

ODONATOLOGICAL ABSTRACTS

1986

- (10768) SHALAPYONAK, A.S., 1986. Strakozy (Odonata, abo Odonoptera). – [Dragonflies (Odonata, syn. Odonoptera)]. In: I.P. Shamyakin et al., [Eds], Encyklopedyya pryrody Byelarusi, Vol. 5, p. 12, col. pls 2-3 excl., Byelaruskaya Savyeckaya Encyklopedyya, Minsk. (Byeloruss.).
General, in the national Byelorussian nat. hist. encyclopaedia. In Byelorussia, there are ca 50 odon. spp., 21 of which are shown on col. pls, along with their resp. Byelorussian “common” names.

1987

- (10769) BULUHTO, N.P., 1987. *Nasekomye Tul'skogo kraya*. – [*The insects of Tula district*]. Priokskoe knizh. Izdat., Tula. 128 pp., 8 col. pls excl. ISBN none. (Russ.).
The odon. are briefly dealt with on pp. 21-23, but a list of the regional spp. (ca 180 km S of Moscow, Russia) is not given.

1988

- (10770) BEAVIS, I.C., 1988. *Insects and other invertebrates in classical antiquity*. Univ. Exeter. xv+269 pp. ISBN none. – (Publishers: Exeter Univ. Pubs, Reed Hall, Streatham Drive, Exeter, Devon, EX4 4QR, UK).
A chapter titled “Insecta: Diptera or Odonata (dragonflies)”, appears on pp. 239-240. – No dragonfly appellations are known in classical literature. Here, a reference is made to the Roman rhetoric teacher and miscellaneous writer, Claudius Aelianus (ca AD 170-236, or 160-240), who studied Greek literature and wrote in Greek. His works are considered by

some of no scientific significance; he compiled tales of earlier periods, which he selected for their morals or their singularity (cf. G. Morge, 1973, in: R.F. Smith et al., [Eds], *History of entomology*, p. 54, Ann. Reviews, Palo Alto). Noteworthy is his 17-book treatise, “*De animalium natura*”, where 50 chapters are devoted to insects. This includes the description of an insect, called “*hippouros*” (= “horse tail”), living around the river Astraios in Macedonia. Based on its description, behaviour and habitat, L.G. Fernandez (1959, *Manuales y Anejos de Emerita*, vol. 18, p. 47) suggests its identification as a “*dragonfly*”. – The etymology is here discussed in detail. If correct, this is the sole dragonfly appellation known so far in classical Greek.

- (10771) DZENDZELEVSKIY, I.A., 1988. Strekoza. – [Dragonfly]. In: R.I. Avenesov, [Ed.], The Slavic linguistic atlas. Lexical and word-formational series, 1: The animal world, pp. 19-24 (localities), 118-119 (distr. map), 131 (comments), 176-177 (lexical list), Nauka, Moscow, ISBN 5-02-010891-X. (Russ., with Fr. & Engl. title).
A commented map (with exact localities) of the distribution of folk appellations for “*dragonfly*” in the dialects of all Slavic languages (Europ. Russia only). The exhaustive checklist of appellations (ca 400) is crossreferenced with 853 localities of their origin, as indicated on the map.

- (10772) MÜLLER, J., 1988. Príspevok k poznaniu vážok (Insecta, Odonata) okresu v Krtíš. – [Contribution to the knowledge of dragonflies (Insecta, Odonata) in the district of Krtíš] In: Prehľad odborných Vysledkov 23 Tab. Ochrán. Prir., Plachtínská Dolina, pp. 141-144. (Slovak). – (Frankelfelde 3, D-39116 Magdeburg).

An annotated list of 17 spp., evidenced July 12-18, 1987 in Plachtínska Valley, central Slovakia. – (*Abstracter's Note*: These are the results of a regular "Nature Conservationists Summer Camp", published in a special volume by the organizer. Cf. also *OA* 10790).

1990

- (10773) STAUDER, A., 1990. *Untersuchungen des Makrozoobenthos in einem Bach auf Madeira mit zoogeographischen Aspekten*. DiplArb. Univ. Freiburg/Br. 141 pp. – (Inst. Biol. I, Univ. Freiburg, Albertstr. 21a, D-79104 Freiburg/Br.).
For a journal paper based on this work cf. *OA* 10777.

