



RESEARCH ARTICLE

ODONATA FROM VENEZUELA 1985-2015

*Matthias Hartung

Hauptstr. 62, D-16866 Kyritz, Germany

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*Corresponding author:

Matthias Hartung

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ABSTRACT

From 1985 till 2015 I have got Odonata from Norbert Flauger in Venezuela. Many deliveries with Odonata I got from him and I have collected a lot of Odonata species. The dried or emerged Odonata I have mostly prepared. All Odonata were noted in a book and a database. A list contains the Odonata from Venezuela from the database is given.

INTRODUCTION

From 1985 till 2015 I have got Odonata from Norbert Flauger, living in Venezuela, Carabobo. 1996 and 2001 I have visited him there. Many deliveries with Odonata I got from him over the time and I have collected a lot of Odonata species with Norbert Flauger in Venezuela. The Odonata I have identified with the help of many literatures during the long time. The new species for my collection I have integrated in this collection. Some new species or new parts of a species I could describe during this long time in different journals.

METHODS

The dried or emerged Odonata I have mostly prepared. The larva I have held in small boxes and have feeded them with mosquito larva. After emerging, Odonata were held alive in an Aqua florarium for a time, before the preparation or setting them free. Each Odonata, larva, exuvia or emerged one got an individual number. Each individuum was noted in a book and given to a database. For identification the genitalia of male or female Odonata were prepared, photographed with the help of my binocular microscope and identified after several references. One or more reference from a database I used and noted the figure numbers, after which I could identify these species. Number of specimens. No. /year (e. g. 145/2000), Abbreviations. m = male, f = female, L = larva, E = exuvia, H = hind wing, A = abdomen length, f. = figure, pl. = plate, tb. = table, AN = Ante Nodal, PN = Post Nodal, S1-10 = segment 1 to 10, T (Anisoptera), q (Zygoptera), Lp = labial palpus, Pr = prementum, l. a. = Lamina anterior, Ah = antehumeral stripe.

RESULTS

The following list contains the Odonata from Venezuela from the database. The locations are shown in Fig. 1.

Nearly for all locations a geo-reference is described. Some images are integrated. Most of them I have made. The species *Heteragion palmichale* and the exuvia of *Micrathyria venezuelae* I have described as new.

Zygoptera, Calopterygidae

Hetaerina

caja c. (Drury, 1773). Canaima Nat. Park, S 6.242670 - W - 62.832670, m, 25. - 26.12.2001, P. Weigert leg., Garrison, 1990, Racenis, 1968 - Carabobo Edo., Bejuma, Carrizal, 2 ponds outside, concrete outlet, S 10.185 - W -68.23, 13.11.1996, 1 m, 3 f, M. Hartung leg. - Carabobo Edo., La Mona, R. Chirgua, Water: 23.9C, Air: 34.9C, N 10.119 - W -68.2, 2 m, 1 f, 7.02.2001, M. Hartung leg. - Cojedes Edo., Manrique S, small river with dam at street, Water: 23.5C, Air: 27.6C, N 9.833 - W -68.550, m, 10.02.2001, M. Hartung leg. - Cojedes Edo., San Carlos N, Manrique S, river, at bridge, Water: 23.2C, Air: 33.2C, N 9.791 - W -68.509, m, 10.02.2001, M. Hartung leg. - Cojedes Edo., near Hato Altamira (Hacienda), R. Tinaco, eutrophic low-land river, Water: 26.6C, Air: 34.5C, N 9.497 - W -68.365, f, 11.02.2001, M. Hartung leg. Guayana, 40km N St. Elena, Sn. Francisco d. Y, R. Yuruany ('Yaspis'), N 5.067 - W - 61.083, 3m, 2 f, 15.10.1989, Norbert Flauger leg. - Guayana, El 68, Caretera El Dorado, N 6.313 - W -61.302, 3m, 5.09.1997, Norbert Flauger leg. - Yaracuy Edo., 1km N Albarico, small, slow runningstream, N 10.405 - W -68.698, m, 11.11.1996, M. Hartung

leg. = *capitalis* Selys, 1873. Bejuma, Edo. Carabobo, Hacendia Palmichal, 600-700m, Hac. Palmichal, small stream, N 10.322 - W -68.231, 1 Ef, 1 f, 15.11.1996, M. Hartung leg., EC, Garrison, 1990 - Bejuma, Edo. Carabobo, Via Palmichal, 1630m (Top), N 10.289 - W -68.211, m, 12.11.1996, M. Hartung leg. = *cruentata* (Rambur, 1842). Barinas Edo., Barinitas, 800m, N 8.743 - W -70.425

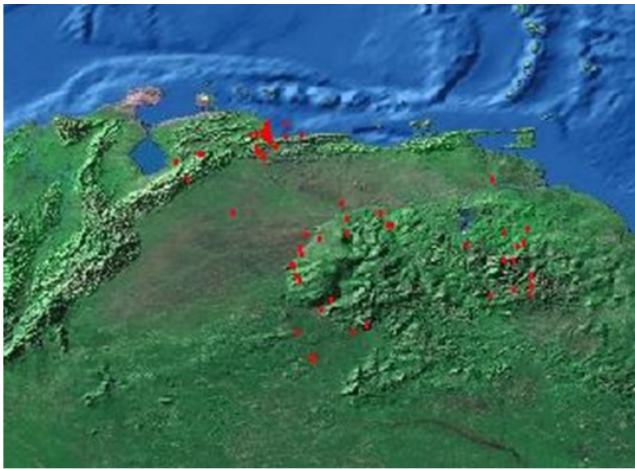


Fig. 1. Venezuela, the distribution of habitats

1 m, 1 f, 9.08.1994, Norbert Flauger leg. Garrison, 1990, Selys, 1854 - Bejuma, Edo. Carabobo, Cerro de Paja, Campamento Palmichal, prim. wood, 850-900, N 10.320 - W -67.767, 3 m, 9.11.1996, M. Hartung leg. - Trujillo Edo., Carache 15km NE, 2400m, N 9.667 - W -70.1, f, 27.12.1997, N. Flauger leg. = *medinai* Racenis, 1968. Bolivar, Maripa, R. Caura, N 7.411247 - W -65.197949, m, 15.08.1988, N. Flauger leg., Garrison, 1990 - Guayana, 40km N St. Elena, Sn. Francisco d. Y., R. Yuruany ('Yaspis'), N 5.067 - W -61.083, 2 m, 2 f, 15.10.1989, N. Flauger leg. = *occisa* Hagen in Selys, 1853. Aragua, Col. Tovar, 1800m, 60km SW Caracas, N 10.405 - W -67.308, m, 1.05.1991, Norbert Flauger leg., Garrison, 1990 - Barinas Edo., Barinitas, 1m, N 8.743 - W -70.425, m, 2.04.1992, Norbert Flauger leg. - Bejuma, Edo. Carabobo, 800m, Quebrada 'Guarapo', ca. 900m, N 10.292 - W -68.235, 5m, 7.11.1996, M. Hartung leg. - Bejuma, Edo. Carabobo, Canoabo, 300m, N 10.303 - W -68.285, 6 m, 7.7. (1994), Norbert Flauger leg. - Bejuma, Edo. Carabobo, Cerro de Paja, Campamento Palmichal, prim. wood, 850-900, N 10.320 - W -67.767, m, 9.11.1996, M. Hartung leg. - Carabobo Edo., Bejuma, Carrizal, 2 ponds outside, concrete outlet, N 10.185 - W -68.230, m, 13.11.1996, M. Hartung leg., Garrison, 1990 - Carabobo Edo., Canoabo, Quebrada. Agua Clara, small stream, N 10.393 - W -68.317, f, 4.11.1996, M. Hartung leg. - Carabobo Edo., La Mona, R. Chirgua, Water: 23.9C, Air: 34.9C, S 10.119 - W -68.2, m, 7.02.2001, leg. M. Hartung, Heckman, 2006 - Cojedes Edo., Manrique, small river, Water: 21.9C, Air: 29.0C, N 9.850 - W -68.545, m, 10.02.2001, M. Hartung leg. - Cojedes Edo., Manrique N, R. San Carlos, at bridge, Water: 21.6C, Air: 34.5C, N 9.873 - W -68.549, 2 m, 10.02.2001, M. Hartung leg. - Cojedes Edo., Manrique S, small river with dam at street, Water: 23.5C, Air: 27.6C, N 9.833 - W -68.55, f, 10.02.2001, M. Hartung leg. - Bolivar, Tachira Umuquena, 800m, N 7.0 - W -65.0, m, 23.03.1992, Norbert Flauger leg. = *sanguinea* Selys, 1853. 'Venezuela', S 10.0 - W -68.0, 1 m, 1f, 1.01.1981, Lehmann, Bergkamen, coll. - Cojedes Edo., near Hato Altamira (Hacienda), R. Tinaco, eutrophic low-land river, Water: 26.6C, Air: 34.5C, N 9.497 - W -68.365, 2 m, 1f, 11.02.2001, M. Hartung leg., Garrison, 1990 = *westfalli* Racenis, 1968. 50 km S Caicara, Area R. Guaniamo & R. Cuchivero, N 7.197 - W -66.123, 2 m, 1.05.1991, Norbert Flauger leg., Garrison, 1990

Zygoptera, Polythoridae. *Euthore fasciata* (Selys, 1853). Barinas Edo., Barinitas, 100m, N 8.743 - W -70.425 2 m, 2.04.1992, Norbert Flauger leg., Bick & Bick, 1992- Barinas Edo., Barinitas, 800m, N 8.743 - W -70.425, 2 m, 9.07.1994, Norbert Flauger leg. - Barinas Edo., Barinitas, 1400m, N 8.743 - W -70.425, 2 m, 20.11.1996, Norbert Flauger leg. = *meridana* Selys, 1879. Barinas Edo., Barinitas,

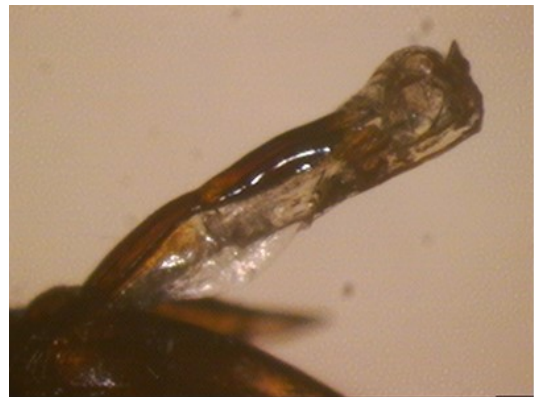
700m, N 8.743 - W -70.425, m, 20.08.1994, Norbert Flauger leg., Bick & Bick, 1992 - Barinas Edo., Barinitas, 1400m, N 8.743 - W -70.425, 1 m, 1 f, 20.11.1996, Norbert Flauger leg. - Barinas Edo., Barinitas, 800m, N 8.743 - W -70.425, 2 m, 1 f, 9.08.1994, Norbert Flauger leg.

Zygoptera, Polythoridae: *Cora cyane* Selys, 1853. Bejuma, Edo. Carabobo, Cerro de Paja, 900m, Quebrada 'Guarapo', ca. 900m, Water: 18.8C, Air: 24.7C, N 10.275 - W -68.249, hw, 12.02.2001, Emerged. 10.03.2001, M. Hartung leg., De Marmels, 1992, Bick & Bick, 1990, 1 w, Lf, 12.02.2001, M. Hartung leg. - Bejuma, Edo. Carabobo, Hacendia Palmichal, 600-700m, Hac. Palmichal, small stream, N 10.322 - W -68.231, m, 15.11.1996, Norbert Flauger leg. - Bejuma, Edo. Carabobo, Via Palmichal, 1m, Hac. Palmichal, small stream, N 10.317 - W -68.231, m, 15.11.1996, M. Hartung leg.

