

ODONATOLOGICAL ABSTRACTS

1980

- (4998) CARLQUIST, S., 1980. *Hawaii. A natural history: geology, climate, native flora and fauna above the shoreline.* Pacific Trop. Bot. Garden, Honolulu. 468 pp. — Price: US \$ 19.95. — (Author's address not stated). Contains various references to the Odon., incl. a note on the larval ecology of Megalagrion.

1982

- (4999) MOLA, L.M., S.S. AGOPIAN & A. RODRIGUES CAPITULO, 1982. Estudios cromosómicos en tres especies de Libellulidae (Odonata, Anisoptera). *Resum. XIII Congr. argent. Genét.*, La Plata, p. 28. [Abstract]. — (First Author: Catamarca 490/4°E, AR-1213 Buenos Aires). The karyotypes of Tauriphila risi, Miathyria marcella and Perithemis icteroptera, all from Argentina (n=13), are briefly described and discussed.

- (5000) RÜPPELL, G., 1982. *Aeschna cyanea* (Aeshnidae) — Flugverhalten. *Publ. wiss. Filmen. Biol.* (XV) 47: 1-10. (With Engl. & Fr. s's). — (Zool. Inst., Techn. Univ. Braunschweig, Pockelstr. 10a, D-3300 Braunschweig, FRG). Explanatory text for Film No. E-2712, of the Inst. Wiss. Film, Göttingen (16 mm, colour, silent, 3.5 min). The flight on the spot and in curves is shown in several scenes. Remarkable are the clearly visible rotations of the thorax, probably serving in the flight on the spot to stabilize the flight against selfproduced waving or gusts and in curves to compensate the centri-

fugal power, whereby the optical axis always remains vertical. (Cf. OA 4217).

1983

- (5001) AGOPIAN, S.S., L.M. MOLA & A. RODRIGUES CAPITULO, 1983. Análisis cromosómico en tres especies de Libellulidae (Odonata). *Resum. XIV Congr. argent. Genét.*, San Luis, p. 34. [Abstract]. — (Second Author: Catamarca 490/4°E, AR-1213 Buenos Aires). The karyotypes of Erythemis attala (n=13), Orthemis ambinigra (n=6) and O. nodiplaga (n=21), all from Argentina, are briefly described and discussed.

- (5002) HÜBNER, T., 1983. Untersuchung zur Arten-schutzfunktion von Autobahngewässern. *Natur & Landschaft* 58(10): 371-373. — (Kirschbaum 10, D-4018 Langenfeld, FRG). Contains a list of 13 odon. spp., recorded at the ponds along the superhighway in the Langenfeld area, Rhineland, FRG. No statement is made as to the deposition of the reference material, if any.

- (5003) JACOB, U., B. KLAUSNITZER & H. WALTHER, 1983. Qualitative and quantitative entomofaunistic investigation of an open-cast residual lake near Leipzig (GDR). *Int. Revue ges. Hydrobiol.* 68(5): 701-713. — (Second Author: Abt. Taxon./Oekol., Sekt. Biowiss., Karl-Marx-Univ., Talstr. 33 DDR-7010 Leipzig, GDR). The paper deals with the situation in the oligo-to mesotrophic Kulkwitz lignite residual lake,

- and contains some specific references to the Odon.
- (5004) LEVITINA, M.V., 1983. Sravnitel'no-biohimicheskoe izuchenie cerebrozidov i sul'focerebrozidov v cerebral'nyh gangliyah bespozvonochnyh. — Comparative biochemical study of cerebrosides and sulfocerebrosides in invertebrate cerebral ganglia. *Zh. evol. Biohim. Fiziol.* 19(6): 529-533. (Russ., with Engl. s.). — (Sechenov Inst. evol. Physiol. & Biochem., USSR Acad. Sci., Leningrad, USSR). The cerebroside and sulfocerebroside content of the cerebral ganglia of 14 invertebrate spp., incl. *Aeshna grandis*, was studied. A correlation between the glycolipid concentration in the cerebral ganglia and the degree of development of the nervous system of the taxa studied is suggested.
- (5005) MOENS, J., 1983. Libellen — [Dragonflies]. *Jaarbullet. Vrienden Heverleebos & Meerdaalwoud* 1983: 46-63. (Dutch). — (Dept SBM, Limburgs Univ. Centrum, Univ. Campus, B-3610 Diepenbeek). General talk on dragonflies. The same text, with different illustrations and without author's name, was published in *Jachthoorn* 3(18): 13-25 (1983).
- (5006) NOTULAE ODONATOLOGICAE. Semianual bulletin of the International Odonatological Society. Published by the Societas Internationalis Odonatologica (S.I.O.), Utrecht. Vol. 2, No. 2 (Dec. 1, 1983), and subsequent issues. — Annual subscription Hfl. 25.- net. — (c/o Dept Anim. Cytogen. & Cytotaxon., Univ. Utrecht, Padualaan 8, 3584 CH Utrecht, NL). [Since the bulletin is supplied free to all subscribers to *Odonatologica*, the listing of the contents in the OA is henceforth suspended].
- 1984
- (5007) ADVANCES IN ODONATOLOGY Vol. 2. (V + 208 pp. col. frontispiece), Dec., 1984. Edited by G. Pritchard; published by the Societas Internationalis Odonatologica (S.I.O.), Utrecht. Price: Can. \$ 28.- net. (Orders to the Editors of *Odonatologica*, or to Univ. Calgary Press, 2500 University Drive, Calgary, Alberta T2N 1N4, CA).
Pritchard, G.: Preface (p. III); — *Asahina, S.*: Some biological puzzles regarding Aka-Tombo, *Sympetrum frequens*, (Anisoptera: Libellulidae) of Japan (1-11, col. frontispiece); — *Fincke, O.M.*: Giant damselflies in a tropical forest: reproductive biology of *Megaloprepus coerulatus* with notes on *Mecistogaster* (Zygoptera: Pseudostigmatidae) (13-27); — *Franchini, J., J.-G. Pilon & M.J. Masseau*: Différenciation des types de développement et variation intra-stade au cours du développement larvaire d'*Ischnura verticalis* (Say) (Anisoptera: Coenagrionidae) (29-43); — *Henderson, J.B. & T.B. Herman*: Movement patterns and behavior of *Calopteryx aequabilis* Say (Zygoptera: Calopterygidae) in Nova Scotia, Canada (45-55); — *Johnson, D.M., R.E. Bohanan, C.N. Watson & T.H. Martin*: Coexistence of *Enallagma divagans* and *Enallagma triviatum* (Zygoptera: Coenagrionidae) in Bays Mountain Lake, Tennessee: an in situ enclosure experiment (57-70); — *Lavoie-Dorrik, J. & J.-G. Pilon*: Ultrastructure de l'œil composé larvaire et adulte chez un insecte appartenant au genre *Enallagma* (Zygoptera: Coenagrionidae) (71-94); — *May, M.L.*: Energetics of adult Anisoptera, with special reference to feeding and reproductive behavior (95-116); — *Moens, J.*: Morphology and ultrastructure of the excretory organs in larvae of *Ischnura elegans* Vander Linden (Zygoptera: Coenagrionidae) (117-126); — *Norling, U.*: Life history patterns in the northern expansion of dragonflies (127-156); — *Parr, M.J.*: The seasonal occurrence of Odonata in the Liwonde National Park, Malawi (157-167); *Pickup, J. & D.J. Thompson*: The effects of prey density and temperature on development of larvae of the damselfly *Lestes sponsa* (Hans.) (Zygoptera: Lestidae) (169-176); — *Pilon, J.-G. & M.J. Masseau*: The effect of temperature on egg development in Zygoptera: a preliminary discussion (177-193); — *Siva-Jothy, M.T.*: Sperm competition in the family Libellulidae (Anisoptera) with special reference to *Crocothemis erythraea* (Brullé) and *Orthetrum cancellatum* (L.) (195-207).

