf.

Fig. 28

***Diaethria clymena* (Cramer)**

Frontispiece and Fig. 30

Explorama Inn, Loreto, Peru, 21 Jul 1989.

Fig. 31

Same, rare display with open wings (possibly attract-

ed by blue pieces of ceramics).

***Dione juno* (Cramer)**

Fig. 32

Rondonia, Brazil, 8 Nov 1989 (Heliconiinae).			
Doxocopa agathina (Cramer)	Fig. 33		Fig. 58
Rondonia, Brazil, 21 Mar 1991.		Tinalandia, Ecuador, 7 May 1990.	Fig. 59
Doxocopa linda Felder & Felder	Fig. 34	Rondonia, Brazil, 4 Nov 1989.	Fig. 60
Rondonia, Brazil, 15 Mar 1991.		Marpesia berania (Hewitson)	
Doxocopa seraphina Hübner	Fig. 35	Rondonia, Brazil, 22 Mar 1991.	
Tinalandia, Ecuador, 9 May 1990.		Tinalandia, Ecuador, 7 May 1990.	Fig. 61
Dryadula phaetusa (Linnaeus)	Fig. 43	Marpesia chiron (Fabricius)	Fig. 62
Rondonia, Brazil, 21 Mar 1991 (Heliconiinae).		Explorama Inn, Loreto, Peru, 19 Jul 1989.	
Dryas iulia titio (Stichel)	Fig. 45	Marpesia crethon (Fabricius)	Fig. 63
Rondonia, Brazil, 17 Mar 1991 (Heliconiinae).		Rondonia, Brazil, 15 Mar 1991.	
Dynamine arene Hübner	Fig. 36	Marpesia iole (Drury)	Fig. 64
Rondonia, Brazil, 9 Nov 1989.		Tinalandia, Ecuador, 9 May 1990.	
Dynamine athemon (Linnaeus)	Fig. 37	Marpesia orsilochus (Fabricius)	Fig. 65
Rondonia, Brazil, 21 Mar 1991.		Rondonia, Brazil, 6 Nov 1989.	
Dynamine gisella Hewitson	Fig. 38	Mazia amazonica Bates	Fig. 66
Rondonia, Brazil, 11 Nov 1989.		Explorama Inn, Loreto, Peru, 17 Jul 1989.	
Same (lateral view).		Memphis basilia (Cramer)	Fig. 67
Dynamine glauce Bates	Fig. 39	Rondonia, Brazil, 10 Nov 1989.	
Explorama Inn, Loreto, Peru, 19 Jul 1989.		Memphis glauce Felder	Fig. 68
Dynamine mylitta (Cramer)	Fig. 40	Rondonia, Brazil, 10 Nov 1989.	
Rondonia, Brazil, 16 Mar 1991.		Memphis morvus? (Fabricius)	Fig. 69
Dynamine racidula Hewitson	Fig. 41	Rondonia, Brazil, 22 Mar 1991.	
Rondonia, Brazil, 21 Mar 1991.		Memphis vicinia Staudinger	Fig. 70
Ectima thecla Fruhstorfer	Fig. 42	Rondonia, Brazil, 22 Mar 1991.	
Rondonia, Brazil, 15 Mar 1991.		Nessaea batesii Felder	Fig. 71
Ectima lirides Staudinger	Fig. 44	San Isidro, Bolivar, Venezuela, 28 Jun 1984 (male).	
Explorama Inn, Loreto, Peru, 21 Jul 1989. The butterfly is perching headdown on a wall; note the "scorpion-like" elevated position of the abdomen.		Nessaea obrinus (Linnaeus)	Fig. 72
Eresia clara Bates	Fig. 47	Rondonia, Brazil, 22 Mar 1991 (male).	