1991

- (10774) LAHIRI, A.R. & S. DAS, 1991. Observation on the epicranio-orbital complex of some Indian Aeshnidae (Odonata: Aeshnidae). *Rec. zool. Surv. India* 89(1/4): 155-166. – (Zool. Surv. India, 'M'Block, New Alipore, Calcutta-700053, India).
The morphology of the epicranio-orbital complex was examined in 12 Indian spp. of the genera Aeshna, Anaciaeschna, Anax, Gynacantha, Hemianax and Polycanthagyna. The variation is discussed, and tentative keys, based on these structures, are provided.

- (10775) LAHIRI, A.R. & C. SINHA, 1991. A review of Indian Chlorocyphidae (Insecta: Odonata) with additional notes on taxonomy and distribution for some species and description of a new subspecies. *Rec. zool. Surv. India* 89(1/4): 257-268, pl. 1 excl. – (Zool. Surv. India, 'M'Block, New Alipore, Calcutta-700053, India).
A review is presented of the 24 Indian spp. and ssp., and the additional information on distribution is provided for 8 spp. *Rhinocypha hilaryae* miaoa ssp.n. is described and illustrated (holotype ♂, allotype ♀, several paratypes of both sexes: India, Arunachal Pradesh, Tirap distr.: Horn Bill, ca 30 km NE of Miao, 12-XII-1983; deposited at ZSI, Calcutta).

- (10776) OVSEC, D.J., 1991. *Slovenska mitologija in verovanja*. – [*The Slavic mythology and superstitions*]. Domus, Ljubljana. 538 pp. ISBN 86-7137-070-4. (Slovene). – Price: SIT 2500.- net.
A statement on dragonflies appears on p. 461. It is taken from the work of J. Pajek (1884, *Črtice iz duševnega žitka štaj. Slovencev*, Matica slovenska,

Ljubljana), from where it was quoted also by J. Kelemina (1930, *Bajke in pripovedke slovenskega ljudstva*, Družba sv. Mohorja, Celje). In the village of Prežigal nr Slovenske Konjice, Styria, Slovenia, the people believe, where there is a dragonfly, there is a snake, therefore it is not safe to bath. The dragonfly sting is as poisonous as that of 9 snakes. In all 3 publications, the term "kačec" is stated as a synonym of the more common Slovene dragonfly appellation "kačji pastir".

- (10777) STAUDER, A., 1991. Water fauna of a Madeiran stream with notes on the zoogeography of the Macaronesian Islands. *Bolm Mus. munic. Funchal* 43(235): 243-299. (With Port.s.). – (Inst. Biol. I, Univ. Freiburg, Albertstr. 21a, D-79104 Freiburg/Br.).
From the Ribeira des Cales, Anax imperator, Sympetrum fonscolombei and the larvae of *S. nigrifemur* are reported, and the habitat of the latter is described. *Ischnura pumilio* and *I. senegalensis* are the only other odon. spp. known from Madeira.

1992

- (10778) ARILLO, A. & C.S. BREMOND, 1992. Nota sobre la presencia de un tricóptero y un odonato en el Mioceno superior de la depresión ceretana. *Boln geol. minero* 103(6): 984-988. (With Engl.s.). – (First Author: Depto Biol. animal I/Ent., Fac. Biol., Univ. Complutense, ES-28040 Madrid).
A not further identified *Lestes* sp. is briefly described and illustrated from the Upper Miocene deposits of the Cerdanya Basin, Lleida, Spain.

- (10779) KAZANCI, N., A. IZBIRAK, S.S. ÇAĞLAR & D. GÖKÇE, 1992. *Köyceğiz-Dalyan özel çevre koruma bölgesi sucul ekosisteminin hidrobiyolojik yönden incelenmesi*. – [*A hydrobiological investigation of the Köyceğiz-Dalyan Specially Protected Area*]. Fen Fakültesi Biyoloji Bölümü, Hacettepe Univ., Beytepe-Ankara. 191 pp., 32 col. figs incl. (Turkish). – (First Author: OR-AN Sitesi D-1 Blok No. 502, Ankara, Turkey).