Zygoptera, Rimaneliidae: *Rimanella arcana* (Needham, 1933). Bolivar, way to Kavanayen, km40, Toron Meru, Gran Sabana, 800-1m, N 5.695 - W -61.562, 5m, 1 f, 1 E4-5.1991, Norbert Flauger leg., Geijskes, 1940 - Guayana, 40km N St. Elena, Sn. Francisco d. Y., R. Yuruany ('Yaspis'), N 5.067 - W -61.083, 3 m, 2 f, 15.05.-25.05.1989, Norbert Flauger leg. Guayana, El 88, S El Dorado, 350m, N 6.17 - W -61.46, m, 5.1989, Norbert Flauger leg.

Zygoptera, Lestidae: *Lestes forficula* Rambur, 1842. Canoabo south, 3 km from ocean, N 10.405 - W -68.698333, f, 10.11.1996, M. Hartung leg., Munz, 1919, Ris, 1918, Muzon, 1993 - Carabobo Edo., 3km S Canoabo, ponds at road, S 10.367 - W -68.321, 1 m, 1 f, 10.11.1996, M. Hartung leg. = *jerrelli* Tennesen, 1997. Bolivar, km78 n. Icabarú, Salto Cathedral, Gr. Sabana, N 4.34 -W -62.203, f, 26.05. 1991, Norbert Flauger leg., Calvert, 1901-08, Tennessee, 1991, 1997- Bolivar, way to Kavanayen, km40, Toron Meru, Gran Sabana, 800-1m, N 5.695 - W -61.562, 2 m, 10.-25.05.1990, Norbert Flauger leg. = *mediorufus* Calvert, 1909. Guayana, St. Elena, 5km N, N 4.715 - W -61.088, 10.25.-05.1989, Norbert Flauger leg.

Archilestes grandis (Rambur, 1842). Bejuma, Edo. Carabobo, 800m, Quebrada 'Guarapo', ca. 900m, N 10.292 - W -68.235, m, 8.11.1996, M. Hartung leg., Garrison, 1982, Williamson, 1921



Lestes jerrelli Tennesen, 1997 (Genital, Segment 2)



Lestes jerrelli Tennesen, 1997 (Thorax ventral)

Table. Species from Venezuela

Arten	M	W	E/L
1. Hetaerina caja c. (Drury, 1773)	13	7	0
2. Hetaerina capitalis Selys, 1873	1	1	1
3. Hetaerina cruentata (Rambur, 1842)	4	2	0
4. Hetaerina medinae Racenis, 1968	4	1	0
5. Hetaerina occisa Hagen in Selys, 1853	20	2	0
6. Hetaerina sanguinea Selys, 1853	3	2	0
7. Hetaerina westfalli Racenis, 1968	2	0	0
8. Euthore fasciata f. Hagen in Selys, 1853	6	1	0
9. Euthore meridana Selys, 1879	4	2	0
10. Cora cyane Selys, 1853	2	0	2
11. Rimanella arcana (Needham, 1933)	14	4	0
12. Lestes forficula Rambur, 1842	1	2	0
13. Lestes jерrelli Tennessen, 1997	3	1	0
14. Lestes mediorufus Selys, 1862	1	0	0
15. Archilestes grandis (Rambur, 1842)	1	0	0
16. Philogenia cassandra Hagen in Selys, 1862	7	2	0
17. Heteragrion chrysops Hagen in Selys, 1862	6	0	1
18. Heteragrion palmichale Hartung, 2002	2	0	0
19. Teinopodagrion macropus (Selys, 1862)	0	1	0
20. Teinopodagrion venale (Hagen in Selys, 1862)	8	4	0
21. Leptobasis vacillans Hagen in Selys, 1862	2	2	0
22. Metaleptobasis manicaria Williamson, 1915	0	1	0
23. Telebasis carminita Calvert, 1909	1	0	0
24. Telebasis corallinum (Selys, 1876)	1	0	0
25. Telebasis filiola (Perty, 1834)	13	8	0
26. Telebasis salvum (Hagen, 1861)	3	1	0
27. Telebasisgriffinii (Martin, 1896)	3	0	0
28. Nehalennia minuta m. (Selys, 1857)	0	1	0
29. Ischnura (Ceratura) capreolus (Hagen, 1861)	2	2	0
30. Ischnura ramburii (Selys, 1950)	2	2	0
31. Enallagma (Neoeryth. cultellatum Selys, 1876)	2	1	0
32. Enallagma novaehispaniae Calvert, 1907	5	0	0
33. Acanthagrion adustum Williamson, 1916	2	0	0
34. Acanthagrion truncatum Selys, 1876	1	0	0
35. Acanthagrion fluviatile (De Marmels, 1984)	1	1	0
36. Acanthagrion rubrifrons Leonard, 1977	0	1	0
37. Acanthagrion temporale Selys, 1876	1	0	0
38. Acanthagrion vidua Selys, 1876	15	2	0
39. Oxyagrion miniopsis Selys, 1876	0	1	0
40. Oxyagrion rubidum (Rambur, 1842)	1	0	0
41. Argia adamsi Calvert, 1902	2	2	0
42. Argia oculata Hagen in Selys, 1865	19	5	0
43. Argia translata Hagen in Selys, 1865	19	7	0
44. Argia difficilis Selys, 1865	1	3	0
45. Argia extranea (Hagen, 1861)	0	1	0
46. Argia cupraurea Calvert, 1902	2	1	0
47. Argia cuprea (Hagen, 1861)	3	1	0
48. Argia insipida Hagen in Selys, 1865	1	0	0
49. Argia medullaris Hagen in Selys, 1865	18	2	0
50. Argia pulla Hagen in Selys, 1865	12	5	0
51. Epipleoneura metallica Racenis, 1955	2	0	0
52. Neoneura cristina Racenis, 1955	0	1	0
53. Neoneura mariana Williamson, 1917	1	1	0
54. Neoneura rubriventris Selys, 1860	1	0	0
55. Neoneura sylvatica Hagen in Selys, 1886	1	1	0
56. Mecistogaster ornata Rambur, 1842	1	2	0
57. Mecistogaster linearis (Fabricius, 1777)	1	0	0
58. Mecistogaster lucretia (Drury, 1773)	2	8	0
59. Aeshna constricta (Say, 1839)	0	0	1
60. Rhionaeshna cornigera c. (Brauer, 1865)	9	9	16
61. Aeshna psilus Calvert, 1947	0	1	0
62. Aeshna marchali (Rambur, 1842)	7	1	1
63. Coryphaeschna adnexa (Hagen, 1862)	1	0	0
64. Coryphaeschna viriditas Calvert, 1952	0	1	0
65. Remartinia luteipennis l. (Burmeister, 1839)	4	2	8
66. Anax amazili (Burmeister, 1839)	1	4	1
67. Gynacantha bifida Rambur, 1842	1	1	0
68. Gynacantha membranalis Karsch, 1891	2	6	0
69. Gynacantha nervosa Rambur, 1842	6	6	0
70. Triacanthagyna septima (Selys, 1857)	0	1	0
71. Neuraeschna costalis Burmeister, 1839	0	1	0
72. Aphylla producta Selys, 1854	1	0	0
73. Aphylla molossus Selys, 1869	1	0	0
74. Phyllogomphoides major Belle, 1984	1	0	0
75. Phyllogomphoides undulatus (Needham, 1944)	4	0	0
76. Progompus abbreviatus Belle, 1973	3	0	0
77. Progompus geijskesi Needham, 1944	0	1	0
78. Allorrhizucha apicale Selys, 1876	1	0	0
79. Uracis oviposatrix Calvert, 1909	8	3	0
80. Uracis infumata (Rambur, 1842)	1	0	0
81. Uracis imbuta (Burmeister, 1839)	8	6	0
82. Uracis siemensis Kirby, 1897	1	0	0
83. Oligoclada abbreviata (Rambur, 1842)	1	0	0
84. Micrathyria aequalis (Hagen, 1861)	5	0	0
85. Micrathyria atra (Martin, 1898)	3	1	0
86. Micrathyria artemis Ris, 1891	2	0	0
87. Micrathyria venezuelae DeMarmels, 1989	16	10	31
88. Micrathyria pseudeximia Westfall, 1992	1	0	0
89. Nephelptia flavifrons (Karsch, 1889)	1	1	0
90. Nephelptia phryne (Perty, 1834)	3	1	0
91. Planiplax phoenicura Ris, 1912	0	1	0
92. Brachymesia furcata (Hagen, 1861)	2	0	0
93. Brachymesia herbida Grundlach, 1889	1	0	0
94. Orthemis discolor (Burmeister, 1839)	7	8	3
95. Orthemis biolleyi Calvert, 1906	2	3	0
96. Orthemis cultiformis Calvert, 1899	1	0	0
97. Orthemis attenuata (Erichson, 1848)	1	1	0
98. Cannaphila vibex (Hagen, 1861)	1	0	0
99. Dasythemis esmeralda Ris, 1910	1	0	0
100. Libellula herculea Karsch, 1889	4	0	3
101. Erythemis credula (Hagen, 1861)	0	0	1
102. Erythemis peruviana (Rambur, 1842)	2	0	0
103. Erythemis mithroides (Brauer, 1900)	2	0	0
104. Erythemis attala (Selys in Sagra, 1857)	0	1	0
105. Erythemis haematogastra (Burmeister, 1839)	0	3	0
106. Erythemis plebeja Burmeister, 1839	5	1	0
107. Erythemis vesiculosa (Fabr., 1775)	2	5	0
108. Erythrodiplax amazonica a. Sjöstedt, 1918	1	0	0
109. Erythrodiplax castanea (Burm., 1839)	1	3	0
110. Erythrodiplax angustipennis Borrer, 1942	1	1	0
111. Erythrodiplax famula f. (Erichson, 1848)	0	3	0
112. Erythrodiplax famula lativittata Borrer, 1942	10	7	0
113. Erythrodiplax naeva (Hagen, 1861)	5	5	0
114. Erythrodiplax fulva Borrer, 1957	5	4	0
115. Erythrodiplax umbrata (L., 1758)	9	11	0
116. Erythrodiplax fervida (Erichson, 1848)	7	12	0
117. Erythrodiplax juliana Ris, 1911	1	0	0
118. Erythrodiplax basalis b. (Kirby, 1897)	9	0	0
119. Erythrodiplax kimminsi Borrer, 1942	2	1	0
120. Erythrodiplax connata fusca (Rambur, 1842)	28	5	0
121. Erythrodiplax paraguayensis (Förster, 1904)	3	0	0
122. Erythrodiplax venusta (Kirby, 1897)	4	0	0
123. Erythrodiplax unimaculata (De Geer, 1773)	0	1	0
124. Rhodopygia hollandi Calvert, 1907	2	0	0
125. Sympetrum illotum gilvum (Selys, 1884)	2	0	0
126. Ypirangthemis calverti Santos, 1945	9	4	0
127. Dythemis multipunctata Kirby, 1894	4	1	0
128. Dythemis sterilis Hagen, 1861	2	1	0
129. Brechmorhoga vivax Calvert, 1906	3	0	0
130. Brechmorhoga nubecula (Rambur, 1842)	0	4	0
131. Brechmorhoga valida (Navas, 1916)	1	0	0
132. Brechmorhoga rapax r. Calvert, 1898	2	0	0
133. Macrothemis hahneli Ris, 1913	1	0	0
134. Macrothemis hemichlora (Burmeister, 1839)	0	1	0
135. Macrothemis i. leucozona Ris, 1913	1	2	2
136. Macrothemis pseudimitans Calvert, 1898	5	2	0
137. Macrothemis musiva Calvert, 1898	1	0	0
138. Macrothemis rupicola Racenis, 1957	2	0	0
139. Macrothemis tessellata inequiunguis Calvert, 1895	1	1	0
140. Macrothemis tessellata tessellata (Burmeister, 1839)	0	2	0
141. Diastatops estherae Montgomery, 1940	5	0	0
142. Diastatops obscura (Fabricius, 1775)	4	3	0
143. Zenithoptera fasciata (L., 1758)	4	0	0
144. Zenithoptera viola Ris, 1910	7	5	0
145. Zenithoptera lanci Santos, 1941	2	1	0
146. Perithemis electra Ris, 1930	3	0	3
147. Perithemis domitia (Drury, 1773)	2	0	1
148. Perithemis mooma Kirby, 1889	5	2	0
149. Perithemis lais (Perty, 1834)	9	0	0
150. Pantala flavescens (Fabricius, 1798)	7	1	4
151. Tramea cophysa (Hagen, 1867)	2	0	0
152. Tramea rustica De Marmels & Racenis, 1982	1	1	0
153. Tramea minuta De Marmel & Racenis, 1982	0	1	0
154. Tramea calverti Muttkowski, 1910	3	1	0
155. Tramea binotata (Rambur, 1842)	1	0	0
156. Tramea binotata f. pantepuyan DeMarmels, 1994	1	0	0
157. Tramea abdominalis (Rambur, 1842)	1	4	6
158. Tholymis citrina (Hagen, 1867)	7	7	0
159. Tauriphila australis (Hagen, 1867)	1	0	2
160. Miathyria marcella (Selys, 1857)	8	5	0
Anzahl der Datensätze: 934			