Explorama Inn, Loreto, Peru, 18 Jul 1989.		Ortilia gentina Higgins	Fig. 73
Eresia eunice (Hübner)	Fig. 48	Rondonia, Brazil, 14 Mar 1991.	
Explorama Inn, Loreto, Peru, 21 Jul 1989.		Panacea divalis Bates	Fig. 74
Eresia lansdorfi Godart	Fig. 49	Rondonia, Brazil, 3 Nov 1989.	
Rio Julho, east of São Bento do Sul, Brazil, 12 Mar 1984. This species may be a member of a mimetic complex involving <i>Podotricha telesiphe</i> form <i>tithraustes</i> Hewitson and <i>Heliconius telesiphe</i> . I observed very interesting behavior of several individuals of <i>E. lansdorfi</i> : they were following a little larger individuals of <i>Heliconius erato</i> (<i>melpomene</i> type), flying directly behind them, but always keeping about a 1 foot distance from them.		Perisama bonplandii Guérin	Fig. 75
Eresia plagiata Röber	Fig. 50	Tinalandia, Ecuador (600m above town), 10 May 1990.	
Explorama Inn, Loreto, Peru, 19 Jul 1989.		Same (dorsal basking)	Fig. 76
Eresia quintilla Hewitson	Fig. 51	Perisama oppeli (Latreille)	Fig. 77
Tinalandia, Ecuador, 6 May 1990.		Tinalandia, Ecuador (600m above town), 10 May 1990.	
Eueides aliphera Godart	Fig. 52	Philaethria dido (Linnaeus)	Fig. 78
Rondonia, Brazil, 17 Mar 1991 (Heliconiinae).		Rondonia, Brazil, 17 Mar 1991 (Heliconiinae).	
Hamadryas arinome (Lucas)	Fig. 53	Pyrrhogrya crameri Aurivillius	Fig. 79
Explorama Inn, Loreto, Peru, 19 Jul 1989.		Rondonia, Brazil, 6 Nov 1989.	
Hamadryas chloe (Stoll)	Fig. 54	Pyrrhogrya edocla Doubleday	Fig. 80
Rondonia, Brazil, 9 Nov 1989.		Rondonia, Brazil, 9 Nov 1989.	
Hamadryas februa Hübner	Fig. 57	Siproeta epaphus Latreille	Fig. 81
Rondonia, Brazil, 21 Mar 1991.		Tinalandia, Ecuador, 9 May 1990.	
Hamadryas laodamia (Cramer)	Fig. 55	Siproeta stelenes (Linnaeus)	Fig. 82
Explorama Inn, Loreto, Peru, 21 Jul 1989 (male).		Rondonia, Brazil, 6 Nov 1989.	
Same (female).	Fig. 56	Smyrna blomfildia (Fabricius)	Fig. 83
		Puerto Vallarta, Mexico, 28 Feb 1988.	
		Telenassa burchelli Moulton	Fig. 84
		Rondonia, Brazil, 9 Nov 1989.	
		Temenis laothoe (Cramer)	Fig. 85
		Explorama Inn, Loreto, Peru, 21 Jul 1989.	
		Temenis pulchra Hewitson	Fig. 86
		Rondonia, Brazil, 11 Nov 1989.	
		Same (lateral view).	Fig. 87
		According to D'Abrera (1987), "the proportion of red to black markings appear to be governed by the particular population of	