- (5008) AGOPIAN, S.S. & L.M. MOLA, 1984. Bandeo C en Odonata. *Resum. XV Congr. argent. Genét.*, Corrientes, p. 17. [Abstract]. — (Second Author: Catamarca 490/4E, AR-1213 Buenos Aires).
The complements of *Tauriphila risi* ($n=12+X$) and *Orthemis ambinigra* ($=6$, incl. neo-XY) were stained with propionic haematoxylin, yielding good C-banding patterns in spermatogonia and in spermatocytes. The morphology and phylogeny of the 2 karyotypes are briefly discussed.
- (5009) BEUTLER, H., 1984. Eine Methode zum Lebendtransport von Grosslibellen (Anisoptera). *Ent. Nachr. Ber.* 28(3): 136-137. — (Frankfurter Str. 23b, DDR-1230 Beeskow, GDR).
Cardboard clips are suggested for wing immobilisation of Anisoptera individuals scheduled for transportation.
- (5010) BEUTLER, H., 1984. Beitrag zur intraspezifischen Variation von *Erythromma viridulum* (Charp., 1840) (Odonata). *Ent. Nachr. Ber.* 28(6): 273-275. (With Engl. & Russ. s's). — (Frankfurter Str. 23b, DDR-1230 Beeskow, GDR).
Material from the "Mark Brandenburg" (GDR) and Austria is biometrically compared, and the importance of sample size is emphasized with reference to *E. viridulum orientale*.
- (5011) BINKOWSKI, R., M. HOFFMEISTER & W. HOFFMEISTER, 1984. Die Wassergüte des Goldbaches bei Hagen am Teutoburger Wald in seinem Oberlauf und in einem seiner Zuflüsse im Jahr 1982. *Osnabrück. naturw. Mitt.* 11: 169-207. — (First Author: Lindenstr. 32, D-4504 Georgsmarienhütte, FRG).
Aeshna cyanea is the only odon. sp. listed (fish ponds nr Hagen, Rhineland, FRG).
- (5012) BOYE, P., 1984. Red area: Appener Moor. *Naturk. Beitr. DJN* 13: 1-138. (Germ.). — (Kiefernweg 1, D-2000 Wedel, FRG).
Monograph on the Appener Moor. Distr. Pinneberg, NW of Hamburg, FRG. A list of 23 odon. spp. appears on p. 57.
- (5013) CLAESSENS, S., 1984. De libellen (Odonata) van de Rouwkuilen. — The dragonfly-fauna (Odonata) of the Rouwkuilen. *Natuurh. Maandbl.* 73(11): 202-207. (Dutch, with Engl. s.). — (Mgr. Nolensstr. 5, Venray, NL).
Based on the report listed in OA 4489, the odon fauna of the nature reserve Rouwkuilen, Zuid Limburg prov., the Netherlands is discussed with special reference to the effects of "acid rain" and ammonia pollution.
- (5014) DAVIES, D.A.L. & P. TOBIN, 1984. The dragonflies of the World. A systematic list of the extant species of Odonata. Vol I. Zygoptera and Anisozygoptera. *Soc. int. odonatol. rapid Comm.* (Suppl.) 3: X + 128 pp. — Price: hfl. 40. net. — (Available from the Editors of Odonatologica, Dept Anim. Cytogen. & Cytotaxon., Univ. Utrecht, 3584 CH Padualaan 8, Utrecht, NL).
This is the first volume of the World Catalogue of the Order (for the Anisoptera Vol. cf. OA 5042), listing 2362 spp., 205 spp. and 87 "forms". Brief references are given to the original descriptions (author, year, journal vol., page) and the general range is stated. The original genus in which a sp. was described is entered for the type spp. (asterisked) and in monotypic genera (where needed). The subgenera are also listed, and the synonyms are stated and marked; the names unaccepted (for any reason) have no entry in the distribution column. — Since W.F. Kirby (1890), this is the first systematic catalogue of the Order. Although such a tremendous and pioneer work is inevitably bound to show some shortcomings and errors (the more so since the authors were unable to receive in time the comments on their earlier drafts from some of the taxonomists approached), the work definitely ranks among the major and most significant achievements of 20th century odonatology; it represents a definite milestone, comparable to those set up, in different odonatol. disciplines, by R.J. Till-yard and P.S. Corbet. Although this is only a "preliminary edition" (both volumes are scheduled by SIO for publication in a single book, with complete bibliographic references, corrections and additional information, early in the 1990s), the catalogue is being computerized