Zygotera, Megapodagrionidae: *Philogenia cassandra* Hagen in Selys, 1862. Bejuma, Edo. Carabobo, 800m. Quebrada 'Guarapo', ca. 900m, N 10.292 - W -68.235, 2 m, 1 f, 8.11.1996, M. Hartung leg., Racenis, 1959, DeMarmels, 1982 - Bejuma, Edo. Carabobo, Cerro de Paja, 1m, Quebrada 'Guarapo', ca. 900m, Water: 17.2C, Air: 22.2C, N 10.295 - W -68.229, f, 14.02.2001, M. Hartung leg., Racenis, 1953, 1959 - Bejuma, Edo. Carabobo, Hacienda Palmichal, 600-700m, small stream, N 10.322 - W -68.231, 3 m, 15.11.1996, M. Hartung leg. - Bejuma, Edo. Carabobo, Via Palmichal, Casa Maria, 800m, N 10.283 - W -68.254, 2 m, 28.08.1998, N. Flauger leg.

Heteragrion chrysops Hagen in Selys, 1862. Bejuma, Edo. Carabobo, 800m, Quebrada 'Guarapo', ca. 900m, N 10.292 - W -68.235, 4 m, 1 f, 16.11.1996, M. Hartung leg., Racenis, 1959, Williamson, 1919 - Bejuma, Edo. Carabobo, Hacienda Palmichal, 600-700m, small stream, N 10.322 - W -68.231, 2 m, 15.11.1996, M. Hartung leg. - Carabobo Edo., Via Palmichal, Quebrada Palmichal, N 10.816667 - W -67.766667, m, 8.12.2015, leg. Norbert Flauger = *palmichale* Hartung, 2002. Bejuma, Edo. Carabobo, Via Palmichal, 1200m, N 10.283 - W -68.317, 2 m, 13.06.1992, Norbert Flauger leg., TYPE, PARATYPE, M. Hartung, 2002

Teinopodagrion macropus (Selys, 1862). Trujillo Edo., Carache 15km NE, 2400m, N 9.667 - W -70.1, f, 27.12.1997, N. Flauger leg., Munz, 1919, Racenis, 1959 = *venale* (Hagen in Selys, 1862). Aragua, Col. Tovar, 1800m, 60km SW Caracas, N 10.405 - W -67.308, m, 15-25.05.1989, Norbert Flauger leg., Racenis, 1959, DeMarmels, 1982 - Bejuma, Edo. Carabobo, 800m, Quebrada 'Guarapo', ca. 900m, N 10.292 - W -68.235, 3 m, 8.11.1996, M. Hartung leg. - Bejuma, Edo. Carabobo, Cerro de Paja, Campamento Palmichal prim. wood, 850-900, N 10.322 - W -68.231, 2 m, 15.02.2001, M. Hartung leg. - Bejuma, Edo. Carabobo, Via Palmichal, 1200m, N 10.283 - W -68.211, 2 m, 3f, 12.11.1996, M. Hartung leg. - Carabobo, Edo. Via Palmichal, Quebrada Palmichal, N 10.816667 - W -67.66667, m, 8.12.2015, leg. Norbert Flauger

Zygotera, Coenagriidae: *Leptobasis vacillans* Hagen in Selys, 1862. Bejuma, Edo. Carabobo, Cerro de Paja, Campamento Palmichal prim. wood, 850-900, N 10.32 - W -67.767, f, 9.11.1996, M. Hartung leg., Calvert, 1909, Santos, 1961, Förster, 1999 - Bejuma, Edo. Carabobo, Hacienda Palmichal, 600-700m, small stream, N 10.322 - W -68.231, 1 m, 1 f, 15.11.1996, M. Hartung leg. - Edo. Cojedes, Manrique near, small stream at street, Water: 21.9C, Air: 34.5C, N 9.855 - W -68.545, m, 10.02.2001, M. Hartung leg.

Metaleptobasis manicaria Williamson, 1915. Guayana, El 88, S El Dorado, 350m, N 6.17 - W -61.46, f, 15. -25.05.1989, Norbert Flauger leg.

Telebasis carminita Calvert, 1909. Amazonas border, road Caicara-Pto. Ayacucho, N 6.133 - W -67.383, m, 27.12.1996, Norbert Flauger leg., Calvert, 1909, Bick & Bick, 1995 = *corallinum* (Selys, 1876). Carabobo Edo., 3km S Canoabo, ponds at road, N 10.367 - W -68.321, m, 10.11.1996, M. Hartung leg., Munz, 1919, Bick & Bick, 1995 = *filiola* (Perty, 1834). Bejuma, Edo. Carabobo, Via Palmichal, 800m, Casa Maria, 800m, small artif. pond, N 10.283 - W -68.254, 6 m, 2 f, 7.11.1996, M. Hartung leg., Bick & Bick, 1995, Calvert, 1902-08 - Carabobo Edo., 3km S Canoabo, ponds at road, N 10.367 - W -68.321, 5m, 5 f, 10.11.1996, M. Hartung leg. - Carabobo Edo., San Pablo, 100m, R. Yaracuy, flood area at bridge, Water: 25.0C, Air: 32.5C, N 10.528 - W -68.393, 2 m, 1 f, 16.02.2001, M. Hartung leg. = *salvum* (Hagen, 1861). Carabobo Edo., 3km S Canoabo, ponds at road, N 10.367 - W -68.321, 3 m, 1 f, 10.11.1996, M. Hartung leg., Bick & Bick, 1995, Calvert, 1895 = *griffinii* (Martin, 1896). Carabobo Edo., Bejuma, Carrizal, 2 ponds outside, concrete outlet, Water: 25.5C, Air: 32.1C, N 10.186 - W -68.228, 2 m, 7.02.2001, M. Hartung leg., Bick & Bick, 1995 - Carabobo Edo., San Pablo, 100m, R. Yaracuy, flood area at bridge, Water: 25.0C, Air: 32.5C, N 10.528 - W -68.393, m, 16.02.2001, M. Hartung leg.

Nehalennia minuta m. (Selys, 1857 - Tropical Sprite). Road from Edo. Aragua, to Maripa ca. 500km, road, N 7.402 - W -65.192, f, 5.05.1989, Norbert Flauger leg., De Marmels, 1984

Ischnura (Ceratura) capreolus (Hagen, 1861). Aragua, Col. Tovar, 1800m, 60km SW Caracas, N 10.405 - W -67.308, 1 m, 1 f, 4.05.1991, Norbert Flauger leg., Ris, 1916, Munz, 1919 - Cojedes Edo., San Carlos N, Manrique S, river, at bridge, Water: 23.2C, Air: 33.2C, N 9.791 - W -68.509, m, 10.02.2001, M. Hartung leg. - Cojedes Edo., near Hato Altamira (Hacienda), Rest pool of stream, Water: 26.6C, Air: 33.5C, N 9.541 - W -68.352, f, 11.02.2001, M. Hartung leg.

Ischnura ramburii (Selys, 1950). Falcon Edo., Boca Aroa, R. Aroemouth, Water: 27.7C, Air: 32.8C, N 10.684 - W -68.302, m, 13.02.2001, M. Hartung leg., Westfall & May, 1996, Förster, 1999 - Cojedes Edo., near Hato Altamira (Hacienda), 'red ground' pond at street, Water: 31.1C, Air: 33.8C, N 9.631 - W -68.385, 1 m, 1 f, 11.02.2001, M. Hartung leg. - Cojedes Edo., near Hato Altamira (Hacienda), R. Tinaco, eutrophic low-land river, Water: 26.6C, Air: 34.5C, N 9.497 - W -68.365, f, 10.02.2001, M. Hartung leg.

Enallagma (Neoeryth.) cultellatum Selys, 1876. Bejuma, Edo. Carabobo, Canoabo, 300m, N 10.303 - W -68.285, 2 m, 1 f, 7.07.1994, Norbert Flauger leg., Needham & Heywood, 1929 = *novaehispaniae* Calvert, 1907. Cojedes Edo., Manrique N, R. San Carlos, at bridge, Water: 21.6C, Air: 34.5C, N 9.873 - W -68.549, m, 10.02.2001, M. Hartung leg., Förster, 1999 - Cojedes Edo., San Carlos N, Manrique S, river, at bridge, Water: 23.2C, Air: 33.2C, N 9.791 - W -68.509, 4 m, 10.02.2001, M. Hartung leg.

Acanthagrion adustum Williamson, 1916. Maripa, R. Caura, N 7.411247 - W -65.197949, m, 18.05.1991, Norbert Flauger leg., Williamson, 1916 - Maripa, stream at gasol. station, R. Caura, N 7.411247 - W -65.197949, m, 15.05.1990, Norbert Flauger leg. = *truncatum* Selys, 1876. Amazonas border, road Caicara-Pto. Ayacucho, N 6.133 - W -67.383, m, 27.12.1996, Norbert Flauger leg., Leonard, 1977 = *fluviale* (De Marmels, 1984). 50 km S Caicara, S Cumbre, Area R. Guaniamo & R. Cuchivero, N 7.197 - W -66.123, m, 11.05.1991, Norbert Flauger leg., DeMarmels, 1984 - Yaracuy Edo., 1km N Albarico, small, slow run. stream, N 10.405 - W -68.698 f, 11.11.1996, M. Hartung leg. = *rubrifrons* Leonard, 1977. Guayana, 40km N St. Elena, Sn. Francisco d. Y, R. Yuruany ('Yaspis'), N 5.067 - W -61.083, m, 10.-25.10.1989, Norbert Flauger leg., DeMarmels, 1990 = *temporale* Selys, 1876. Cojedes Edo., near Hato Altamira (Hacienda), R. Tinaco, eutrophic low-land river, Water: 26.6C, Air: 34.5C, S 9.497 - W -68.365, m, 11.02.2001, M. Hartung leg., Leonard, 1977 = *vidua* Selys, 1876. Aragua, Col. Tovar, 1800m, 60km SW Caracas, N 10.405 - W -67.308, m, 15.05.1989, 25.05.1989, Norbert Flauger leg., Leonard, 1977, Tsuda, 1991 - Bejuma, Edo. Carabobo, Quebrada 'Guarapo', ca. 900m, N 10.292 - W -68.235, 3 m, 2 f, 7.11.1996, M. Hartung leg. - Bejuma, Edo. Carabobo, Via Palmichal, 800m, Casa Maria, 800m, small artif. pond, N 10.283 - W -68.254, 4 m, 7.11.1996, M. Hartung leg. - Carabobo Edo., Bejuma, Carrizal, 2 ponds outside, concrete outlet, N 10.185 - W -68.23, m, 13.11.1996, M. Hartung leg. - Carabobo Edo., La Mona, R. Chirgua, Water: 23.9C, Air: 34.9C, N 10.119 - W -68.2, 3 m, 7.02.2001, M. Hartung leg. - Cojedes Edo., Manrique N, R. San Carlos, at bridge, Water: 21.6C, Air: 34.5C, N 9.873 - W -68.549, m, 10.02.2001, M. Hartung leg. - Cojedes Edo., San Carlos N, Manrique S, river, at bridge, Water: 23.2C, Air: 33.2C, N 9.791 - W -68.509, m, 10.02.2001, M. Hartung leg. - San Pablo, Edo. Carabobo, 100m, R. Yaracuy, flood area at bridge, N 10.528 - W -68.393, m, 4.11.1996, M. Hartung leg.