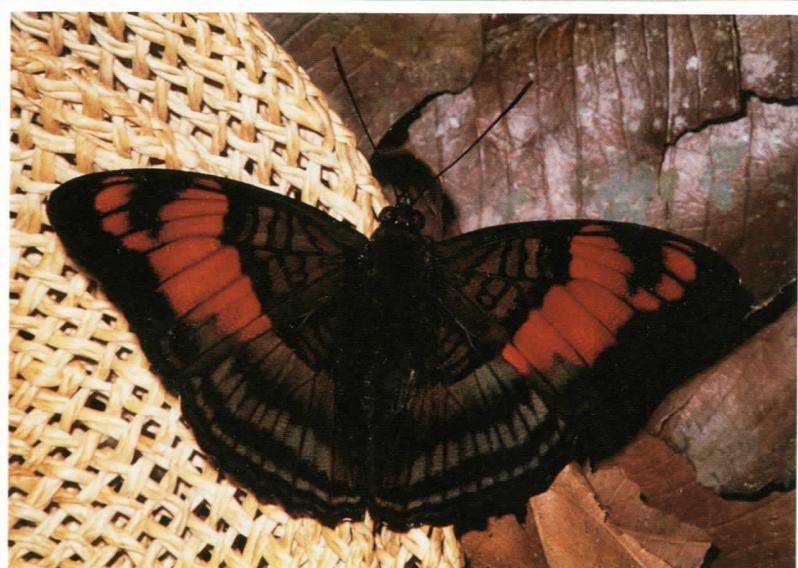


Fig. 1. *Adelpha cytherea* ♂/♀
Fig. 2. *Adelpha fufia*

Fig. 3. *Adelpha iphiclus*
Fig. 4. *Adelpha mesentina*

Fig. 5. *Adelpha pleasure*
Fig. 6. *Adelpha thesprotia*



Fig. 7. *Adelpha paroeca*
Fig. 8. *Anartia amathea*

Fig. 9. *Adelpha basiloides*
Fig. 10. *Anartia fatima*

Fig. 11. *Archeoprepona demophon*
Fig. 12. *Anthonassa ardys*

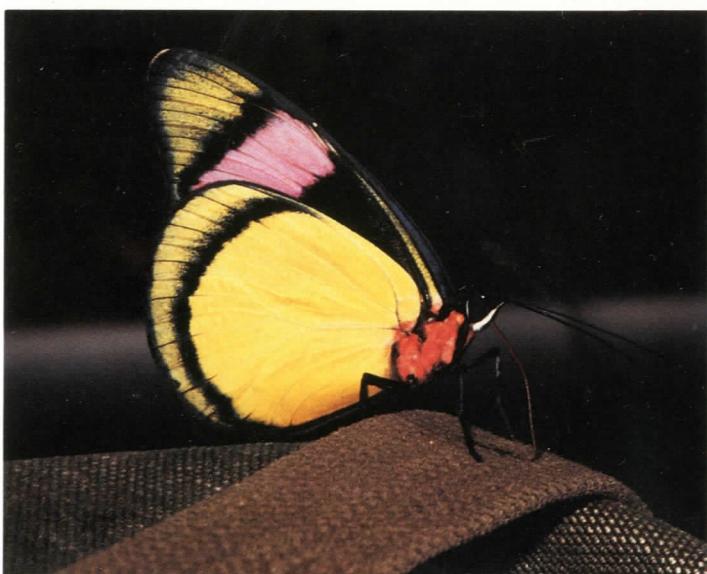
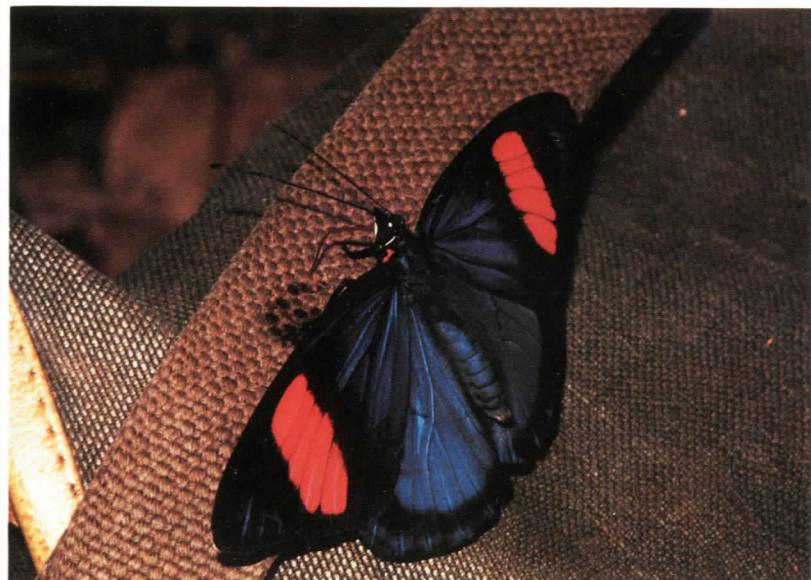