- now by the Conservation Monitoring Centre (London) of the International Union for Conservation of Nature and Natural Resources (IUCN). It is going to serve as the basis for status evaluation and for various other objectives of current and forthcoming research on odon. systematics, biogeography and conservation.
- (5015) ES'KOV, K.Yu., 1984. B.F. Belyshev, A. Yu. Haritonov, "Geografiya strekoz (Odonata) boreal'nogo faunisticheskogo carstva". *Zool. Zh.* 63(4): 637-640. (Russ.). — (Author's address not stated).
A very comprehensive book review of the work listed in *OA* 3292.
- (5016) FALK, L., 1984. Die Insekten und Spinnen des Remigiusberges. *Pollinia-Buch* 5: 169-190.
5 odon. spp. are listed from the Remigiusberg, Palatinate, FRG.
- (5017) GARNER, P., 1984. *Gallé*. Flammarion, Paris. 168 pp. [ISBN 2-08-011703-3]. — Price: fFr. 250.- (Fr.).
French ed. of the original Engl. work (Academic Press, London, 1976). — This is a monograph (biography and review of work) on the famous French Art Nouveau artist Émile Gallé (May 8, 1846 - Sept. 23, 1904), Photographs of, and references to his numerous well known dragonfly creations appear on pp. 25, 78, 82, 88, 94-97, 123, 143. — Cf. also *OA* 5021.
- (5018) HEINICKE, W., 1984. Neue Artenschutzbestimmung in der Deutschen Demokratischen Republik. *Ent. Nachr. Ber.* 28(6): 281-283. — (Str. der Republik 35, DDR-6500 Gera, GDR).
A classified list is given of the insect taxa legally "protected" in the GDR. All odon. spp. fall under category "d". A licence is required even for photographing. — (The comments in *Abstracter's Note* of *OA* 3112 are in order).
- (5019) JARZEMBOWSKI, E.A., 1984. Early Cretaceous insects from southern England. *Modern Geol.* 9: 71-93. — (Dept Ent., Brit. Mus. (Nat. Hist.), Cromwell Rd, London, SW7 5BD,
- UK).
Reference is made to the Wealden Odon. The Anisoptera include Aeschnidiidae, but the Zygoptera are relatively scarce. Specific names are not stated. (Cf. also *OA* 3345).
- (5020) JOOST, W., 1984. Erstnachweis von Aphelocheirus aestivalis (F.) im Bezirk Halle (Heteroptera, Aphelocheiridae). *Ent. Nachr. Ber.* 28(2): 80-82. — (Sekt. Biowiss., Karl-Marx-Univ., Talstr. 33, DDR-7010 Leipzig, GDR). Includes a list of 10 odon. spp., recorded in the Pelze R., Rosslau, GDR.
- (5021) MAROT, P., F.-T. CHARPENTIER & P. HUSSON, 1984. *Musée de l'Ecole de Nancy: la céramique de Gallé, conservée au Musée*. Musée Ecole de Nancy, Nancy. 158 pp. — Price: fFr. 130.-.
Monograph on, and a catalogue of the Art Nouveau pottery of Emile Gallé in the collections of the Nancy Museum. References and/or figs concerning his dragonfly work appear on pp. 28-29, 40-41, 50, 79 (monograph), and 16, 20, 26, 55, 76 (catalogue). — Cf. also *OA* 5017.
- (5022) MOLA, L.M., S.S. AGOPIAN & A. RODRIGUES CAPITULO, 1984. Estudios citogenéticos del género Erythrodiplax. *Resum. XV Congr. argent. Genét. Corrientes*, p. 17. [Abstract]. — (First Author: Catamarca 490 40E, AR-1213 Buenos Aires).
The karyotypes of *E. ochracea*, *E. corallina*, *E. atroterminata*, *E. connata fusca* and *E. nigricans*, all from Argentina (n=13), are briefly discussed.
- (5023) NEW, T.R., 1984. *Insect conservation. An Australian perspective* XIV + 184 pp. Junk, Dordrecht-Boston-Lancaster. ISBN 90-6193-507-5.
In the chapter "Australian insect fauna: what to conserve?", *Hemiphlebia mirabilis* is the only odon. sp. discussed (pp. 46-47). Reference is made to an IUCN/SSC Odonata Specialist Group research project on it, and it is stated "it may have become extinct recently". — (For a review of the present status of *H. mirabilis* cf. the paper by D.A.L. Davies in the present issue

- of Odonatologica).
- (5024) RÜPPELL, G., 1984. Symptetrum spec. (Libellulidae) — Eiablageverhalten. *Publ. wiss. Filmen, Biol.* (XVI) 30: 1-8. With Engl. & Fr. s's). — (Zool. Inst., Techn. Univ. Braunschweig, Pockelstr. 10a, D-3300 Braunschweig, FRG). Explanatory text for the Film No. E-2740, as listed in OA 4878. The oviposition (in tandem) is shown of *S. sanguineum*. By means of 500 f/s details of the male-female cooperation and the wing movements are visible.
- (5025) RÜPPELL, G., 1984. Rana esculenta (Ranidae) — Beuteerwerb. *Publ. wiss. Filmen, Biol.* (XVI) 31: 1-14. (With Engl. & Fr. s's). — (Zool. Inst., Techn. Univ. Braunschweig, Pockelstr. 10a, D-3300 Braunschweig, FRG). Explanatory text for Film No. E-2819, of the Inst. Wiss. Film, Göttingen (16 mm, colour, silent, 8 min). The dragonfly-catching behaviour of the green frog is figured and discussed in detail.
- (5026) RÜPPELL, G., 1984. Orthetrum cancellatum (Libellulidae) — Flug- und Fortpflanzungsverhalten. *Publ. wiss. Filmen, Biol.* (XVI) 36: 1-12. (With Engl. & Fr. s's). — (Zool. Inst., Techn. Univ. Braunschweig, Pockelstr. 10a, D-3300 Braunschweig, FRG). Explanatory text for Film No. E-2851, of the Inst. Wiss. Film, Göttingen (16 mm, colour, silent, 7 min). Flight and reproductive behaviour. In patrolling flight males threaten each other and pursue small insects and females. In the air they grasp the females and build together with them the mating position. Oviposition takes place soon after fertilization, the males showing guarding behaviour.
- (5027) SAVARD, M., 1984. Le Chevalier solitaire (*Tringa solitaria*), important prédateur de larves d'odonates en Sagamie. *Fauberries* 11(1): 1-6. — (184 av. Eymard Nord, Alma, Qué., G8B 5H9, CA). Observations on the Solitary Sandpiper's feeding on Anisoptera larvae (Saint-Jean Lake, Quebec, Canada) are brought on record and discussed.
- (5028) STRAKA, V., 1984. Vážki (Odonata) Slovenského Krasu. — On the knowledge of dragonflies (Odonata) of the Slovak Karst. *Biologia Bratislava* 39(10): 1017-1022. — (Slovak, with Engl. s.) — (Turčianske Múzeum, Engelsova 2, CZ-03601 Martin). By processing odon. material collected in the Slovak Karst, 29 spp. were identified, representing 49.18% of odon. spp. known from the Slovak territory, Czechoslovakia. Using the classification of U. Jacob (1969, *Faun. Abh. Dresden* 2: 197-239), 2 types of odon. communities may be sorted out for the Slovak Karst.
- (5029) UNRUH, M., 1984. Neue Fundorte von *Sympetrum pedemontanum* Allioni (Odonata). *Ent. Nachr. Ber.* 28(5): 220-221. — (Mus. "Schloss Moritzburg", Schlossstr. 6, DDR-4900 Zeitz, GDR). With reference to the paper listed in OA 4648, 4 additional localities from the GDR are stated.
- (5030) VON DRACHENFELS, H. MEY & P. MIOTK, 1984. Naturschutzatlas Niedersachsen: Erfassung der für den Naturschutz wertvollen Bereiche, Ergebnis der ersten landesweiten Kartierung (Stand 1984). *Naturschutz Landschaftspf. Niedersachsen* 13: 1-267. — (Third Author: Podbielskistr. 47, D-3000 Hanover-1, FRG). The catalogue covers, among other things, all types of aquatic habitats in Lower Saxony, FRG. For each of these the characteristic odon. spp. are stated.