Oxyagrion miniopsis Selys, 1876. Barinas Edo., Barinitas, 1400m, N 8.743 - W -70.425, f, 20.11.1996, Norbert Flauger leg., St. Quentin, 1961, Costa, 1978 = *rubidum* (Rambur, 1842). R. Caura, N 7.411247 - W -65.197949, m, 18.05.1991, Norbert Flauger leg., Garrison, Ellenrieder & Louton, 2010. *Argia adamsi* Calvert, 1902. Guayana, 40km N St. Elena, Sn. Francisco d. Y, R. Yuruany ('Yaspis'), N 5.067 - W -61.083, 2m, 1 f, 5. 1989, Norbert Flauger leg., Calvert, 1908 = *oculate* Selys, Guayana, 40km N St. Elena, Sn. Francisco d. Y, R. Yuruany ('Yaspis'), N 5.067 - W -61.083, m, 10.10.-25.10.1989, Norbert Flauger leg., Calvert, 1901-08 - Bejuma, Edo. Carabobo, 800m, Quebrada 'Guarapo', ca. 900m, N 10.292 - W -68.235, 4 m, 2 f,

16.11.1996, M. Hartung leg. - Bejuma, Edo. Carabobo, Canoabo, 300m, N 10.303 - W -68.285, 2 m, 7.7. (1994), Norbert Flauger leg. - Bejuma, Edo. Carabobo, Cerro de Paja, Campamento Palmichal prim. wood, 850-900, N 10.32 - W -67.767, 2 m, 9.11.1996, M. Hartung leg. - Bejuma, Edo. Carabobo, Hacendia. Palmichal, 600-700m, small stream, N 10.322 - W -68.231, 2 m, 15.11.1996, M. Hartung leg. - Salto Huesco, Mucumata, Gr. Sabana, N 5.635 - W -61.801, m, 2.09.1997, Norbert Flauger leg. - Yaracuy Edo., 1km N Albarico, small, slow run. stream, N 10.405 - W -68.698, 7 m, 3 f, 11.11.1996, M. Hartung leg. = *translata* Hagen in Selys, 1865. Bejuma, Edo. Carabobo, Canoabo, 300m, N 10.303 - W -68.285, 4 m, 1 f, 7.7.(1994), Norbert Flauger leg., Calvert, 1901-08, Westfall & May, 1996 - Weg n. S. Juan d. Manapiare, Guamura, Area R. Guaniamo & R. Cuchivero, N 6.7 - W -66.117, m, 4-5.1991, Norbert Flauger leg. - Carabobo Edo., Canoabo, Quebrada. Agua Clara, small stream, N 10.393 - W -68.317, 3 m, 1 f, 4.11.1996, M. Hartung leg. - Carabobo Edo., La Mona, R. Chirgua, Water: 23.9C, Air: 34.9C, N 10.119 - W -68.2, 3 m, 7.02.2001, M. Hartung leg., Westfall & May, 1996 Cojedes Edo., Manrique N, R. San Carlos, at bridge, Water: 21.6C, Air: 34.5C, N 9.873 - W -68.549, 6 m, 1 f, 10.02.2001, M. Hartung leg., Westfall & May, 1996 Cojedes Edo., Manrique N, R. San Carlos, at bridge, Water: 21.6C, Air: 34.5C, N 9.873 - W -68.549, 2 f, 10.02.2001, M. Hartung leg. - Cojedes Edo., Manrique S, small river with dam at street, Water: 23.5C, Air: 27.6C, N 9.833 - W -68.55, f, 10.02.2001, M. Hartung leg - Yaracuy Edo., 1km N Albarico, small, slow run. stream, N 10.405 - W -68.698, 2 m, 11.11.1996, M. Hartung leg., Calvert, 1901-08 = *difficilis* Selys, 1865. Guayana, 40km N St. Elena, Sn. Francisco d. Y, R. Yuruany ('Yaspis'), N 5.067 - W -61.083, 1 m, 2 f, 10.10.-25.10.1989, Norbert Flauger leg., Heckmann, 2008 - Guayana, El 88, S El Dorado, 350m, N 6.17 - W -61.46, f, 10.-25.05.1990, Norbert Flauger leg. = *extranea* (Hagen, 1861). Carabobo Edo., Bejuma, Carrizal, 2 ponds outside, concrete outlet, N 10.185333 - W -68.23, f, 13.11.1996, M. Hartung leg., Heckmann, 2008 = *cupraurea* Calvert, 1902. Carabobo Edo., Bejuma, Carrizal, 2 ponds outside, concrete outlet, N 10.185 - W -68.23, m, 13.11.1996, M. Hartung leg., Calvert, 1901-08, Ris, 1916 - Carabobo Edo., Canoabo, Quebrada. Agua Clara, small stream, N 10.393 - W -68.317, f, 17.08.1998, Norbert Flauger leg. - Carabobo Edo., La Mona, R. Chirgua, Water: 23.9C, Air: 34.9C, N 10.119 - W -68.2 m, 7.02.2001, M. Hartung leg. = *cuprea* (Hagen, 1861). Bejuma, Edo. Carabobo, Canoabo, 300m, N 10.303 - W -68.285, 3m, 1 f, 7.7.(1994), Norbert Flauger leg., Ris, 1918, Calvert, 1908 = *insipida* Hagen in Selys, 1865. Guayana, 40km N St. Elena, Sn. Francisco d. Y, R. Yuruany ('Yaspis'), N 5.067 - W -61.083, m, 5.1989, Norbert Flauger leg., Hagen & Calvert, 1902 = *medullaris* Hagen in Selys, 1865. Barinas Edo., Barinitas, 1400m, N 8.743 - W -70.425, 3 m, 20.11.1996, Norbert Flauger leg., Hagen & Calvert, 1902, Calvert, 1901-08 - Carabobo Edo., Bejuma, Via Palmichal, 1200m, N 10.283 - W -68.211, m, 12.11.1996, M. Hartung leg., Calvert, 1901-08), pl. 4, f. 54 - Way to Kavanayen, km40, Toron Meru, Gran Sabana, 800-1m, N 5.695 - W -61.562, 14 m, 2 f, 4.-5.1991, Norbert Flauger leg. = *pulla* Hagen in Selys, 1865. Bejuma, Edo. Carabobo, Canoabo, 300m, N 10.303 - W -68.285, 1 m, 1 f, 7.7. (1994), Norbert Flauger leg., Heckman, 2008, Westfall & May, 1996 - Maripa, R. Caura, N 7.411247 - W -65.197949, f, 18.05.1991, Norbert Flauger leg. - St. Elena, N 4.505338 - W -61.528229, f, 18.05.1991, Norbert Flauger leg. - Carabobo Edo., Bejuma, Carrizal, 2 ponds outside, concrete outlet, N 10.185 - W -68.23, 6 m, 1f, 13.11.1996, M. Hartung leg. - Carabobo Edo., La Mona, R. Chirgua, Water: 23.9C, Air: 34.9C, N 10.119 - W -68.2, m, 7.02.2001, M. Hartung leg. - Cojedes Edo., Manrique S, small river with dam at street, Water: 23.5C, Air: 27.6C, N 9.833 - W -68.55, m, 10.02.2001, M. Hartung leg. - Cojedes Edo., San Carlos N, Manrique S, river, at bridge, Water: 23.2C, Air: 33.2C, N 9.791 - W -68.509, 3m, 1 f, 10.02.2001, M. Hartung leg.

Zygoptera, Protoneuridae: *Epipleoneura metallica* Racenis, 1955. Maripa, stream at gasol. station, R. Caura, N 7.411247 - W -65.197949, 2 m, 15.05.1990, Norbert Flauger leg.

Neoneura cristina Racenis, 1955. Maripa, stream at gasol. station, R. Caura, N 7.411247 - W -65.197949, f, 15.05.1990, Norbert Flauger leg., Racenis, 1955 = *mariana* Williamson, 1917. Guayana, 40km N

St. Elena, Sn. Francisco d. Y, R. Yuruany ('Yaspis'), N 5.067 - W -61.083, 1 m, 1 f, 10.-25.10.1989, Norbert Flauger leg., Williamson, 1917 = *rubriventris* Selys, 1860. Guayana, El 88, S El Dorado, 350m, N 6.17 - W -61.46, m, 10.-25.10.1989, Norbert Flauger leg., Racenis, 1955 = *sylvatica* Hagen in Selys, 1886. 50 km S Caicara, Area R. Guaniamo & R. Cuchivero, N 7.197 - W -66.123, 1 m, 1 f, 11.05.1991, Norbert Flauger leg., Racenis, 1955, Williamson, 1917

Zygoptera, Pseudostigmatidae: *Mecistogaster ornata* Rambur, 1842. Bejuma, Edo. Carabobo, Cerro de Paja, Campamento Palmichal prim. wood, 850-900, N 10.32 - W -67.767, f, 9.11.1996, Norbert Flauger leg., Selys, 1886 - Bejuma, Edo. Carabobo, Via Palmichal, 800m, Casa Maria, N 10.283 - W -68.254, f, 20.01.1995, Norbert Flauger leg. - Guayana, 40km N St. Elena, Sn. Francisco d. Y, R. Yuruany ('Yaspis'), N 5.067 - W -61.083, m, 10.-25.10.1989, Norbert Flauger leg. = *linearis* (Fabricius, 1777). Guayana, El 88, S El Dorado, 350m, N 6.17 - W -61.46, m, 5.09.1997, Norbert Flauger leg., Fraser, 1946 = *lucretia* (Drury, 1773). Guayana, 40km N St. Elena, Sn. Francisco d. Y, R. Yuruany ('Yaspis'), N 5.067 - W -61.083, 2 m, 4 f, 10.-25.10.1989, Norbert Flauger leg., Selys, 1986, Aguilar, 1985- Guayana, El 88, S El Dorado, 350m, N 6.17 - W -61.46, 4 f, 15.08.1988, Norbert Flauger leg.

Anisoptera, Aeshnidae: *Aeshna constricta* (Say, 1839). Bejuma, Edo. Carabobo, Cerro de Paja, Pond in wood, 1400m, Water: 19.3C, Air: 24.4C, N 10.27582 - W -68.23402, L, 9.02.2001, M. Hartung leg. = *psilus* Calvert, 1947. Bejuma, Edo. Carabobo, Cerro de Paja, Pond in wood, 1400m, Water: 19.3C, Air: 24.4C, N 10.27582 - W -68.23402, f, 5.11.1996, M. Hartung leg., Calvert, 1956, Calvert, 1901-08 = *marchali* (Rambur, 1842). Humocaro (Anden), 2450m, N 9.692 - W -70.118, 6 m, 3.01.1998, Norbert Flauger leg., Piper, 1997, Calvert, 1956 - Trujillo Edo., Carache 15km NE, 2500m, N 9.7 - W -70.05, 1 Em, 1 m, 1 f, 26.12.1997, N. Flauger leg.

Rhionaeshna cornigera c. (Brauer, 1865). Aragua, Col. Tovar, 1800m, 60km SW Caracas, N 10.405 - W -67.308, 1 m, 1 f, 5.05.1989, Norbert Flauger leg. - Bejuma, Edo. Carabobo, Cerro de Paja, Campamento Palmichal, prim. wood, 850-900, N 10.322 - W -68.231, Em, 15.02.2001, M. Hartung leg., EC, Calvert, 1956, Heckman, 2006 - Bejuma, Edo. Carabobo, Cerro de Paja, Pond in wood, 1400m, Water: 19.3C, Air: 24.4C, 10.275817 - W -68.234017, 1 E, 6 f, 2 Ef, 1 hw, 9.02.2001, leg. M. Hartung - Bejuma, Edo. Carabobo, Hacendia Palmichal, 1m, small stream at street, N 10.322 - W -68.231, 5m, 7 f, 1 Hm, Ef, 1 Em, 15.11.1996, 4.02.2001, M. Hartung leg., EC - Carabobo Edo., Cumbre Canoabo, La Rosa, N 10.265 - W -68.279 f, 5.11.1996, M. Hartung leg.