Fig. 13. *Anthanassa drusilla*
Fig. 14. *Batesia hypochlora*

Fig. 15. *Batesia hypochlora*
Fig. 16. *Callicore cyllene*

Fig. 17. *Callicore eunomia*
Fig. 18. *Castilia eranites*

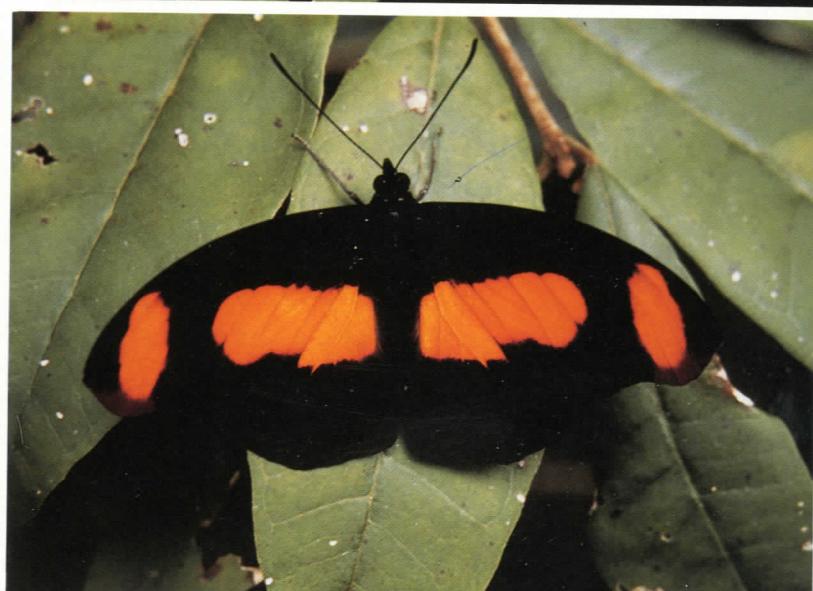


Fig. 19. *Castilia myia*
Fig. 20. *Catonephele mexicana* ♂

Fig. 21. *Catonephele mexicana* ♀
Fig. 22. *Catonephele sabrina* ♂

Fig. 23. *Catonephele salacia* ♂
Fig. 24. *Chlosyne gaudialis*

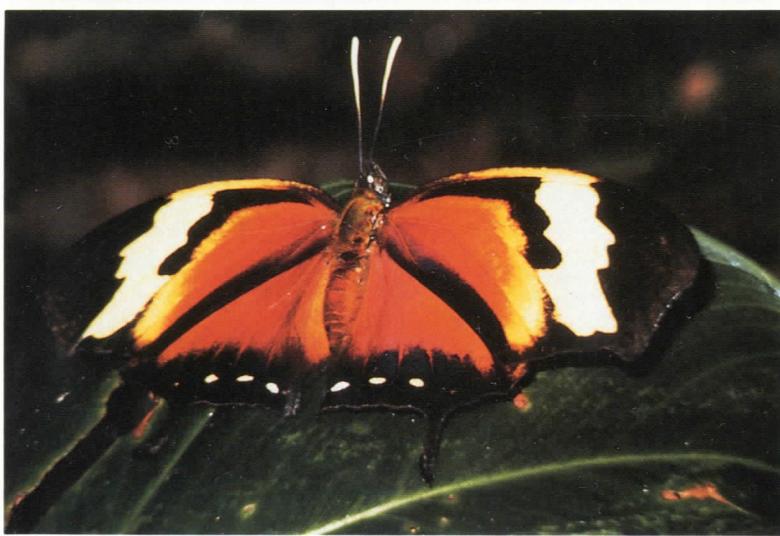
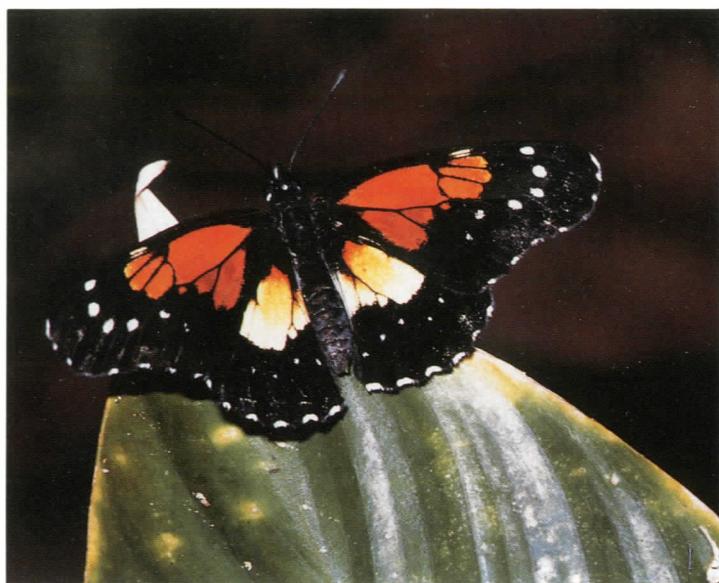