The Köyceğiz-Dalyan is an important aquatic ecosystem in SW Turkey. It is legally protected since 1988. On p. 149, 12 odon. taxa are listed. *Lindenia tetra-phylla* is recorded here probably for the first time from Turkey.

1993

- (10780) MÜLLER, J., 1993. Beitrag zur Geschichte und Bibliographie der entomofaunistischen Forschung im Raum Magdeburg in den Jahren zwischen 1971-1993. *Abh. Ber. Naturk., Magdeburg* 16: 79-96. – (Frankelfelde 3, D-39116 Magdeburg).
This is an authoritative and comprehensive account of the history and organisational set-up of insect faunistics in the district of Magdeburg, E Germany (1971-1993). The regional bibliography contains close to 300 titles.

1994

- (10781) BEDE, L.C., M. WEBER, S. RESENDE, W. PIPER & W. SCHULTE, 1994. *Manual para mapeamento de biótopos no Brasil: base para um planejamento ambiental eficiente*. Brandt Meio Ambiente, Belo Horizonte. viii+99 pp., ISBN none. – (Publishers: Rua Timbiras 270, BR-30140-060 Belo Horizonte, MG).
A brief chapter on the odon. appears on p. 67.
- (10782) BORGES, P.A.V. & V. VIEIRA, 1994. The entomological bibliography of the Azores. 2. The taxa. *Boim Mus. munic. Funchal* 46(251): 5-75. (With Port.s.). – (Second Author: Depto Biol., Univ. Açores, rua da Madre de Deus, PT-9500 Ponta Delgada, S. Miguel, Açores).
Lists 8 odonatol. titles.
- (10783) COOPER, G., 1994. *Analysis of genetic variation and sperm competition in dragonflies*. PhD thesis, Univ. Oxford, Oxford. viii+208 pp. – (Dept Genet., Univ. Cambridge, Downing St., Cambridge, CB2 3EH, UK).
[Author's abstract]: Microsatellites are useful genetic markers as they often exhibit length polymorphisms which can be detected by size separation of loci amplified by the polymerase chain reaction (PCR). They were selected as a means of determining paternity in *Ischnura elegans* in order to study the outcome of sperm competition. Microsatellite loci were identified by screening an *I. elegans* genomic library with AC and AG repeats. Selected clones were sequenced and pairs of PCR primers were designed to anneal to the non-repetitive flanking regions of microsatellite loci. PCR conditions were optimised for seven microsatellite loci. Five of these did not show length polymorphism in *I. elegans* but the remaining two microsatellites were polymorphic. One of the loci had null alleles at a significant frequency which reduced its informativeness but did not preclude its use in paternity analysis. – Captive-breeding of *I. elegans* allowed the collection of offspring from multiply-mated females. Offspring were also collected from females which had mated in the wild. More than 3,000 larvae were typed for one or two microsatellite loci and paternity was determined by comparison with parental genotypes. This study showed that female multiple-matings in *I. elegans* result in a large proportion of last-male sperm precedence. The mean value for immediate last male precedence is 0.77 ± 0.059 (\pm S.E.; $n=10$, range = 0.44-1.0). There is appreciable variation in the extent and patterns of immediate and longer-term precedence. Analysis of genotypes of offspring from wild-caught females revealed that most of these females had mated with several males. These results are discussed in relation to copulatory activity, genitalic morphology and the evolution of mating systems.
- (10784) CORDERO, A., 1994. Inter-clutch interval and number of ovipositions in females of the damselfly *Ischnura graellsii* (Odonata: Coenagrionidae). *Etologia* 4: 103-106. (With Span.s.). – (Area Ecol., Univ. Vigo, Avda Buenos Aires s/n, ES-36002 Pontevedra, Galicia).
Oviposition behaviour was studied in a natural population in NW Spain. In ♀♀ that were seen ovipositing more than once, 40% of oviposition periods were separated by a 1-day interval. This is in agreement with the earlier laboratory observations, indicating that ♀♀ of this sp. would maximize their lifetime egg production by minimizing inter-clutch intervals rather than by increasing the clutch size. Marked ♀♀ oviposited 0.7 times during their lives, and no androchrome ♀ was seen ovipositing more than once.
- (10785) CORDOBA-AGUILAR, A. & M. LEE, 1994. Prey size selection by *Orthemis ferruginea* (Fabricius) larvae (Odonata: Libellulidae) over mosquito instars. *Fol. ent. mex.* 91: 23-30 (With Span.s.). – (First Author: Inst. Ecol. A.C., Aptdo Postal 63, MX-91000 Xalapa, Veracruz).
The investigations were carried out in the laboratory, using mosquito larvae and pupae as prey. 3 variables were studied, viz. predator size, prey stage and light/dark conditions. Prey was divided into 3 groups: 1st and 4th instars and pupae. The results indicate that number of prey eaten was related to both predator