Coryphaeschna adnexa (Hagen, 1862). Bejuma, Edo. Carabobo, Via Palmichal, 800m, Casa Maria, 800m, small artif. pond, N 10.283 - W -68.254, m, 5.11.1996, Norbert Flauger leg., at light, Calvert, 1956 = *viriditas* Calvert, 1952. Bejuma, Edo. Carabobo, Via Palmichal, 800m, Casa Maria, N 10.283 - W -68.254, f, 15.06.1997, Norbert Flauger leg., Calvert, 1956, Martin, 1909, det. G. Peters.

Remartinia luteipennis l. (Burmeister, 1839). Bejuma, Edo. Carabobo, Via Palmichal, Casa Maria, 800m, N 10.283 - W -68.254, 2 m, 1 f, 1 Em, 2 Ef, 2 Hm, 1 Hf, 5 f, 1 Lm, 20.12.1998, N. Flauger leg., Piper, 1997, Carvalho, 1992 - Gr. Sabana, km78 to Icabarú, Salto Cathedral, N 4.34 - W -62.203, 2 m, 26.05.1991, Norbert Flauger leg.

Anax amazili (Burmeister, 1839). Bejuma, Edo. Carabobo, Via Palmichal, 800m, Casa Maria, N 10.283 - W -68.254, 1 m, 1 f, 1 Ef, 26.09.1997, Norbert Flauger leg., De Marmels, 1990, Dunkle, 1989 - Bejuma, Edo. Carabobo, Via Palmichal, 800m, Casa Maria, 800m, small artif. pond, N 10.283 - W -68.254, 3 f, 10.11.1996, F. Koenig leg., at light

Gynacantha bifida Rambur, 1842. Weg n. S. Juan d. Manapiare, Guamura, Area R. Guaniamo & R. Cuchivero, N 6.70 - W -66.117, m, 1.05.1991, Norbert Flauger leg. Gr. Sabana, km78 n. Icabarú, Salto Cathedral, N 4.34 - W -62.203, f, 26.05.1991, Norbert Flauger leg. = *membranalis* Karsch, 1891. Bejuma, Edo. Carabobo, Via Palmichal,

Casa Maria, 800m, N 10.283 - W -68.254, 1 m, 5 f, 4. 2000, N. Flauger leg., Williamson, 1923 - Bejuma, Edo. Carabobo, Via Palmichal, 800m, Casa Maria, 800m, small artif. pond, N 10.283 - W -68.254, 1 m, 1 f, 7.1995, Norbert Flauger leg. = *nervosa* Rambur, 1842. Bejuma, Edo. Carabobo, Via Palmichal, 800m, Casa Maria, N 10.283 - W -68.254, 2 m, 1 f, 10.06.1992, Norbert Flauger leg., Williamson, 1923 - Bolivar Edo., Piginao near, N 6.50 - W -66.833, 3 m, 5 f, 15.08.1998, Norbert Flauger leg. - Guayana, 40km N St. Elena, Sn. Francisco d. Y. R. Yuruany ('Yaspis'), N 5.067 - W -61.083, m, 15.10.1989, Norbert Flauger leg.

Triacanthagyna septima (Selys, 1857). Bejuma, Edo. Carabobo, Via Palmichal, 800m, Casa Maria, N 10.283 - W -68.254, f, 18.01.1997, Norbert Flauger leg., Williamsom, 1923.

Neuraeshna costalis Burmeister, 1839. Guayana, El 88, S El Dorado, 350m, N 6.17 - W -61.46, f, 1.05.1988, Norbert Flauger leg., Piper, 1997

Anisoptera, Gomphidae: *Aphylla producta* Selys, 1854. Guayana, El 88, S El Dorado, 350m, N 6.17 - W -61.46, m, 20.04. -5.05.1988, Norbert Flauger leg. = *molossus* Selys, 1869. Bolivar Edo., La Reforma, N 6.824 - W -61.2, m, 22.09.2000, N. Flauger leg., Belle, 1970, 1992

Phyllogomphoides major Belle, 1984. Amazonas, Pto. Ayacucho 20km S, R. Paria, N 5.50 - W -67.583, m, 26.12.1996, Norbert Flauger leg., Belle, 1984 = *undulatus* (Needham, 1944). Guayana, El 68, Caretera El Dorado, N 6.313 - W -61.302, 4 m, 5.09.1997, Norbert Flauger leg., Belle, 1970 = *abbreviatus* Belle, 1973. Bejuma, Edo. Carabobo, 800m, Quebrada 'Guarapo', ca. 900m, S 10. 292 - W68.235, m, 8.11.1996, M. Hartung leg., Belle, 1973, DeMarmels, 1981 - Bejuma, Edo. Carabobo, Via Palmichal, 1200m, N 10.283 - W -68.211, 2 m, 12.11.1996, M. Hartung leg.

Progomphus geijskesi Needham, 1944. Bolivar Edo., R. Hacha, R. Supamo, N 6.7 - W -61.8, f, 17.09.2000, N. Flauger leg., Belle, 1966, Needham, 1944

Anisoptera, Libellulidae: *Allorrhizucha apicale* Selys, 1876. Guayana, El 88, S El Dorado, 350m, S 6.17 - W -61.46, m, 15.05.-25.05.1989, Norbert Flauger leg., Calvert, 1909.

Uracis ovipositorix Calvert, 1909. Amazonas Edo., Municipio. Rio Negro, Cano Casiquiare, 450-420m, N 2.0 - W -67.0, 4 m, 13.-24.08.1994, Maluz leg., Fraser, 1946, Santos, 1955, Santos, 1956 - Amazonas Edo., Municipio. Rio Negro, Cano Casiquiare, 450-420m, N 2.00 - W -67.00, f, 13.-24.08.1994, Maluz leg. - Amazonas, Pto. Ayacucho 20km SE, R. to Gavilan, N 5.08 - W -67.51 3 m, 6.09.1998, N. Flauger leg., Ris, 1911 - Bejuma, Edo. Carabobo, Via Palmichal, 800m, Casa Maria, N 10.283 - W -68.254, f, 1997, Norbert Flauger leg. - Las Trincheras, R. Caura, N 6.98 - W -64.857, f, 8.10. 1996, Norbert Flauger leg. Guayana, El 88, S El Dorado, 350m, N 6.17 - W -61.46, m, 15.05.1989, Norbert Flauger leg. = *infumata* (Rambur, 1842). Cuaio Amaionas, N 10.00 - W -68.00, m, 17.03.2000, N. Flauger leg., Ris, 1911 = *imbuta* (Burmeister, 1839). Amazonas Edo., Jerusalem, N 5.908 - W -67.317, f, 10.09.1998, N. Flauger leg., Ris, 1911, Borrer, 1947 - Bejuma, Edo. Carabobo, Hacienda Palmichal, 600-700m, small stream, N 10.322 - W -68.231, m, 15.11.1996, M. Hartung leg. - Carabobo Edo., Cumbre Canoabo, La Rosa, stream in wood, N 10.265 - W -68.279, 2 m, 5.11.1996, M. Hartung leg. - Cojedes Edo., Manrique N, R. San Carlos, at bridge, Water: 21.6C, Air: 34.5C, N 9.873 - W -68.549, f, 10.02.2001, M. Hartung leg. - Cojedes Edo., near Hato Altamira (Hacienda), R. Tinaco, eutrophic low-land river, Water: 26.6C, Air: 34.5C, N 9.497 - W -68.365, m, 11.02.2001, M. Hartung leg. - Guayana, El 88, S El Dorado, 350m, N 6.17 - W -61.46, 3 f, 3 m, 1.05.1988, Norbert Flauger leg. - Bolivar, KM96, road to St. Helena, m, 21.09.2000, N. Flauger leg. = *siemensi* Kirby, 1897. Amazonas Edo., near Yávida, upper R. Atabapo, N 2.917 - W -67.417, m, 20.09.1999, N. Flauger leg., Ris, 1911.

Oligoclada abbreviata (Rambur, 1842). Amazonas, Pto. Ayacucho 20km SE, R. to Gavilan, N 5.08 - W -67.51, m, 6.09.1998, N. Flauger leg., Borrer, 1931, Ris, 1919

Micrathyria aequalis (Hagen, 1861). Carabobo Edo., Bejuma, Carrizal, 2 ponds outside, concrete outlet, N 10.185 - W -68.23, 4 m, 13.11.1996, M. Hartung leg., Ris, 1911, Racenis, 1953 - Carabobo Edo., Bejuma, Carrizal, 2 ponds outside, concrete outlet, Water: 25.5C, Air: 32.1C, N 10.186 - W -68.228, m, 7.02.2001, M. Hartung leg. = *atra* (Martin, 1898). Amazonas Edo., near Yávida, upper R. Atabapo, N 2.917 - W -67. 417, m, 20.09.1999, N. Flauger leg., Ris, 1911 - Gr. Sabana, km78 n. Icabarú, Salto Cathedral, N 4.34 - W -62.203, 2 m, 1 f, 26.05.1991, Norbert Flauger leg. = *artemis* Ris, 1891. Bejuma, Edo. Carabobo, Via Palmichal, 800m, Casa Maria, N 10.283 - W -68.254, m, (1997), Norbert Flauger leg., Ris, 1911, Santos, 1945 - Guayana, El 88, S El Dorado, 350m, N 6.17 - W -61.46, m, 15.10.1989, Norbert Flauger leg. = *venezuelae* De Marmels, 1989. Bejuma, Edo. Carabobo, Cerro de Paja, River Chirgua at la Mona, Water: 23.9C, Air: 34.9C, N 10. 27582 - W -68.23402 1 E, 3 Em, 7.02.2001, M. Hartung leg., DeMarmels, 1989, M. Hartung, 2022 - Bejuma, Edo. Carabobo, Cerro de Paja, Pond in wood, 1400m, Water: 19.3C, Air: 24.4C, N 10. 27582 - W -68.23402, 4 m, 6 Em, 9.02.2001, M. Hartung leg., Paratype exuvia - Bejuma, Edo. Carabobo, Via Palmichal, Casa Maria, 800m, Pond in wood, N 10.283 - W -68. 254, 1 Em, 1m, 4.02.2001, Emerged: 21.04.2001, M. Hartung leg. - Bejuma, Edo. Carabobo, Via Palmichal, Casa Maria, 800m, small artif. pond, N 10.283 - W -68.254, m, 5.02.2001, M. Hartung leg., Ris, 1916, DeMarmels, 1989 - Bejuma, Edo. Carabobo, Via Palmichal, 800m, Casa Maria, N 10.283 - W -68.254 m, 22.06.1992, Norbert Flauger leg., DeMarmels, 1989 - Bejuma, Edo. Carabobo, Via Palmichal, 800m, Casa Maria, 800m, small artif. pond, N 10.283 - W -68.254, 11Em, 8 Ef, 8 f, 15.11.1996, M. Hartung leg., EC, type Exuvia - Carabobo Edo., La Mona, R. Chirgua, Water: 23.9C, Air: 34.9C, N 10.119 - W -68.2, 1 m, 1 Em, 7.02.2001, M. Hartung leg., EC - Cerra de Paja, Palmichal mountain, 1400m, Water: 23.9C, Air: 34.9C, N 10.275817 - W-68.234017, Em, 9.02.2001, leg. M. Hartung - Gr. Sabana, km78 n. Icabarú, Salto Cathedral, N 4.34 - W -62.203, m, 26.05.1991, Norbert Flauger leg. - *pseudeximia* Westfall, 1992. Guayana, El 88, S El Dorado, 350m, N 6.17 - W -61.46, m, 1.05.1988, Norbert Flauger leg.