Fig. 25. *Chlosyne gaudialis*
Fig. 26. *Colobura dirce*

Fig. 27. *Consul fabius*
Fig. 28. *Consul fabius*

Fig. 29. *Consul fabius* (basking)
Fig. 30. *Diaethria clymena*

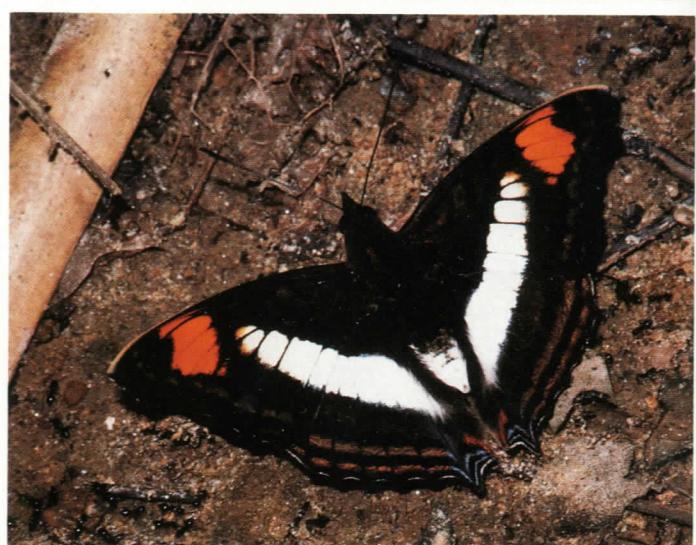
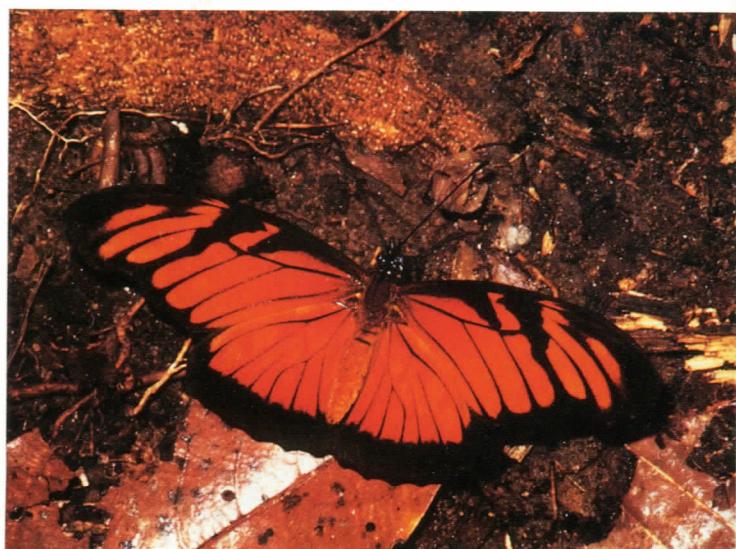