1985

- (5031) AMSTRONG, N., 1985. Fans for all seasons. *Readers Digest* (Brit. ed.) 1985 (June): 40-45. On p. 43 appears a col. phot. of "Dragonflies", i.e. a fan by the leading Paris fanmakers Duveleroy (ca 1900), made in dark net appliqued with paler hand-made Brussels lace, decorated with gold, silver and blue sequins.
- (5032) ASAHIKA, S., 1985. Further contributions to the taxonomy of Southasiatic Coelicia species (Odonata, Platycnemididae). *Chō Chō* 8(2): 2-13. (With Jap. s.). — (Takadanobaba 4-4-24,

Shinjuku-ku, Tokyo, 160, JA).

C. loringae Laidl. is classified as a ssp. of *C. didyma* Sel. The *C. renifera*-group is revised, resulting in the synonymisation of *C. dierli* St. Quent. with *C. renifera* (as a teneral specimen of the latter), and in the description of *C. rossi* sp. n. (♂, ♀, Ledo, Assam, 13-X-1961). Notes are also provided on *C. svihleri* Asah., and on *C. albicauda* (Först.), and figs are given of all taxa treated.

- (5033) ASAHINA, S., 1985. Illustrated common dragonflies of Southeast Asia, I. *Chô Chô* 8(5): 26-28. (Jap. with Engl. title). — (Takadanobaba 4-4-24, Shinjuku-ku, Tokyo, 160, JA).

Specimen photographs of, and annotations on *Pantala flavescens*, *Tramea virginia*, *T. transmarina euryale* and *Hydrobasileus croceus*.

- (5034) ASAHINA, S., 1985. A list of the Odonata recorded from Thailand. Part VII. Megapodagrionidae. *Chô Chô* 8(6): 2-8. (With Jap. s.). (Takadanobaba 4-4-24, Shinjuku-ku, Tokyo, 160, JA).

Burmargiolestes melanothorax (Sel.), *B. laidlawi* Lieft. and *Rhinagrion minima* Karsh are redescribed, figured and discussed. *B. flaviceps* Fraser is synonymised with *B. melanothorax*.

- (5035) ASAHINA, S., 1985. Illustrated common dragonflies of Southeast Asia, II. *Chô Chô* 8(6): 23-25. (Jap., with Engl. title). — (Takadanobaba 4-4-24, Shinjuku-ku, Tokyo, 160, JA). Specimen photographs of, and annotations on *Rhyothemis p. phyllis*, *R. v. variegata*, *Trithemis aurora*, *T. festiva* and *T. pallidinervis*.

- (5036) BARTH, E. & D. ZÜHLKE, 1985. *Zwischen Wolkenstein, Marienberg und Jöhndstadt*. Akad.-Verlag, Berlin. XII + 228 pp. — (Second Author: Arbeitsgr. Heimatforschung, Inst. Geogr. & Geoökol., Akad. Wiss. DDR, Augustusstr. 2, DDR-8010 Dresden, GDR). A regional monograph. Erzgebirge, GDR. On p.13. *Somatochlora alpestris* is recorded.

- (5037) BEUKEBOOM, L., 1985. *Libellen in het Fochtelooërvengebiet: een ecologisch onderzoek Dragonflies of the Fochtelooërveen area: an ecology study*. Privately published.

XIV + 102 pp. (Dutch, with Engl. s.). — Copies available from the Author, at Hfl. 9.25; remittance to Postal Giro Account No. 4112676 of L. Beukeboom (Helperwestsingel 31-22, 9721 BB Groningen NL).

The Fochtelooërvreen includes the last remaining active peat bog area in The Netherlands. The synecology and autecology of its odon. spp. (27) were studied in considerable detail.

- (5038) BRODSKY, A.K., 1985. *Dvizhenie kryl'ev nasekomyh v gorizontall'nom ustavivshemsya polete* (Sravnitel'nyy aspekt). — Kinematics of insect wing movement in straightforward flight (A comparative study). *Russ. ent. Obozr.* 54(1): 33-50. (Russ., with Engl. s.). — (Dept Ent., Univ. Leningrad, Universitetskaya naberezhnaya 7/9, USSR-199164 Leningrad). The insect wing kinematics is analysed in different orders, incl. *Coenagrion hastulatum* and *Sympetrum vulgatum*. The stroke parameters, motion phases and special movements in the wing-beat cycle are considered. It is argued that the wing kinematics is related to the evolutionary trends in the insect flight function.

- (5039) BUSKIRK, R.E. & K.J. SHERMAN, 1985. The influence of larval ecology on oviposition and mating strategies in dragonflies. *Fla Ent.* 68(1): 39-51. — (First Author: P.O. Box 7456, Univ. Texas, Austin, TX 78712, USA). Based on the literature, the appropriate species patterns of oviposition behaviour, placing offspring in favourable situations, are suggested. By knowing the behaviour of ovipositing females, one can predict the most feasible strategies for males to maximize their breeding success. The territorial defense and male guarding are related to the manner of oviposition in 16 spp. surveyed.

- (5040) *CONTACTBLAD NEDERLANDSE LIBELLENONDERZOEKERS* — Newsletter of the Dutch Dragonfly Workers. No. 9 (May, 1985). (Dutch). (c. o M. Verdonk, Floraliaan 47, 1402 NJ Bussum NL). In addition to various announcements and administrative notices, 3 items will be of particular interest, viz. list of the addresses of odon.

recording Organizers in 14 European countries (*M. Verdonk*, pp. 3-4), noteworthy 1982-1984 faunistic records in The Netherlands (anonymous, pp. 6-10) and, the obituary for Dr M.A. Lieftinck (*M. Wasscher*, pp. 11-12), containing a review of Lieftinck's papers pertaining to the odon. fauna of The Netherlands.