Nephepeltia flavifrons (Karsch, 1889). Las Trincheras, R. Caura, N 6. 98 - W -64.857 f, 31.01.1998, Norbert Flauger leg., Calvert, 1901-08, Santos, 1950, Heckman, 2006 - South of Manteval, Llanos, N 9. 407255 - W -84.156097, m, 6.-9.09.1998, leg. J. & R. Oehlke = *phryne* (Perty, 1834). Carabobo Edo., Bejuma, Carrizal, 2 ponds outside, concrete outlet, N 10.185 -W -68.23, m, 13.11.1996, M. Hartung leg., Racenis, 1953, Santos, 1950 - Bolivar, Carabobo Edo., Bejuma, Carrizal, 2 ponds outside, concrete outlet, Water: 25.5C. Air: 32.1C, N 10.186 - W -68.228, 2 m, 1 f, 7.02.2001, M. Hartung leg.

Planiplax phoenicura Ris, 1912. Bolivar, Carabobo Edo., Bejuma, Carrizal, 2 ponds outside, concrete outlet, Water: 25.5C, Air: 32.1C, N 10.186 - W -68.228, f, 7.02.2001, M. Hartung leg., Ris, 1912

Brachymesia furcata (Hagen, 1861). Carabobo Edo., Bejuma, Carrizal, 2 ponds outside, concrete outlet, N 10.185 - W -68.23, m, 13.11.1996, M. Hartung leg., Borrer, 1945, Dunkle, 1989 - Carabobo Edo., Bejuma, Carrizal, 2 ponds outside, concrete outlet, Water: 25.5C, Air: 32.1C, N 10.186 - W -68.228, m, 7.02.2001, M. Hartung leg. = *herbida* Grundlach, 1889. Las Trincheras, R. Caura, N 6.98 - W -64.857, m, 15.05.1990, Norbert Flauger leg., Ris, 1912, Dunkle, 1989, Heckman, 2006.

Orthemis discolor (Burmeister, 1839 - Rosaete Skimmer). Aragua, Col. Tovar, 1800m, 60km SW Caracas, N 10.405 - W -67.308, m, 15. -25.05.89, Norbert Flauger leg., Calvert, 1901-08, 1895, Donnelly, 1995 - Bejuma, Edo. Carabobo, Via Palmichal, 800m, Casa Maria, 800m, small artif. pond, N 10.283 - W -68.254, m, 7.11.1996, M. Hartung leg. - Gr. Sabana, km78 n. Icabarú, Salto Cathedral, N 4.34 - W -62.203, m, 26.05.1991, Norbert Flauger leg. - Guayana, El 88, S El Dorado, 350m, N 6.17 - W -61.46, m, 10.-25.05.1990, Norbert

Flauger leg. - Amazonas Edo., near Yávita, upper R. Atabapo, N 2.917 - W -67.417, 3 f, 20.09.1999, N. Flauger leg. - Carabobo Edo., Bejuma, Via Palmichal, Casa Maria, 800m, small artif. pond, N 10.283 - W -68.254, 1 m, 1 f, 5.02.2001, M. Hartung leg. - Carabobo Edo., Bejuma, Via Palmichal, 800m, Casa Maria, 800m, small artif. pond, N 10.283 - W -68.254, 1 m, 4 f, 3Ef, 15.11.1996, Emerged: 16.12.1996, M. Hartung leg., EC - Maripa, 300m, R. Caura, N 7.411247 - W -65.197949, m, 3.01.1998, Norbert Flauger leg., Donelly, 1995 = *biolleyi* Calvert, 1906. 2 m, 1 f, 15.-25.05.1989, Norbert Flauger leg. - Guayana, El 88, S El Dorado, 350m, S 6.17 - W -61.46, f, 15.10.1989, Norbert Flauger leg., Ris, 1910 - San Pablo, Edo. Carabobo, 100m, R. Yaracuy, flood area at bridge, N 10.528 - W -68.393, f, 4.11.1996, M. Hartung leg., Calvert, 1901-08 = *cultiformis* Calvert, 1899. Guayana, El 88, S El Dorado, 350m, N 6.17 - W -61.46, m, 20.04.-5.05.1988, Norbert Flauger leg. = *attenuata* (Erichson, 1848). Cojedes Edo., near Hato Altamira (Hacienda), R. Tinaco, eutrophic low-land river, Water: 26.6C, Air: 34.5C, N 9.497 - W -68.365, m, 11.02.2001, M. Hartung leg., Calvert, 1899, Donelly, 1995 - Guayana, El 88, S El Dorado, 350m, N 6.17 - W -61.46, f, 1997, Norbert Flauger leg.

Cannaphila vibex (Hagen, 1861). Aragua, Col. Tovar, 1800m, 60km SW Caracas, N 10.405 - W -67.308, m, 15.05.1989, Norbert Flauger leg.

Dasythemis esmeralda Ris, 1910, Guayana, El 88, S El Dorado, 350m, N 6.17 - W -61.46, m, 15.05.1989, Norbert Flauger leg.

Libellula herculea Karsch, 1889. Bejuma, Edo. Carabobo, Cerro de Paja, Pond in wood, 1400m, Water: 19.3C, Air: 24.4C, N 10.27582 - W -68.23402, 2 m, 9.02.2001, M. Hartung leg., Heckmann, 2006 - Bejuma, Edo. Carabobo, Via Palmichal, pond 1400m, Water: 19.3C, Air: 24.4C, N 10.266667 - W -68.233333, m, 9.02.2001, leg. M. Hartung - Bejuma, Edo. Carabobo, Via Palmichal, 800m, Casa Maria, N 10.283 - W -68.254, m, Norbert Flauger leg. - Carabobo Edo., La Mona, R. Chirgua, Water: 23.9C, Air: 34.9C, N 10.119 - W -68.20, 3 Ef, 7.02.2001, leg. M. Hartung

Erythemis credula (Hagen, 1861). Amazonas border, road Caicara-Pto. Ayacucho, N 6.133 - W -67.383, m, 27.12.1996, Norbert Flauger leg., Borrór, 1945, Williamson, 1923, Kennedy, 1923 = *peruviana* (Rambur, 1842). Delta area, R. Orinoco, N 8.717 - W -62.115, m, 4.01.1998, Norbert Flauger leg., Williamson, 1923, Kennedy, 1993, Borrór, 1945 - Carabobo Edo., San Pablo, 100m, R. Yaracuy, flood area at bridge, N 10.528 - W -68.393, m, 4.11.1996, M. Hartung leg. = *mithroides* (Brauer, 1900). Carabobo Edo., San Pablo, 100m, R. Yaracuy, flood area at bridge, N 10.528 - W -68.393, m, 4.11.1996, M. Hartung leg., Williamson, 1923, Kennedy, 1923 - Carabobo Edo., San Pablo, 100m, R. Yaracuy, flood area at bridge, Water: 25.0C, Air: 32.5C, N 10.528 - W -68.393, 1 m, 1 f, 16.02.2001, M. Hartung leg. = *attala* (Selys in Sagra, 1857). Carabobo Edo., Bejuma, Carrizal, 2 ponds outside, concrete outlet, Water: 25.5C, Air: 32.1C, N 10.186 - W -68.228, f, 14.08.2000, N. Flauger leg., Williamson, 1923, Kennedy, 1923 = *haematogastra* (Burmeister, 1839). Maripa, R. Caura ('R. Orinoco'), N 7.411247 - W -65.197949, m, 10.-25.10.1989, Norbert Flauger leg., Borrór, 1945 - Carabobo Edo., 3km S Canoabo, R. Canoabo, N 10.367 - W -68.321, 2 f, 10.11.1996, M. Hartung leg. = *plebeja* Burmeister, 1839. Carabobo Edo., Rivermouth R. Yaracuy, Air: 31.8C, N 10.583 - W -68.243, 1 m, 1 f, 13.02.2001, M. Hartung leg., Williamson, 1923, Kennedy, 1923 - Carabobo Edo., Bejuma, Carrizal, 2 ponds outside, concrete outlet, Water: 25.5C, Air: 32.1C, N 10.186 - W -68.228, 2 m, 7.02.2001, M. Hartung leg. - Carabobo Edo., San Pablo, 100m, R. Yaracuy, flood area at bridge, Water: 25.0C, Air: 32.5C, N 10.528 - W -68.393, 2 m, 16.02.2001, M. Hartung leg. = *vesiculosa* (Fabr., 1775). Amazonas, Portuguesa Edo., n. Guanare, Santuario Coromoto, N 5.433 - W -67.567, f, 19.11.1996, Norbert Flauger leg., Ris, 1909, 1911, Förster, 1999, Kennedy, 1923 - Bejuma, Edo. Carabobo, Via Palmichal, Casa Maria, 800m, N 10.283 - W -68.254, 1 m, 2 f, Jan. 1999, N. Flauger leg. - Guayana, El 88, S El Dorado, 350m, N 6.17 - W -61.46, 1 m, 1 f, 1.05.1988, Norbert Flauger leg. - Llanos, Hato el Cedral, N 7.42267 - W -69.213, f, 25.12.2001-26.12.2001, P. Weigert leg.

