

ADDITIONAL RECORDS OF ODONATA FROM EL SALVADOR

L.K. GLOYD (1981), *Notul. odonatol.* 1: 33) listed 17 species of Odonata as first records from the small Central American country, El Salvador, and stated that specimens from there are of interest even though of well-known species. D.R. PAULSON (1982, in: S.H. Hurlbert & A. Villalobos-Figueroa, [Eds], *Aquatic biota of Mexico, Central America and the West Indies*, pp. 249-277, San Diego St. Univ.) listed 41 species from the country, 18 of which were from records in his own collections or collections he had examined. Many specimens from his own collection had been deposited in the Florida State Collection of Arthropods. He in 1984 (*Notul. odonatol.* 2: 51-52) added details to his 1982 records and added two species [*Lestes sigma* Calvert and *Pseudoleon superbus* (Hagen) — the latter a sight record].

There are in the Florida State Collection of Arthropods 17 additional species, and *Pseudoleon superbus* of which Paulson had only a sight record. Recently V. Hellebuyck has sent a large number of specimens to me for determination, as well as some to T.W. Donnelly and L.K. Gloyd. He has kindly consented to have his new records included in this paper. He has collected 21 additional species which I had not seen in the previous lists. Some of his specimens have been donated to the Florida State Collection of Arthropods, the E.B. Williamson Collection at the University of Michigan, T.W. Donnelly's collection, and the Museo de Historia Natural de El Salvador, but most are still in his own collection. This makes a total of 81 species recorded from El Salvador. From a study of Paulson's list (1982) it appears that there are at least 100 more species known from both north and south of El Salvador which might still be encountered in that country.

El Salvador Departments are given in capitals and the names of the collectors S. & L. Steinhauser are abbreviated as SLS. V. Hellebuyck's collecting localities and dates are indicated as follows: VH-01, LA LIBERTAD, Bocana de Julupito, Chiltuipán, ca. 25 km W of La Libertad, I-XII-83; VH-02, same as VH-01 except 3,4-XII-84; VH-03, LA LIBERTAD, Los Chorrros, Colón, 6.5 km W of Santa Tecla,

6-XII-83; VH-04, LA LIBERTAD, Río San Antonio, ca. 7 km S of La Libertad Hgwy., 7-XII-83; VH-05, same as VH-01 except 8-XII-84; VH-06, SAN SALVADOR, Lago de Ilopango, 14 km E of San Salvador, Club Corinto, 11-XII-83; VH-07, AHUACHAPAN, Parque Nacional "Bosque El Imposible", Río San Francisco, San Francisco Menéndez, 14-XII-83; VH-08, AHUACHAPAN, Parque Nacional "Bosque El Imposible", Quebrada La Cascada, Río San Francisco, Menéndez, 15-XII-83; VH-09, AHUACHAPAN, Parque Nacional "Bosque El Imposible", La Fincona, 16-XII-83; VH-10, LA PAZ, small stream in a cotton plantation near Costa del Sol, Comalapa, 17, 18-XII-83; VH-11, same as VH-08 except 18-XII-83; VH-12, LA LIBERTAD, Laguna de Channico, Ingenio Channico, 20-XII-83; VH-13, SAN SALVADOR, Parque Saburo-Hirao, San Salvador, 21-XII-83; VH-14, SANTA ANA, Lago de Coatepeque, El Congo, 22-XII-83; VH-15, same as VH-09 except 23-XII-83; VH-16, SANTA ANA, Cerro Verde, Finca San Blas, 27, 28-XII-83.

Calopterygidae: *Hetaerina smaragdalis* De Marmels, LA LIBERTAD, Tamanique, 31-X-70, 2 ♂, 7-XI-71, 3 ♂ (SLS); VH-04, 4 ♂, 1 ♀; VH-08, 1 ♂; VH-09, 1 ♂; VH-11, 1 ♂. — *H. cruentata* (Rambur), LA LIBERTAD, Tamanique, 24-XI-71, 1 ♂ (SLS); VH-04, 2 ♂; VH-08, 1 ♂, LA LIBERTAD, 5 mi N of Quezaltepeque, 17-VI-63, 1 ♀, M. Irwin & D.Q. Cavagnaro (Coll. California Academy of Sciences). — *H. macropus* Selys, VH-02, 1 ♀; VH-07, 11 ♂, 2 ♀; VH-08, 1 ♂, 1 ♀; LA LIBERTAD, 5 mi N of Quezaltepeque, 17-VI-63, 1 ♂, M. Irwin & D.Q. Cavagnaro (Coll. California Academy of Sciences).

Pseudostigmatidae: *Mecistogaster ornata* Rambur, LA LIBERTAD, Tamanique, 24-XI-71, 1 ♂, 5-XII-71, 1 ♂, 1 ♀ (SLS); LA LIBERTAD, Santa Tecla, 29-VIII-71, 1 ♂ (SLS); LA LIBERTAD, La Libertad, 21-XII-68, 1 ♂ (SLS); SAN MIGUEL, San Miguel, 1-III-70, 1 ♂ (H.L. King); VH-01, 1 ♀; VH-02, 1 ♂; VH-07, 3 ♂, 2 ♀; VH-15, 1 ♂. — *Pseudostigma aberrans* Selys, VH-08, 1 ♂ (identified by T.W. Donnelly).

Platystictidae: *Palaeonema nathalia* Selys, LA LIBERTAD, 22-VIII-54, 1 ♂ (E.S. Ross).