- (5041) D'AGUILAR, J., J.-L. DOMMANGET & R. PRECHAC, 1985. *Guide des Libellules d'Europe et d'Afrique du Nord*. Delachaux & Niestlé, Neuchâtel-Paris. 342 pp., col. pls & maps incl. [ISBN 2-603-00566-9]. — Price: fFr. 169.- net. (hard cover). — (Second Author: 7 rue Lamartine, F-78390 Bois d'Arcy). Indispensible pocket-size field guide, covering 131 spp. of Europe and northern Africa. The following information is provided for each sp.: taxonomic name (and some synonymy), vernacular names in Fr., Engl. Germ., description, habitat characterisation, notes on biology and on general distribution. Also included are col. drawings (of both sexes, where necessary) and distribution maps of all spp. No similar work has ever been published on the European fauna, it is definitely to become the vademecum of all somehow interested in the regional dragonflies.
- (5042) DAVIES, D.A.L. & P. TOBIN, 1985. The dragonflies of the World. A systematic list of the extant species of Odonata. Vol. 2. Anisoptera. *Soc. int. odonatol. rapid Comm.* (Suppl.) 5: XII + 152 pp. — Price: Hfl. 40.- net. — (Available from the Editors of *Odonatologica*, Dept Anim. Cytogen. & Cytotaxon., Univ. Utrecht, Padualaan 8, Utrecht, NL). Second and final volume of the work listed in OA 5014. For the scope of information provided and for the general characterization see there. Both volumes are practically complete to the end of 1983, though both contain some taxa published in 1984 as well. The Anisoptera catalogue lists 2513 spp., 322 ssp. and 83 "forms" (of no status under the Code).
- (5043) DUNCAN, P.B., 1985. The Odonata of Rhum. *Ent. mon. Mag.* 121(1448/1451): 27-33. — (East Camghouran, By Rannoch Station, Perthshire, Scotland UK).

A survey was carried out in 1981 on the island of Rhum, Inner Hebrides, Scotland to identify the more important odon. sites in terms of species diversity and to establish the status of the vulnerable spp. 10 odon. spp. were recorded, and the biogeographical relevance of Rhum is briefly discussed.

- (5044) DUNN, R., 1985. Annual dragonfly (Odonata) report - 1984. *Quart. J. Derby. ent. Soc.* 1985 (80): 17-20. — (4 Peakland View, Darley Dale, Matlock, Derbyshire, DE4 2GF, UK). Annotations on the 19 spp. so far recorded from Derbyshire, UK.
- (5045) FISCHER, H., 1985. Die Tierwelt Schwabens. 24. Die Libellen. *Ber. naturf. Ges. Augsburg* 40: 1-48. — (Naturf. Ges. Augsburg, Vogelmauer 33, D-8900 Augsburg, FRG). Checklist of all known odon. records (66 spp.) evidenced in the Schwaben prov., FRG, between 1813-1984. The bibliography is not given.
- (5046) GARDINER, B.O.C., 1985. British dragonflies, by Roderick Dunn. *Bull. amat. Ent. Soc.* 44(346): 38-39. — (Author's address not stated). Description of a set of 4 col. dragonfly prints (*Calopteryx splendens*, *Cordulegaster boltoni*, *Libellula quadrimaculata*, *Somatochlora metallica*), published in 500 copies, by Woodall, Townhead, Tideswell, Derby. SK7 8LX, available at £ 20.- per set.
- (5047) GOMPHUS Mededelingenblad van de Belgische libellenonderzoekers — Feuille de contact des odonatologues belges, Vol. 2, Nos 1 (May, 1985), 2 (July 1985). (Dutch & Fr.). — (c/o M. Van Mierlo, Steenweg op Mol 52, B-2300 Turnhout). No. 1, entirely in Dutch: reports on the Sixth and Seventh Meeting of the Belgian Dragonfly Recorders (*A. Anselin*), an exhaustive review of the work listed in OA 4979 (*A. Anselin*), various announcements, and an outline of the mapping work in 1985 (*N. Michiels*). — No. 2, in Fr. & Dutch: various announcements, report on the Eighth Meeting of the Belgian Dragonfly Recorders (*A. Anselin*), a book review of the work listed in OA 4672 (*A. Anselin*), and

the directory of the membership. Of particular interest is the paper by *P. Goffart* (Lab. Ecol., 24 Petit Sart, B-6688 Lierneux): Compte-rendu de l'excursion en Hainaut & Namurois, 29 juillet 1984.

- (5048) HÄMÄLÄINEN, M. 1985. Note on "nigrescens-like" specimens of *Sympetrum striolatum* (Odonata, Libellulidae) in the Åland Islands. *Norul. entomol.* 65: 68. — (Tullilaboratorio, Tekniikantie 13, SF-02150 Espoo, Finland). *S. striolatum* specimens from the Åland Islands, Finland, are reported to show intermediate features between *S. striolatum* and *S. nigrescens* sensu Gardner. The taxonomy of *S. nigrescens* Lucas is discussed, and its species status is questioned. The record of a *S. nigrescens* larva from Tvärrminne (cf. *OA* 3144) is corrected; it is a *S. vulgatum*.
- (5049) HERBST, G.N. & H.K. MIENIS. 1985. Aquatic invertebrate distribution in Nahal Tanninim, Israel. *Israel J. Zool.* 33(1/2): 51-62. — (Dept Zool., Hebrew Univ., IL-91904 Jerusalem). The aquatic invertebrate assemblage of the Mediterranean coastal river, Nahal Tanninim, is analysed. Reference is made to Odon., but a spp. list is not provided (*Coenagrion* sp., *Gomphidae*).
- (5050) KASparek, M., 1985. *Die Sultanssümpfe: Naturgeschichte eines Vogelparadieses in Anatolien*. 154 pp. Kasparek, Heidelberg. [ISBN 3-925064-00-1]. — (Bettinaweg 7, D-8300 Landshut, FGR). *Ischnura elegans ebneri*, *Anax parthenope*, *Orthetrum cancellatum*, *Crocothemis erythraea*, *Sympetrum meridionale* and *S. vulgatum flavum* are recorded (pp. 122-123) from the Sultan Marshes, Rayseri prov. Central Anatolia, Turkey. The material was identified by Dr N. Kazancı, Hacettepe Univ., Ankara (p. 14).
- (5051) LINDENIA. Notiziario dell'Ufficio Nazionale Italiano della Società Odonatologica Internazionale, Roma, No. 4 (July 1, 1985). — (c/o Prof. Dr C. Utzeri, Dipt. Biol. Anim. & Uomo, Univ. Roma, Viale dell'Università 32, I-00185

Roma).