- size and prey stage (instar/pupa). Larger dragonflies consumed more mosquitoes, but did not show any preference. Smaller dragonflies ate preferably 4th-instar mosquitoes. In this way, size-selective predation appears to be tied to the predator size. Light conditions, in general, did not affect the number of prey eaten. In an attempt to explain the heavier predation on the 4th-instar mosquitoes by smaller predators, 3 hypotheses are suggested: (1) major movements due to their size and stage, (2) easier detection, because of prey size and shape, and (3) a combination of both mechanical and visual cues.
- (10786) COSTA, J.M. & S.M.V. CARNEIRO, 1994. Duas novas larvas de *Lestes* Leach e dados morfológicos sobre *Lestes pictus* Hagen (Odonata, Zygoptera, Lestidae). *Revta brasil. Zool.* 11(2): 303-309. (Port., with Engl.s.). – (Depto Ent., Mus. Nac., Univ. Fed. Rio de Janeiro, Quinta da Boa Vista, São Cristóvão, BR-20.940-040 Rio de Janeiro, RJ). Ultimate instar larvae of *L. bipupillatus* and *L. tricolor* are described and illustrated from specimens collected in temporary habitats nr Rio de Janeiro. Some notes are provided on larval morphology of *L. pictus*, and the larvae of the 3 spp. are keyed.
- (10787) DE ASSIS, C.V. & J.M. COSTA, 1994. Seis novas larvas do género *Micrathyria* Kirby e notas sobre a distribuição no Brasil (Odonata, Libellulidae). *Revta brasil. Zool.* 11(2): 195-209. (Port., with Engl.s.). – (Depto Ent., Mus. Nac., Univ. Fed. Rio de Janeiro, Quinta da Boa Vista, São Cristóvão, BR-20.940-040 Rio de Janeiro, RJ). Ultimate instar larvae of *M. borgmeieri*, *M. hesperis*, *M. mengeri*, *M. ocellata*, *M. stawiarskii* and *M. pirassuningae* are described and compared with the descriptions of the earlier authors. Based on the MNRJ material, their distribution is outlined.
- (10788) FOCHETTI, R., R. ARGANO, C. BELFIORE, L. MANCINI & G.P. MORETTI, 1994. Composizione e struttura della comunità macrobentonica del Fiume Fiora e considerazioni sulla qualità delle acque. *Riv. Idrobiol.* 33(1/3): 105-128. (With Engl.s.). – (First Author: Mus. Civ. Zool., Via del Giardino Zoologico 20, I-00197 Roma). 5 odon. spp. are listed from 6 localities on the Fiora R., northern central Italy.
- (10789) LITSINGER, J.A., N. CHANTARAPRAPH, A.T. BARRION & J.P. BANDONG, 1994. Natural enemies of the rice caseworm *Nymphula depunctalis* (Guenée) (Lepidoptera: Pyralidae). *Insect Sci. Appl.* 15(3): 261-268. (With Span.s.). – (First Author: Ent. Div., Int. Rice Res. Inst., P.O. Box 933, Manila-1099, Philippines). 11 odon. spp. are listed as natural enemies of *N. depunctalis* in the Philippines.
- (10790) MÜLLER, J., 1994. Bemerkenswerte Funde von Heuschrecken (Saltatoria) und Libellen (Odonata) in der Umgebung des XXIX. TOP 1993 bei Kráľová (Zvolen) mit einem Nachtrag zum XXVIII. TOP bei Turček. *In: XXIX Tábor ochrancov prírody (Kráľová pri Zvolene, 17.-24. júla 1993): Odborné výsledky*, pp. 69-79, Katedra krajinskej ekológie, Techn. Univ. Zvolen, Zvolen. (With Slovak s.). – (Frankelfelde 3, D-39116 Magdeburg). Records from the Javorie hills S of Zvolen and from Turiec, Slovakia, with a brief assessment of the fauna. – Cf. *Abstracter's Note* in OA 10772.
- (10791) MÜLLER, J., 1994. Gründung der AG Odonatenfauna. *MittBl. Ent.-Ver. Sachsen-Anhalt* 2(2): 73-74. – (Frankenfelde 3, D-39116 Magdeburg). On 9 Apr. 1994, a special task-group, "Arbeitsgemeinschaft Odonatenfauna", has been set up in the framework of the Ent. Soc. Sachsen-Anhalt. Membership is open to all interested in the regional fauna. Information is available from the Entomologen-Vereinigung Sachsen-Anhalt, Republikstr. 38, D-39218 Schönebeck.
- (10792) PÉREZ D'A., V. & E. MUTSCHKE, O., 1994. Las especies de *Aeshna* Fabricius (Odonata: Anisoptera: Aeshnidae) en la region de Magallanes. *An. Inst. Patagonia (Cienc. nat.)* 22: 63-68. (With Engl.s.). – (Lab. Ent., Inst. Patagonia, Univ. Magallanes, Casilla 113-D, Punta Arenas, Chile; – Residence First Author: Casilla 709, Punta Arenas, Chile). The distribution of *Aeshna diffinis* and *A. variegata* in the Magellan Region, S Chile, is mapped and discussed.
- (10793) PIRNAT, A., 1994. Poročilo odonatološke skupine. – [Report of the Odonata team]. *In: M. Jejčič, [Ed.], Naravoslovno-ekološki tabor "Vipavska 94"*, pp. 14-16, Zveza prijateljev mladine, Ajdovščina. (Slovene). – (Vošnjakova 4 a, SI-1000 Ljubljana). 21 spp. are recorded from 19 localities in the Vipavska