Fig. 31. *Diaethria clymena*
Fig. 32. *Dione juno*

Fig. 33. *Doxocopa agathina*
Fig. 34. *Doxocopa linda*

Fig. 35. *Doxocopa seraphina*
Fig. 36. *Dynamine arene*



Fig. 37. *Dynamine athemon*
Fig. 38. *Dynamine gisella*

Fig. 39. *Dynamine gisella*
Fig. 40. *Dynamine glauce*

Fig. 41. *Dynamine mylitta*
Fig. 42. *Dynamine racidula*



Fig. 43. *Dryadula phaetusa*
Fig. 44. *Ectima thecla*

Fig. 45. *Dryas iulia titio*
Fig. 46. *Ectima lirides*

Fig. 47. *Eresia clara*
Fig. 48. *Eresia eunice*



Fig. 49. *Eresia lansdorfi*
Fig. 50. *Eresia plagiata*

Fig. 51. *Eresia quintilla*
Fig. 52. *Eueides aliphera*

Fig. 53. *Hamadryas arinome*
Fig. 54. *Hamadryas chloe*



Fig. 55. *Hamadryas laodamia* ♂
Fig. 56. *Hamadryas laodamia* ♀

Fig. 57. *Hamadryas februa*
Fig. 58. *Hypanartia lethe*

Fig. 59. *Hypanartia lethe*
Fig. 60. *Marpesia berania*



Fig. 61. *Marpesia berania*
Fig. 62. *Marpesia chiron*

Fig. 63. *Marpesia crethon*
Fig. 64. *Marpesia iole*

Fig. 65. *Marpesia orsilochus*
Fig. 66. *Mazia amazonica*



Fig. 67. *Memphis basilia*
Fig. 68. *Memphis glauce*

Fig. 69. *Memphis morvus?*
Fig. 70. *Memphis vicinia*

Fig. 71. *Nessaea batesii* ♂
Fig. 72. *Nessaea obrinus* ♂

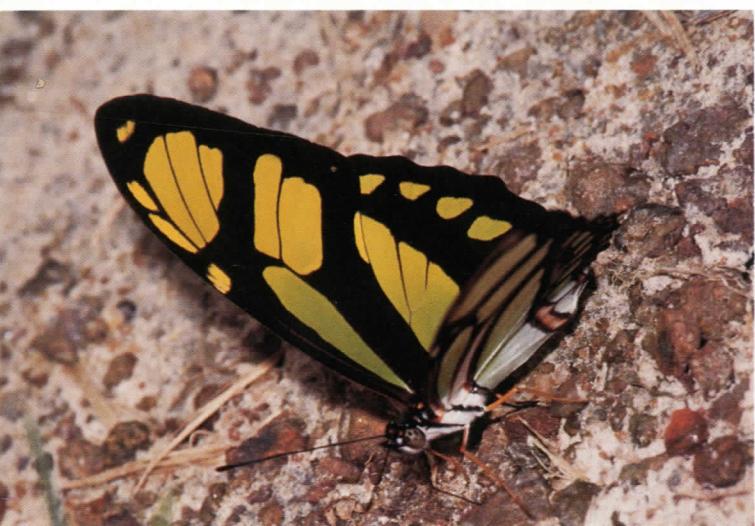
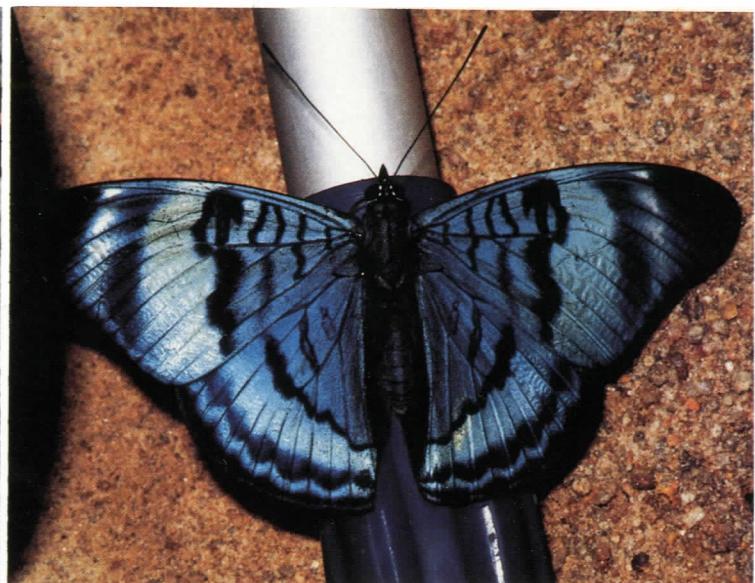