An Editorial is followed by a complete directory of the Italian odon. workers, incl. the names of the few non-members of SIO. There is an announcement of the Second Indian Symposium of Odonatology (Dehra Dun, 1986), obituaries for Drs M.A. Lieftinck († April 13, 1985) and C. Nielsen († July 11, 1984); book reviews of volumes listed in *OA* 4870 and 4973 conclude the issue.

- (5052) MEYER, M., 1985. Nouvelle réglementation en matière de la protection des espèces animales sauvages au Luxembourg. — Neue Bestimmungen im Bereich des Schutzes wildlebender Tierarten in Luxemburg. *Paiperlek* 7(1): 5-16. (Fr. & Germ., comments in Germ.). — (Author's address not stated). The abridged (verbatim) text of the Act of Aug. 11, 1982, and of the Governmental Regulation of Oct. 22, 1984, incl. the list of the "protected" taxa, is followed by critical comments. The list includes numerous non-endangered taxa, incl. all the Odon., which are all placed under "total protection". As usual in this type of legislation, the destruction of the listed spp. by the application of the "normal agriculture and forestry economic methods" is exempted from the "conservation" regulations. — (Abstracter's Note: With the promulgation of this legislation Luxembourg has placed herself in the increasing group of countries, the legislative bodies of which either lack the intellectual potential to comprehend the basic principles of animal conservation, or, more likely, make the reliable inventarisation and status monitoring of the threatened taxa intentionally impossible. Cf. the comments in *OA* 3102, 3112, 4753).
- (5053) MOULDS, M.S., 1985. A new species of *Choristhemis* Tillyard (Odonata: Synthemistidae). *J. Aust. ent. Soc.* 24(2): 113-116. — (Ent. Dept. Aust. Mus., 6-8 College St., Sydney, N.S.W. 2000, AU). *C. barbareae* sp. n. is described and figured from Mt Lewis, northern Queensland, Australia. *Eusynthemis paradoxa* Förster is placed as a junior synonym of *C. flavoterminata* (Martin), and a key to the spp. of *Choristhemis* is given.

- (5054) NEL, A. & M. PAPAZIAN, 1985. Une nouvelle espèce d'Odonate fossile du Stampien d'Aix-en-Provence (B.d.R.) (Odonata Libellulidae). *Entomologiste* 41(2): 55-59. — (First Author: 8 ave. Gaison, F-13600 La Ciotat). *Palaeotramea aquisextana* gen. n., sp. n. is described and illustrated from the Stampian (Lower Oligocene) of Aix-en-Provence, France. The new genus is compared with various extant libellulids. The holotype is in the collection of the First Author.
- (5055) *NEWSLETTER [OF THE] BRITISH DRAGONFLY SOCIETY* No. 7 (Spring 1985). — (c/o R. Dunn, 4 Peakland View, Darley Dale, Matlock, Derbyshire, DE4 2GF, UK). Announcements of various field and indoor meetings, a note on the Welsh Dragonfly Group (c/o W. Nelson, 67 Heol Las, North Cornelly, Bridgend, Mid Glam, CF33 4BA, UK), notifications on literature, sales advertisement for dragonfly cards (12 spp.), fold-over cards (4 spp.) and folders (2 spp.) (cards from: Dr K. Mash, Old Thatch, 12 Havelins, Stourpaine, Dorset, DT11 8TH; folders from: N. Brown, Derbyshire Naturalists' Trust, Elvaston Castle Country Park, Derby, DE7 3EP). obituary notice for Dr M.A. Liefstink, etc.
- (5056) PRITYKINA, L.N., 1985. Yurskie strekozy (Libellulidae = Odonata) Sibiri i zapadnoy Mongoli. — [Jurassic dragonflies (Libellulidae = Odonata) of Siberia and western Mongolia]. *Trudy paleontol. Inst. Akad. Nauk SSSR* 211: 120-138, pls 18-19. (Russ.). — (Inst. Palaeontol., USSR Acad. Sci., Profsoyuznaya 113, USSR-117321 Moscow). The following taxa are described and figured, of which 6 genera and 17 spp. are new: *Camptophlebiidae*: *Xanthophysa sibirica* sp. n., *X. baleiensis* sp. n., *X. tomiensis* sp. n.; *Bathmophlebia jeniseica* sp. n.; *Oreophlebia abanica*; *Hypsophlebia dubia* sp. n.; *Sibironeura amurica* gen. n., sp. n., *S. angarica* sp. n., *S. interrupta* sp. n.; *Oshinia cellulata* gen. n., sp. n.; *Angaroneura tincta* gen. n., sp. n., *A. obscura* sp. n., *A. pulla* sp. n.; *Samarura gigantea*; — *Karatawiidae*: *Karatawia sibirica* sp. n., *K. mongolica* sp. n.; *Olonkia ignota* gen. n., sp. n.; — *Isophlebiidae*: *Dinosamarura tugnuica* gen. n., sp. n.; — *Archithemistidae*: *Kobdoneura manca* gen. n., sp. n.; *Shurabiola nana*.
- (5057) *PROCEEDINGS OF THE FIRST INDIAN SYMPOSIUM OF ODONATOLOGY*, 1985. Madurai Kamaraj University, Madurai. X + 226 pp. Hard cover. Edited by S. Mathavan. — Price (outside India): US \$ 40-. Available from the Editor (Dr S. Mathavan, Dept Anim. Physiol., Sch. Biol. Sci., Madurai Kamaraj Univ., Madurai-625021, India). Orders also accepted by the SIO National Office in India and by the Editors of *Odonatologica*. *Mathavan, S.*: Preface (p. V); — *Krishnaswamy, S.*: Foreword (p. VII); — *Kiauta, B.*: Foreword (p. IX); — *Ananthakrishnan, T.N.*: The role of population dynamics in the biology of insects (1-5); — *Ahmed, A.K.Z. & R.G. Michael*: Seasonal fluctuations of Odonata larvae in fishponds at different altitudes (7-17); — *Balasubramanian, M.P. & S. Palanichamy*: Studies on midgut esterases of the dragonfly *Brachythemis contaminata* (Fabricius) (Anisoptera: Libellulidae) (19-24); — *Basalingappa, S., M.R. Gandhi, S.B. Havalappanavar, K.S. Muralidhar, S.V. Modse & P. Tharabai*: Enumeration of damselfly *Lestes elata* Hagen (Odonata: Lestidae) and their possible role in the control of insects (25-27); — *Chockalingam, S. & M. Krishnan*: Toxicity of selected organic pesticides to the nymphs of *Brachythemis contaminata* Fab. (29-31); — *Jayakumar, E. & S. Mathavan*: Effects of fenthion and dursban on the predatory behaviour of dragonfly nymphs (33-43); — *Jebakumar, S.R.D., S. Mathavan & M.S.M. Christopher*: Effect of fenthion on the acetylcholinesterase activity of the dragonfly nymphs *Brachythemis contaminata* and *Mesogomphus lineatus* (45-52); — *Kallapur, V.L.*: Some aspects of structural organization and metabolic adaptations in the flight muscles of the dragonfly *Pantala flavescens* (53-61); — *Khan, M.W. & D.B. Tembhare*: Histological and histochemical characteristics of the rectal basal pad epithelia of the larvae of the dragonfly *Pantala flavescens* (Fabr.) (Anisoptera: Libellulidae) (63-71); — *Kumar, A.*: A review on the bio-ecology of Indian dragonflies (73-