Erythrodiplax amazonica a. Sjöstedt, 1918. Maripa, R. Caura, N 7.411247 - W -65.197949, m, 18.05.1991, Norbert Flauger leg. = *castanea* (Burm., 1839). Guayana, El 88, S El Dorado, 350m, N 6.17 - W -61.46, 1 m, 3 f, 20.05.1989, Norbert Flauger leg., Borrór, 1942 = *angustipennis* Borrór, 1942. Amazonas Edo., San Fernando de Atabapo, 20km N, R. Atabapo, N 2.917 - W -67.417, 1 m, 1 f, 18.09.1999, N. Flauger leg., Borrór, 1942 = *famula f.* (Erichson, 1848). Guayana, El 88, S El Dorado, 350m, N 6.17 - W -61.46, 3 f, 20.05.1989, Norbert Flauger leg. = *famula lativittata* Borrór, 1942. Amazonas Edo., near Yávita, upper R. Atabapo, N 2.917 - W -67.417, 6 m, 3 f, 20.09.1999, N. Flauger leg., Borrór, 1942, f. Borrór, 1957 - Canaima Nat. Park, N 6.242670 - W -62.832670, f, 25.-26.12.2001, P. Weigert leg., Borrór, 1942 - Yapacana Nat. Park, Amazonas Edo., N 3.80 - W -66.80, 4 m, 3 f, 17.10.2000, N. Flauger leg. = *naeva* (Hagen, 1861). Falcon Edo., Islas de Morrocoy, I. Playuela, Golfo Triste, Mar Caribe, N 10.828 - W -68.238, 4 m, 4 f, 6.11.1996, M. Hartung leg., Borrór, 1942, 1997 - Falcon Edo., I. Cayo Punta Bravo, Morrocoy Nat. Park, Air: 34.5C, N 10.802 - W -68.297, 1 m, 1 f, 13.02.2001, M. Hartung leg. = *fulva* Borrór, 1957. Amazonas Edo., Jerusalem, N 5.908 - W -67.317, f, 10.09.1998, N. Flauger leg., Borrór, 1942, 1957 - Amazonas, Pto. Ayacucho 20km SE, R. to Gavilan, N 5.08 - W -67.51, f, 6.09.1998, N. Flauger leg. - Pto. Ayacucho 80km N, small stream Morrichal, N 6.083 - W -67.383, m, 28.12.1996, Norbert Flauger leg. - Amazonas border, road Caicara-Pto. Ayacucho, N 6.133 - W -67.383, m, 27.12.1996, Norbert Flauger leg. - Guayana, St. Elena, 5km North, N 4.715 - W -61.088, 1 m, 1 f, 20.05.1989, Norbert Flauger leg. - Yapacana Nat. Park, Amazonas Edo., N 3.80 - W -66.80, 2 m, 1 f, 17.10.2000, N. Flauger leg. = *umbrata* (L., 1758). Amazonas Edo., Jerusalem, N 5.908 - W -67.317, f, 10.09.1998, N. Flauger leg., Dunkle, 2000, Heckmann, 2006, f. 3. 2. 250 - Amazonas Edo., San Fernando de Atabapo, 20km N, R. Atabapo, N 2.917 - W -67.417, f, 22.09.1999, N. Flauger leg. - Bolívar, Amazonas, Portuguesa Edo., n. Guanare, Santuario Coromoto, N 5.433 - W -67.567, 1 m, 1 f, 19.11.1996, Norbert Flauger leg. - Bolívar Edo., La Reforma, N 6.824 - W -61.20, m, 22.09.2000, N. Flauger leg. - Maripa, stream at gasol. station, R. Caura, N 7.411247 - W -65.197949, 1 m, 1f., 16.05.1990, Norbert Flauger leg. - Carabobo Edo., 3km S Canoabo, R. Canoabo, N 10.367 - W -68.321, 4 m, 2 f, 10.11.1996, M. Hartung leg. - Guayana, El 88, S El Dorado, 350m, N 6.17 - W -61.46, m, 1.05.1988, Norbert Flauger leg. - South of Manteval, Llanos, N 9.407255 - W -84.156097. 1 m, 1 f, 6.-9.09.1998, leg. J. & R. Oehlke - Trujillo Edo., Betijoque, La Gira, 600m, N 9.376 - W -70.733, f, 1.09.1998, N. Flauger leg. - Yaracuy Edo., near Guayabo, sugar-cane plantage, N 10.423 - W -68.557, 2f, 11.11.1996, M. Hartung leg., Borrór, 1945, 1942 = *fervida* (Erichson, 1848). Amazonas Edo., San Fernando de Atabapo, 20km N, R. Atabapo, N 2.917 - W -67.417, 5 m, 11 f, 22.09.1999, N. Flauger leg., Borrór, 1942 - San Pablo, Edo. Carabobo, 100m, R. Yaracuy, flood area at bridge, N 10.528 - W -68.393, m, 4.11.1996, M. Hartung leg. - Yaracuy Edo., near Guayabo, sugar-cane plantage, N 10.423 - W -68.557, 1 m, 2 f, 11.11.1996, M. Hartung leg. = *juliana* Ris, 1911. Bolívar Edo., 300m, Rio Guaniamo, N 7.197 - W -66.123, m, 5.1992, Norbert Flauger leg., Borrór, 1942, 1957 = *basalis b.* (Kirby, 1897). Maripa, R. Caura, N 7.411247 - W -65.197949, 3 m, 18.05.1991, Norbert Flauger leg., Borrór, 1942 - Carabobo Edo., 3km S Canoabo, R. Canoabo, N 10.367 - W -68.321, 6 m, 10.11.1996, M. Hartung leg. = *kimminsi* Borrór, 1942. Carabobo Edo., 3km S Canoabo, R. Canoabo, N 10.367 - W -68.321, m, 10.11.1996, M. Hartung leg., Borrór, 1942 - Carabobo Edo., Bejuma, Carrizal, 2 ponds outside, concrete outlet, N 10.185 - W -68.23, 1 m, 1 f, 13.11.1996, M. Hartung leg. = *connata fusca* (Rambur, 1842). Aragua, Col. Tovar, 1800m, 60km SW Caracas, N 10.405 - W -67.308, 3 m, 1 f, 20.05.1989, Norbert Flauger leg. - Bejuma, Edo. Carabobo, Canoabo, 300m, N 10.303 - W -68.285, 5 m, 7.07.1994, Norbert Flauger leg., Borrór, 1942 - Carabobo Edo., Bejuma, Via Palmichal, Casa Maria, 800m, small artif. pond, N 10.283 - W -68.254, f, 17.02.2001, M. Hartung leg. - Carabobo Edo., Bejuma, Via Palmichal, 800m, Casa Maria, 800m, small artif. pond, N 10.283 - W -68.254, 3 m, (1997), 7.11.1996, Norbert Flauger leg., Borrór, 1942 - Bolívar Edo., 300m, Rio Guaniamo, N 7.197 - W -66.123, 2 m, 5.1992, Norbert Flauger leg., Borrór, 1942 - Way to Kavanayen, km40, Toron Meru, Gran Sabana, 800-1m, N 5.695 - W -61.562, m, 10.-25.

05.1990, Norbert Flauger leg. - Carabobo Edo., Bolivar, 3km S Canoabo, R. Canoabo, N 10.3670 - W -68.321, m, 10.11.1996, M. Hartung leg. - Carabobo Edo., 3km S Canoabo, ponds at road, N 10.367 -W -68.321 2 f, 10.11.1996, M. Hartung leg. - Carabobo Edo., Bejuma, Carrizal, 2 ponds outside, concrete outlet, N 10.185 - W -68.23, 3 m, 13.11.1996, M. Hartung leg. - Carabobo Edo., Canoabo, Uramavill., R. Canoabo, near 'tube-tunnel', N 10.432 - W -68.322, m, 4.11.1996, M. Hartung leg. - Carabobo Edo., La Mona, R. Chirgua, Water: 23.9C, Air: 34.9C, N 10.119 - W -68.20, m, 7.02.2001, M. Hartung leg. - Cojedes Edo., Manrique N, R. San Carlos, at bridge, Water: 21.6C, Air: 34.5C, N 9.873 - W -68.549, m, 10.02.2001, M. Hartung leg. - Guayana, El 88, S El Dorado, 350m, N 6.17 - W -61.46, 6 m, 1 f, 20.05.1989, Norbert Flauger leg. - Yaracuy Edo., 1km N Albarico, mid-range stream, N 10.405 - W -68.698, m, 11.11.1996, M. Hartung leg. = *paraguayensis* (Förster, 1904). Amazonas border, road Caicara-Pto. Ayacucho, N 6.133 - W -67.383, m, 27.12.1996, Norbert Flauger leg., Borrór, 1942 - Cojedes Edo., San Carlos N, Manrique S, river, at bridge, Water: 23.2C, Air: 33.2C, N 9.791 - W -68.509, 2 m, 10.02.2001, M. Hartung leg. = *venusta* (Kirby, 1897). Amazonas Edo., San Fernando de Atabapo, 20km N, R. Atabapo, N 2.917 - W -67.417, 4 m, 22.09.1999, N. Flauger leg., Borrór, 1942 = *unimaculata* (De Geer, 1773). Guayana, El 88, S El Dorado, 350m, N 6.17 - W -61.46, f, 20.05.1989, Norbert Flauger leg.

Rhodopygia hollandi Calvert, 1907, Maripa, R. Caura, N 7.411247 - W -65.197949, m, 18.05.1991, Norbert Flauger leg., Ris, 1911 - Cerro Autana, 500m, Amazonas Edo., R. Autana, N 4.90 - W -67.40m, 19.10.2000, N. Flauger leg.

Sympetrum illotum gilvum (Selys, 1884), Humocaró (Anden), 2450m, N 9.6920 - W -70.118, m, 3.01.1998, Norbert Flauger leg., Calvert, 1901-08, Ris, 1913 - Trujillo Edo., Carache 15km NE, 2500m, N 9.7 - W -70.05, m, 27.12.1997, N. Flauger leg.

Ypirangthemis calverti Santos, 1945. Amazonas Edo., near Yávita, upper R. Atabapo, N 2.917 -W -67.417, m, 20.09.1999, N. Flauger leg., Borrór, 1942, Heckman, 2006, Borrór, 1947 - Amazonas Edo., near Yávita, upper R. Atabapo, S 2.917 -W -67.417, 2 m, 20.09.1999, N. Flauger leg. - Amazonas, Santa Cruz, N 7.81364 - W -66.269703, m, 10.09.1960, leg. Ojasto, Nr. JR-08773 (Maracay). Amazonas, Buenos Aires-Ventuari, N 3.009 - W -65.955, m, 19.03.1957, leg. Racenis - Amazonas, Yacray, Ventuari, N 4.201 - W -66.501, f, 4.03.1957, leg. Racenis, J. nr. 06477 (Maracay-No.) - Carret, San Carlos, R. Negro-Salano, AM4, N 1.918978 - W -67.061195, f, 13.03.1984, leg. J. A. Clavijo & J. De Marmels, 'J. nr. 16757' (Maracay-No.) - Rio Negro, road to Solamo, R. Negro, N 1.951 - W -67.009, m, 3.-4.03.1984, SC, J. Clavijo & J. De Marmels leg. - San Carlo, R. Negro, N 1.922 - W -67.063, 3 m, 1 f, 24.06.1984, SC, L. Loly leg. - T. F. A., San Carlos, R. Negro, N 1.918978 - W -67.061195, 1 m, 1f, 7.11.1982, leg. A. Chacon & G. Yezplizai, 'JR-14913' (Maracay-No.)

Dythemis multipunctata Kirby, 1894. Carabobo Edo., R. Capita, N 10.0 - W -68.0 m, 3.12.1994, Norbert Flauger leg., Borrór, 1945, Calvert, 1895, De Marmels, 1989 - Carabobo Edo., Canoabo Qbrada. Agua Clara, small stream, N 10.393 - W -68.317 3 m, 4.11.1996, M. Hartung leg., Norbert Flauger leg. - Bolivar, Guayana, El 88, S El Dorado, 350m, N 6.17 - W -61.46, f, 15.-25.5.1989, Norbert Flauger leg. = *sterilis* Hagen, 1861. Bejuma, Edo. Carabobo, Canoabo, 300m, N 10.303 - W -68.285, 2 m, 7.07.(1992), Norbert Flauger leg., Ris, 1913, DeMarmels, 1989, Borrór, 1945 - Carabobo Edo., 3km S Canoabo, ponds at road, N 10.367 - W -68.321, f, 10.11.1996, M. Hartung leg.

Brechmorhoga vivax Calvert, 1906. Bejuma, Edo. Carabobo, 800m, Quebrada 'Guarapo', ca. 900m, N 10.292 - W -68.235, 3m, 16.11.1996, M. Hartung leg., Ris, 1919, Calvert, 1901-08 = *nubecula* (Rambur, 1842). Bejuma, Edo. Carabobo, 800m, Quebrada 'Guarapo', ca. 900m, S 10.292 - W -68.235, 3 f, 8.11.1996, M. Hartung leg., Ris, 1919, Calvert, 1901-08 - Carabobo Edo., 3km S Canoabo, ponds at road, N 10.367 - W -68.321, f, 10.11.1996, M. Hartung leg. = *valida* (Navas, 1916). Tachira, L. a. Fundacion, 1200m, N 7.0 - W -65.0, m,

2.04.1992, Norbert Flauger leg., Costa, 1990 = *rapax* r. Calvert, 1898. Barinas Edo., Barinitas, 1400m, N 8.743 - W -70.425, 2 m, 20.11.1996, Norbert Flauger leg., Förster, 1999.