Fig. 73. *Ortilia gentina*
Fig. 74. *Panacea divalis*

Fig. 75. *Perisama bonplandii*
Fig. 76. *Perisama bonplandii*

Fig. 77. *Perisama oppeli*
Fig. 78. *Philaethria dido*

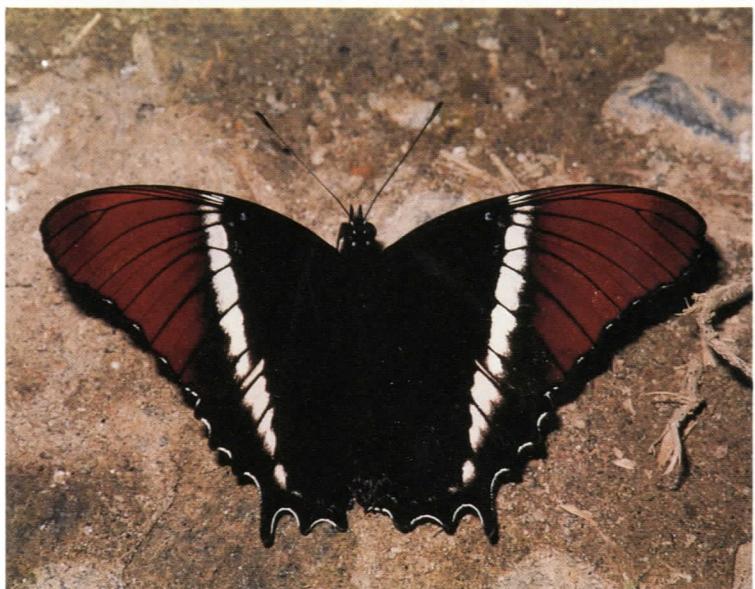


Fig. 79. *Pyrrhogrya crameri*
Fig. 80. *Pyrrhogrya edocla*

Fig. 81. *Siproeta epaphus*
Fig. 82. *Siproeta stelenes*

Fig. 83. *Smyrna blomfildia*
Fig. 84. *Telenassa burchelli*

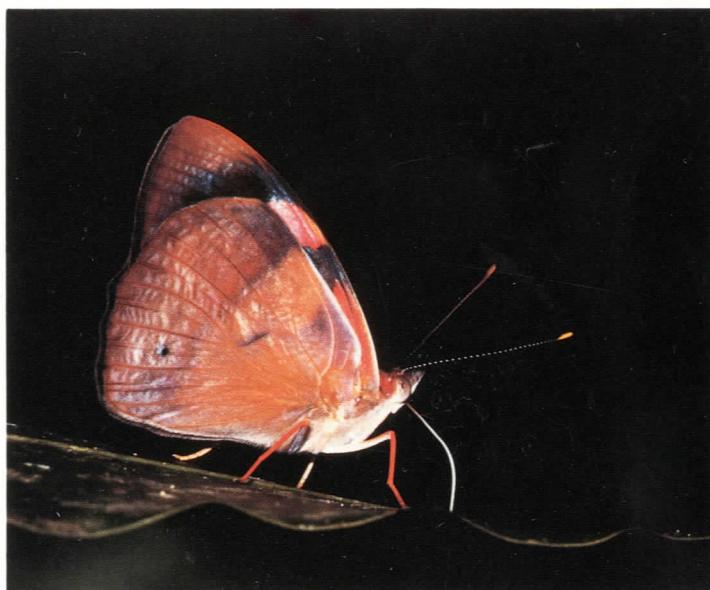


Fig. 85. *Temenis laothoe*
Fig. 86. *Temenis pulchra*

Fig. 87. *Temenis pulchra*
Fig. 88. *Tigridia acesta*

Fig. 89. *Victorina elissa*
Fig. 90. *Zaretis itys*

the species *Catagramma (Callicore) pitheas* Latreille, with which it is a companion." Our specimen is more exactly *Temenis pulchra* form *dilutior* Fruhstorfer.

Tigridia acesta (Linnaeus) Fig. 88

Rondonia, Brazil, 11 Nov 1989.

Victorina elissa (Hübner) Fig. 89

Explorama Inn, Loreto, Peru, 20 Jul 1989.

Zaretis itys (Cramer) Fig. 90

Rondonia, Brazil, 4 Nov 1989.

ACKNOWLEDGMENTS

George T. Austin, Nevada State Museum, Las Vegas, Nevada, repeatedly offered me valuable help in the identification of my photographs, and is entitled to my endless thanks and gratefulness. As in my previous articles, again here I would like to express my special gratitude to Thomas C. Emmel, Dept. of Zoology, University of Florida, Gainesville, Florida, and his staff, for the kind cooperation during various jungle expeditions. John B. Heppner, Florida State Collection of Arthropods, Gainesville, Florida, deserves my very special thanks for his excellent and unique editorial help.

LITERATURE CITED

D'Abraera, B.

1987. *Butterflies of the Neotropical Region. Nymphalidae*. Victoria: Hill House. 678pp.

Krizek, G. O.

1990. Butterfly photography in the tropics. *J. Lepid. Soc.* (Los Angeles), 44:56-61.