-92); — *Mathavan, S.*: Reproductive behaviour of *Brachythemis contaminata* and *Orthetrum sabina* (Odonata: Libellulidae) (93-106); — Yolk utilization in the developing eggs of *Brachythemis contaminata* and *Orthetrum sabina* (Odonata: Anisoptera) (107-113); — *Muthukrishnan, J. & M. Senthamilzhselvan*: Phosphonooesterases of *Mesogomphus lineatus* embryo (115-123); — *Nirmala Kumari, K.R. & N. Balakrishnan Nair*: Effect of certain insecticides on anisopteran nymphs (Odonata) and the adult *Sphaerodema rusticum* Fab. (Hemiptera) (125-131); — Life history studies on *Pantala flavescens* Fab. (Odonata: Libellulidae) (133-149); — *Pitchairaj, R., M. Senthamilzhselvan, V. Prema & J. Muthukrishnan*: Yolk utilization in the developing egg of *Mesogomphus lineatus* (151-158); — *Pooyamoli, G. & T.J. Pandian*: Studies on diel emergence patterns of some tropical dragonflies (159-165); — *Prasad, M.*: Taxonomic significance of male genitalia in Odonata (167-173); — *Ram, R.*: Two new species of *Ictinogomphus* Cowley (Anisoptera: Gomphidae) from India (175-183); — *Roy, S.P.*: Investigations on the population dynamics and species diversity of nymphal odonates in a freshwater tropical shallow wetland (185-191); — *Sangal, S.K. & B.K. Tyagi*: *Calicnemia miniata doonensis*, a new subspecies from the Dehradun Valley (Dehradun, India) (Zygoptera: Platycnemididae) (193-197); — *Saxena, S.C. & R.S. Yadav*: Safety evaluation of a microbial insecticide SAN 402 I and the extract of flowers of *Delonix regia* on the larvae of dragonfly *Bradinopyga geminata* and damselfly *Ceriagrion sp.* (199-201); — *Shanmugavel, S. & S.C. Saxena*: Accumulation and metabolism of pesticides in the larvae of dragonfly *Tholymis tillarga* (203-208); — *Srivastava, B.K. & B.S. Babu*: Reproductive behaviour of *Ceriagrion coromandelianum* Ramb. (Zygoptera: Coenagrionidae) (209-216); — *Tyagi, B.K.*: Cytotaxonomy of the genus *Onychogomphus* Selys (Odonata: Anisoptera, Gomphidae), with special reference to the evolution of the sex-determining mechanism and the reduced chromosome number in the family Gomphidae (217-226).

(5058) REHAGE, H.-O., 1985. Beitrag zur Makroin-

vertebratenfauna und zur Wassergüte der Hopstener Aa. *Natur & Heimat, Münster* 45(1): 17-20. — (Biol. Stn "Heiliges Meer", D-4534 Recke, FRG).

Contains a list of 4 odon. spp. from the Hopstener Aa River, Northrhine-Westfalia, FRG.

(5059) RETTIG, K., 1985. Neues aus der Insektenwelt Ostfrieslands. *Beitr. Vogel-Insektenwelt Ostfrieslands* 19: 23-26. — (Danzigerstr. 11, D-2970 Emden, FRG).
Additions to the odon. lists in OA 4700 and 4889.

(5060) RÜPPELL, G., 1985. Kinematic and behavioural aspects of flight of the male Banded Agrion, *Calopteryx (Agrion) splendens* L. In: M. Gewecke & G. Wendler, [Eds], Insect locomotion, pp. 195-204. Parey, Berlin-Hamburg. — Zool. Inst., Techn. Univ. Braunschweig, Pockelstr. 10a, D-3300 Braunschweig, FRG).
The male flight of *C. splendens* was filmed in the natural habitat with high motion cameras (up to 500 frames/s). There are 2 fundamentally different flight modes: the dragonflies either beat their wing pairs nearly alternately, as in courting-flight, or synchronously, as in all other flight behaviour. From frontal shots the angles of inclination with respect to the horizontal plane (disregarding the twisting of the wings) were determined and placed in the lateral projection of the course of the wingtips. From these data and from pictures of successive stroke phases of the wings, as well as from measurements of body velocities a qualitative explanation of the basic principles of locomotion can be deducted. It is mainly the changes in the angle of inclination and the direction of wingbeat that result in different flight manoeuvres. During forward flight the direction of wingbeat is inclined forwards and downwards, while a more horizontal orientation prevails during backward flight. — The blue banded wings have a signal function in the territorial behaviour of the males. During the different flight manoeuvres the blue areas are visible to varying extents and appear to differ in size depending upon the position of the wings during stroking, the position of the male relative to its partner, and whether the wings are moved slowly or are