Macrothemis hahneli Ris, 1913. Carabobo Edo., Bejuma, Via Palmichal, 1200m, small stream, N 10.289 - W -68.211, m, 12.11.1996, M. Hartung leg., Borrór, 1945, Ris, 1913 = *hemichlora* (Burmeister, 1839). Cojedes Edo., Manrique N, R. San Carlos, at bridge, Water: 21.6C, Air: 34.5C, N 9.873 - W -68.549, f, 10.02.2001, M. Hartung leg., Calvert, 1898, Ris, 1913 = *i. leucozona* Ris, 1913. Carabobo Edo., La Mona, R. Chirgua, Water: 23.9C, Air: 34.9C, N 10.119 - W -68.2, 2 Ef, 1 m, 2 f, 7.02.2001, EC, M. Hartung leg., May, 1998, Ris, 1913, 1916 = *pseudimitans* Calvert, 1898. Carabobo Edo., Bejuma, Via Palmichal, 800m, Casa Maria, 800m, small artif. pond, N 10.283 - W -68.254, f, 7.11.1996, M. Hartung leg., Borrór, 1945, Ris, 1913 - Maripa, 300m, R. Caura, N 7.411247 - W -65.197949, 2 m, 3.01.1998, Norbert Flauger leg., Ris, 1913 - Carabobo Edo., Cumbre Canoabo, La Rosa, stream in wood, N 10.265 - W -68.279, w, 5.11.1996, Calvert, 1898 - Guayana, 40km N St. Elena, Sn. Francisco d. Y, R. Yuruany ('Yaspis'), N 5.067 - W -61.083, 3 m, 15.10.1989, Norbert Flauger leg. = *musiva* Calvert, 1898. Trujillo Edo., Betijoque, La Gira, 600m, N 9.376 - W -70.733, m, 1.09.1998, N. Flauger leg., Ris, 1913, Calvert, 1898 = *rupicola* Racenis, 1957. Guayana, 40km N St. Elena, Sn. Francisco d. Y, R. Yuruany ('Yaspis'), N 5.067 - W -61.083, 2 m, 15.08.1988, Norbert Flauger leg., Racenis, 1957 = *tessellata inequinguis* Calvert, 1895. Carabobo Edo., Canoabo, Qbrada. Agua Clara, small stream, N 10.393 - W -68.317, 1 m, 1f, 1.08.1998, Norbert Flauger leg., Calvert, 1995, Ris, 1913 = *tessellata tessellata* (Burmeister, 1839). Cojedes Edo., near Hato Altamira (Hacienda), R. Tinaco, eutrophic low-land river, Water: 26.6C, Air: 34.5C, N 9.497 - W -68.365, 2 f, 11.02.2001, M. Hartung leg., Heckman, 2006, Calvert, 1898.

Diastatops estherae Montgomery, 1940. Amazonas, Pto. Ayacucho 40km N, R. Pavoni, N 6.117 - W -67.383, 4 m, ca. I.1997, Norbert Flauger leg., Montgomery, 1940 - Maripa, stream at gasol. station, R. Caura, N 7.411247 - W -65.197949 m, 15.05.1990, Norbert Flauger leg. = *obscura* (Fabricius, 1775). Maripa, R. Caura, N 7.411247 - W -65.197949, 3 m, 1 f, 15.05.1990, Norbert Flauger leg. - Maripa, stream at gasol. station, R. Caura, N 7.411247 - W -65.197949, 1 m, 2 f, 15.05.1990, Norbert Flauger leg.

Zenithoptera fasciata (L., 1758). Way to Kavanayen, km40, Toron Meru, Gran Sabana, 800-1m, N 5.695 - W -61.562, m, 10.-25.05.1990, Norbert Flauger leg., Jurzitza, 1982 - Guayana, El 88, S El Dorado, 350m, N 6.17 - W -61.46, 3 m, 5.09.1997, Norbert Flauger leg. = *viola* Ris, 1910. Guayana, St. Elena, 5km N, N 4.715 - W -61.088, 7m, 5 f, 15.05.1989, Norbert Flauger leg. = *lanei* Santos, 1941. Maripa, R. Caura, N 7.411247 - W -65.197949, 2 m, 18.05.1991, Norbert Flauger leg. - Maripa, stream at gasol. Station, R. Caura, N 7.411247 - W -65.197949, w, 18.05.1991, Norbert Flauger leg.

Perithemis electra Ris, 1930. Cojedes Edo., near Hato Altamira (Hacienda), Rest pool of stream, Water: 26.6C, Air: 33.5C, N 9.541 - W -68.352, 3 f, 2 m, 11.02.2001, M. Hartung leg., Ris, 1930 - Yaracuy Edo., 1km N Albarico, mid-range stream, N 10.405 - W -68.698, m, 11.11.1996, M. Hartung leg. = *domitia* (Drury, 1773). Carabobo Edo., 3km S Canoabo, R. Canoabo, N 10.367 - W -68.321, f, 10.11.1996, M. Hartung leg., Ris, 1930, Heckman, 2006 - Yaracuy Edo., 1km N Albarico, mid-range stream, N 10.405 - W -68.698, 2 m, 11.11.1996, M. Hartung leg. = *mooma* Kirby, 1889. Carabobo Edo., Bejuma, Carrizal, 2 ponds outside, concrete outlet, N 10.185 - W -68.23, 2 m, 13.11.1996, M. Hartung leg., Williamson, 1923, Kennedy, 1923 - Carabobo Edo., Bejuma, Carrizal, 2 ponds outside, concrete outlet, Water: 25.5C, Air: 32.1C, N 10.186 - W -68.228, m, 7.02.2001, M. Hartung leg. - Cojedes Edo., near Hato Altamira (Hacienda), Rest pool of stream, Water: 26.6C, Air: 33.5C, N 9.541 - W -68.352, 1 m, 2 f, 11.02.2001, M. Hartung leg. - Yaracuy Edo., 1km N Albarico, mid-range stream, N 10.405 - W -68.698, m, 11.11.1996, M. Hartung leg. = *lais* (Perty, 1834). Pto. Ayacucho 80km N, small stream Morrichal, N 6.083 - W -67.383, 2 m,

28.12.1996, Norbert Flauger leg., Ris, 1930, Ris, 1939, Heckman, 2006 - Estd. Amazonas, La esmeralda, Line B9, N 6.083 - W -67.383, 2 m, 24.04.1999, leg. Linderhaus - Guayana, El 68, Caretera El Dorado, N 6.313 - W -61.302 m, 5.09.1997, Norbert Flauger leg. - Guayana, El 88, S El Dorado, 350m, N 6.17 - W -61.46, 4 m, 20.04.-5.05.1988, Norbert Flauger leg.

Pantala flavescens (Fabricius, 1798). Amazonas, Pto. Ayacucho, near, R. Paria, N 5.5 - W -67.583, m, 12.08.1998, Norbert Flauger leg., Calvert, 1901-08, Ris, 1911, 1913, 1919 - Bejuma, Edo. Carabobo, Via Palmichal, Casa Maria, 800m, N 10.283 - W -68.254, 2 Em, 2 Ef, 15.06.1997, N. Flauger leg., EC - Bejuma, Edo. Carabobo, Via Palmichal, 800m, Casa Maria, 800m, small artificial pond, N 10.283 - W -68.254, m, 20.01.1995, Norbert Flauger leg. - Guayana, 40km N St. Elena, Sn. Francisco d. Y, R. Yuruany ('Yaspis'), N 5.067 - W -61.083, 1 m, 1f, 15.10.1989, Norbert Flauger leg. - Guayana, El 88, S El Dorado, 350m, N 6.17 - W -61.46, 4 m, 1.05.1988, Norbert Flauger leg.

Tramea cophysa (Hagen, 1867). Carabobo Edo., 3km S Canoabo, ponds at road, N 10.367 - W -68.321, 2 m, 10.11.1996, M. Hartung leg., DeMarmels & Racenis, 1982 = *rustica* De Marmels & Racenis, 1982. Guayana, 40km N St. Elena, Sn. Francisco d. Y, R. Yuruany ('Yaspis'), N 5.067 - W -61.083, m, 15.10.1989, Norbert Flauger leg. - Guayana, El 88, S El Dorado, 350m, N 6.17 - W -61.46, f, 15.05.1990, Norbert Flauger leg. = *minuta* De Marmel & Racenis, 1982. Maripa, stream at gasol. station, R. Caura, N 7.411247 - W -65.197949, f, 15.05.1990, Norbert Flauger leg. = *calverti* Muttkowski, 1910. Carabobo Edo., 3km S Canoabo, ponds at road, N 10.367 - W -68.321, m, 10.11.1996, M. Hartung leg., DeMarmels & Racenis, 1982, Förster, 1999 - Cojedes Edo., near Hato Altamira (Hacienda), 'red ground' pond at street, Water: 31.1C, Air: 33.8C, N 9.631 - W -68.385, f, 11.02.2001, M. Hartung leg. - Carabobo Edo., San Pablo, 100m, R. Yaracuy, flood area at bridge, N 10.528 - W -68.393, m, 4.11.1996, M. Hartung leg. - South of Manteval, Llanos, N 10.528 - W -68.393, m, 6.-9.09.1998, leg. J. & R. Oehlke = *binotata* (Rambur, 1842). Carabobo Edo., Bejuma, Carrizal, 2 ponds outside, concrete outlet, N 10.185 - W -68.23, m, 13.11.1996, M. Hartung leg., Ris, 1913 = *binotata f. pantepuyan* DeMarmels, 1994. Guayana, 40km N St. Elena, Sn. Francisco d. Y, R. Yuruany ('Yaspis'), N 5.067 - W -61.083, m, 10.-25.05.1990, Norbert Flauger leg. = *abdominalis* (Rambur, 1842 - Vermilion Glider). Bejuma, Edo. Carabobo, Via Palmichal, Casa Maria, 800m, N 10.283 - W -68.254, 1 Ef, 1 m, 2 f, S: Dec. 1998, EC, N. Flauger leg., Dunkle, 1989, Heckman, 2006 - Bejuma, Edo. Carabobo, Via Palmichal, 800m, Casa Maria, small pond, N 10.283 - W -68.254, f, 15.11.1996, Norbert Flauger leg. - Carabobo Edo., Bejuma, Carrizal, 2 ponds outside, concrete outlet, Water: 25.5C, Air: 32.1C, N 10.186 - W -68.228, f, 4.07.2001, M. Hartung leg.

Tholymis citrina (Hagen, 1867). Bolivar Edo., Piginao near, N 6.5 - W -66.833, 6m, 2 f, 15.08.1998, Norbert Flauger leg., Borrer, 1945, Heckman, 2006 - Las Trincheras, R. Caura, N 6.98 - W -64.857, f, 10.-25.5.1990, Norbert Flauger leg. - Maripa, stream at gasol. station, R. Caura, N 7.411247 - W -65.197949, f, 16.05.1990, Norbert Flauger leg. - Carabobo Edo., 3km S Canoabo, R. Canoabo, N 10.367 - W -68.321 1 m, 3 f, 10.11.1996, M. Hartung leg.

Tauriphila australis (Hagen, 1867). Carabobo Edo., Bejuma, Cerro de Paja, Pond in wood, 1400m, Water: 19.3C, Air: 24.4C, 10.275817 - 68.234017, f, 7.02.2001, leg. M. Hartung - Bejuma, Edo. Carabobo, Via Palmichal, 800m, Casa Maria, 800m, small artif. pond, N 10.283 - W -68.254, 1m, 1Em, 7.11.1996, Emerged: 7.11.1996, M. Hartung leg., EC

Miathyria marcella (Selys, 1857). Pto. Ayacucho 80km N, small stream Morrichal, N 6.083 - W -67.383, 3 m, 2 f, 27.12.1996, Norbert Flauger leg., Calvert, 1901-08, Dunkle, 2000 - Cojedes Edo., near Hato Altamira (Hacienda) 'red ground' pond at street, Water: 31.1C, Air: 33.8C, N 9.631 - W -68.385, f, 11.02.2001, M. Hartung leg. Llanos, Hato el Cedral, N 7.422670 - W -69.213, 2 m, 25.12.2001, 26.12.2001, P. Weigert leg. - Carabobo Edo., San Pablo, 100m, R.

Yaracuy, flood area at bridge, N 10.528 - W -68.393, 3 m, 1 f, 4.11.1996, M. Hartung leg. - Carabobo Edo., San Pablo, 100m, R. Yaracuy, flood area at bridge, Water: 25.0C, Air: 32.5C, N 10.528 - W -68.393, 1 m, 1 w, 16.02.2001, M. Hartung leg. - South of Manteval, Llanos, N 9.631 - W -68.385, m, 6.-9.09.1998, leg. J. & R. Oehlke

DISCUSSION

This report will show the species of Odonata from Venezuela. 160 species I could show. 934 individual Odonata species I have identified. A lot of larvae I could let emerge. In Fig. 1 the distribution of all habitats is shown. The new species *Heteragrion palmichale* I have described in 2002. The Exuvia of *Micrathyria venezuelae* I have also described as new. *Lestes jерrelli* Tennessen, 1997, I could describe as new for Venezuela from Salto Cathedral, Bolivar at the 26. May 1991.

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