Coenagrionidae: *Acanthagrion quadra-*

tum Selys, VH-13, 5 ♂. — *Argia elliptica* Selys, LA LIBERTAD, Tamanique, 30-X-70, 1 ♂, 7-XI-71, 1 ♀ (SLS). — *A. fissa* Selys, AHUACHAPAN, Ahuachapán, 22-IV-71, 1 ♂ (SLS); LA LIBERTAD, Tamanique, 7-XI-71, 1 ♂ (SLS). — *A. funebris* (Hagen), SANTA ANA, Metapán, Parque Nacional de Montecristo, 8-III-70, 1 ♂, 1 ♀, 12-II-72, 1 ♀, 15-IX-72, 1 ♂ (SLS). — *A. indicatrix* Calvert, VH-01, 1 ♂, 2 ♀; VH-02, 1 ♂, 2 ♀; VH-07, 1 ♂, 2 ♀. — *A. oculata* Hagen, LA LIBERTAD, La Libertad, 15-VIII-70, 1 ♂ (SLS); VH-01, 1 ♂; VH-02, 2 ♀; VH-03, 1 ♀; VH-07, 2 ♂, 1 ♀; VH-08, 4 ♀; VH-09, 2 ♀; VH-14, 1 ♀; VH-15, 7 ♀.

Aeshnidae: *Aeshna c. cornigera* Brauer, SANTA ANA, Metapán, Parque Nacional de Montecristo, 5-III-71, 1 ♂, 1 ♀ (SLS). — *A. jalapensis* Williamson, VH-16, 5 ♂ (identified by T.W. Donnelly). — *Gynacantha nervosa* Rambur, LA LIBERTAD, Santa Tecla, 30-IV-70, 1 ♀, 2-IV-71, 1 ♂ (SLS); VH-08, 1 ♀. — *Oplonaeschna armata* (Hagen), SANTA ANA, Metapán, Parque Nacional de Montecristo, 18-III-71, 1 ♂ (SLS). — *Triacanthagyna septima* (Selys), VH-07, 3 ♂, 1 ♀; VH-08, 1 ♂, 2 ♀.

Gomphidae: *Aphylla ambigua* (Selys), VH-06, 1 ♀. — *Phyllogomphoides suasus* (Selys), VH-04, 3 ♂ (identified by T.W. Donnelly).

Cordulegastridae: *Cordulegaster godmani* MacLachlan, SANTA ANA, Metapán, Parque Nacional de Montecristo, 13-III-71, 1 ♀, 16-IV-72, 1 ♀, 30-IV-72, 1 ♂, 1-V-72, 1 ♂, 1 ♀ (SLS); SANTA ANA, Metapán, Parque Nacional de Montecristo, 14-IV-76, 2 ♂, 1 ♀ (V. Hellebuyck).

Libellulidae: *Belonia croceipennis* (Selys, AHUACHAPAN, Ahuachapán, 1-IV-71, 2 ♂ (SLS); LA LIBERTAD, La Libertad, 29-XI-70, 1 ♂ (SLS); VH-04, 1 ♂. — *B. herculea* (Karsch), LA LIBERTAD, La Libertad, 15-VIII-70, 1 ♂ (SLS); LA LIBERTAD, Los Chorros, Colón, 18-VI-71, 1 ♂ (SLS); VH-04, 1 ♀; VH-07, 1 ♂; VH-08, 2 ♂; VH-11, 1 ♂. — *Brachymesia furcata* (Hagen), VH-05, 1 ♂, 1 ♀; VH-06, 1 ♂; VH-12, 2 ♂. — *Brechmorhoga rapax* Calvert, LA LIBERTAD, Tamanique, 14-IV-71, 1 ♂ (SLS); SANTA ANA, Metapán, Parque Nacional de Montecristo, 11-II-79, 1 ♂ (V. Hellebuyck). — *B. vivax* Calvert, VH-03, 1 ♂. — *Dythemis maya* Calvert, VH-11, 1 ♂. — *D. multipunctata* Kirby, VH-04, 1 ♂. — *Erythemis*

simplicicollis (Say), VH-12, 1 ♂, 2 ♀. — *Erythrodiplax umbrata* (Linnaeus), VH-08, 2 ♀. — *Leptthemis vesiculosa* (Fabricius), LA LIBERTAD, La Libertad, 29-XI-70, 1 ♀, 14-II-71, 1 ♂ (SLS); VH-08, 1 ♀. — *Macrothemis hemichlora* (Burmeister), VH-01, 1 ♀; VH-02, 1 ♂; VH-07, 2 ♀. — *M. tessellata* (Burmeister), VH-07, 2 ♀. — *Orthemis levis* Calvert, LA LIBERTAD, La Libertad, 22-II-70, 1 ♂, 15-VIII-70, 1 ♂ (SLS); VH-07, 2 ♀. — *Paltothemis lineatipes* Karsch, VH-04, 2 ♂, VH-10, 1 ♂. — *Perithemis domitia* (Drury), VH-01, 27 ♂, 3 ♀; VH-02, 5 ♂, 3 ♀; VH-05, 15 ♂, 3 ♀; VH-07, 1 ♂. — *Planiplax sanguiniventris* Calvert, VH-12, 5 ♂. — *Pseudoleon superbus* (Hagen), LA LIBERTAD, Santa Tecla, 11-VI-58, 1 ♂ (O.L. Cartwright); VH-02, 1 ♂. — *Sympetrum illotum virgulum* (Selys), VH-15, 1 ♂; VH-16, 16 ♂, 4 ♀. — *Tauriphila australis* (Hagen), VH-10, 1 ♂.

I wish to thank V. HELLEBUYCK for letting me use his records and G.H. BICK for his help in the early stages of this paper, also D.R. PAULSON for two records he sent from the California Academy of Sciences Collection. Mrs L.K. Gloyd determined the species of *Argia*. Two of the species of *Argia* represent new species of Mrs Gloyd's in manuscript, but until they are published we continue to use names as applied by Calvert in B.C.A.

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