- arrested. The dual function of the wings, locomotion and communication, is discussed. (Author).
- (5061) RÜPPELL, G., 1985. Zarte Flügel — rauhe Sitten. *Westermanns Monatsh.* 1985 (4): 30-39. — (Zool. Inst., Techn. Univ. Braunschweig, Pockelstr. 10a, D-3300 Braunschweig, FRG). An account on odon. reproductive behaviour, with emphasis on the photographic documentation of exceptionally high quality, directed at the general reader. — (*Abstracter's Note*: The Author, born 1940, is Professor of Ethology and Ecology at the Univ. of Braunschweig, FRG, and one of the leading authorities on the odon. flight kinematics and behaviour in Germany).
- (5062) SAHLÉN, G., 1985. *Sveriges trollsländor (Odonata)*. — *The dragonflies of Sweden (Odonata)*. Fältbiologerna, Sollentuna. 152 pp. [ISBN 91-85094-21-8]. (Swed., with Engl. s.). — Price: Skr 72.- net. — (Author: Bellmansgatan 24, S-754 28 Uppsala). This attractive volume is the first commercially available book on Fennoscandian Odon. since that on the Finnish dragonflies by K.J. Valle (1952). The 63 Fennoscandian spp. are described, and the 55 Swedish spp. are keyed (adult & larvae). Adequate figs and distribution maps are provided, and suggestions are given on collecting, cabinet preservation, and rearing. The extensive regional bibliography will be very useful, though it is not complete. — The author has to be warmly congratulated on the very adequate presentation of the subject.
- (5063) SAHLÉN, G. & J. DE JONG, 1985. Trollsländeinventering. — Dragonfly inventarisation. *Fältbiologen* 1985 (3): 8-10. (Swedish). — (First Author: Bellmansgatan 24, S-754 28 Uppsala). Introductory notes to the Swedish Dragonfly Inventory, the work on which is scheduled to commence in the summer, 1985.
- (5064) SCHNEIDER, W., 1985. Dragonfly records from SE-Turkey (Insecta: Odonata). *Senckenbergiana biol.* 66(1/3): 67-78. — (Inst. Zool., Univ. Mainz, Saarstr. 21, D-6500 Mainz, FRG). Univ. Mainz, Saarstr. 21, D-6500 Mainz, FRG. 19 spp. are recorded from SE Anatolia. *Crocothemis servilia* is new to the fauna of Turkey. It occurs sympatrically and syntopically with *C. erythraea*. The hitherto westernmost location of *Paragomphus lineatus* and the easternmost location of *Somatochlora flavomaculata* for Turkey are reported. Structural characters are figured of *Epallage fatime*, *Cercion l. lindenii*, *P. lineatus*, *Orthetrum taeniolatum* and *Braechythemis fuscopalliata*.
- (5065) SCHNEIDER, W., 1985. Die Gattung *Crocothemis* Brauer 1868 im Nahen Osten (Insecta: Odonata: Libellulidae). *Senckenbergiana biol.* 66(1/3): 79-88. (With Engl. s.). — (Inst. Zool., Univ. Mainz, Saarstr. 21, D-6500 Mainz, FRG). Diagnostic characters of all Middle Eastern taxa of the genus *Crocothemis* Brauer 1868 are described and figured. An identification key to the spp. and spp., based entirely on structural characters, is presented. A new distinctive character for the females of *C. erythraea* and *C. servilia* is described. Information on the geographic distribution of all taxa is provided, and the first record of *C. servilia* from Kordan is communicated.
- (5066) SCHNEIDER, W., 1985. Wiederbeschreibung von *Erythromma viridulum orientale* Schmidt 1960 aus dem östlichen Mittelmeerraum (Insecta: Odonata: Coenagrionidae). *Senckenbergiana biol.* 66(1/3): 89-95. (With Engl. s.). — (Inst. Zool., Univ. Mainz, Saarstr. 21, D-6500 Mainz, FRG). *E. v. orientale* from Syria is redescribed, based on topotypical material. Diagnostic characters are figured and their variation is discussed.
- (5067) SCHNEIDER, W., 1985. The types of *Orthetrum aniceps* (Schneider, 1845) and the taxonomic status of *Orthetrum ramburii* (Selys 1848) (Insecta: Odonata: Libellulidae). *Senckenbergiana biol.* 66(1/3): 97-104. — (Inst. Zool., Univ. Mainz, Saarstr. 21, D-6500 Mainz, FRG). The syntypes of *Libellula aniceps* Schneider 1845, which so far were thought to be lost, are

redescribed and figured. The type specimens belong to 2 different spp. of the genus *Orthetrum* Newman, viz. *O. brunneum* (Fonsc.) and a taxon so far referred to as *O. ramburii* (Sel. 1848) by most authors. The latter name is a junior synonym of *O. anceps* (Schneider 1845). A lectotype of *O. anceps* is designated.

- (5068) SCHÖLL, F., 1985. Limnologische Untersuchung der Gewässersysteme Hanfbach und Quirrenbach im südlichen Rhein-Sieg-Kreis. *Decheniana* 138: 169-181. (With Engl. s.). — (Inst. Landwirtschaftl. Zool., Univ. Bonn, Melbweg 42, D-5300 Bonn-1, FRG). The macrozoobenthos of the Hanfbach and the Quirrenbach, Rhineland-Westfalia, FRG is analysed. 5 odon. spp. are listed.
- (5069) THEISCHINGER G. & J.A.L. WATSON, 1985. The genus *Episynlestes* Kennedy (Odonata: Synlestidae). *J. Aust. ent. Soc.* 24(2): 143-148. — (Second Author: Div. Ent., C.S.I.R.O., P.O. Box 1700, Canberra City, A.C.T. 2601, AU). *Episynlestes* is redefined, and *E. intermedius* sp. n. is described and figured from Finch Hatton Gorge, nr Mackay, Queensland, Australia. A key is provided, and the distribution of the 3 known spp. is mapped. Notes on the habitats are stated.
- (5070) WALKERIA. Newsletter of the Canadian National Office of the International Odonatological Society. Bulletin du Bureau national canadien de la Société odonatologique internationale, Thunder Bay, Ont., No. 1 (June 1, 1985). — Free for the Canadian members and

subscribers of the International Odonatological Society (S.I.O.); all others: US \$ 1.- per issue (non-Canadian orders to the Editors of *Odonatologica*). — (c/o Dr K. Deacon, 121 Banning St., Thunder Bay, Ont. P7B 3J1, CA). The newsletter appears semiannually (Engl. & Fr.) and serves as a vehicle for communication among Canadian workers. — The first issue contains various announcements of international and national odonatological meetings, an obituary notice for Dr M.A. Lieftinck, a very informative abstract of the PhD dissertation of *M. Leggott* (The effects of temperature on growth, development and activity in three populations of the dragonfly *Argia vivida*. Univ. Calgary, 1984), an article by *S. Cannings* (Burns bog, a wild island in the Delta farmlands), various requests, suggestions and personal communications from the membership, and the directory of the current SIO members in Canada. In the Editorial, the Editor, *K. Deacon*, has outlined the publication program. Of particular interest is his suggestion to set up, throughout the country, "Drop-in Centres", to encourage personal communication and friendship among the odonatologists.

- (5071) WHALLEY, P.E.S. & E.A. JARZEMBOWSKI, 1985. Fossil insects from the Lithographic Limestone of Montsech (Late Jurassic-Early Cretaceous), Lérida Province, Spain. *Bull. Br. Mus. nat. Hist. (Geol.)* 38(5): 381-412. — (Dept Ent., Brit. Mus. (Nat. Hist.), Cromwell Rd, London, SW7 5BD, UK). *Condalia woottoni* gen. n., sp. n. (Libellulidae) is described and figured, and the affinities of *Palaeschna vidali* Meunier are discussed.