Valley, W Slovenia, July 1994.

- (10794) SCHNITTLER, M., G. LUDWIG, P. PRETSCHER & P. BOYE, 1994. Konzeption der Roten Listen der in Deutschland gefährdeten Tier- und Pflanzenarten unter Berücksichtigung der neuen internationalen Kategorien. *Natur & Landschaft* 69(10): 451-459. (With Engl.s.). – (Last 2 Authors: Inst. Tierökol., Konstantinstr. 110, D-53179 Bonn). A revision of the categories in German Red Lists of endangered spp. is proposed. Some odon. spp. are considered, but a complete list is not given.

- (10795) SCHULTE, W., W. PIPER, W. BRANDT & M. WEBER, 1994. Zusammenarbeit mit Brasilien in der Biotopkartierung. *Natur & Landschaft* 69(12): 554-559. (With Port. & Engl.s's). – (Second Author: Unnastr. 6, D-20253 Hamburg). Since 1990, the (German) Federal Agency for Nature Conservation is working closely with the Brazilian Federal Government (and with several other authorities in Brazil) on matters related to a bio-ecological data base. Among the projects scheduled is also a systematic odon. inventarisation in selected water bodies.

1995

- (10796) BENNETT, S. & P.J. MILL, 1995. Lifetime egg production and egg mortality in the damselfly *Pyrrosoma nymphula* (Sulzer) (Zygoptera: Coenagrionidae). *Hydrobiologia* 310(1): 71-78. – (Second Author: Dept Pure & Appl. Biol., Univ. Leeds, Leeds, LS2 9JT, UK). Artificial oviposition sites were used to estimate egg deposition rates in the field. Females laid an average of 10.76 eggs/min. with a mean duration of 22.81 min., giving an average clutch size of 245 eggs. Since one mating corresponded to one clutch of eggs, lifetime mating success was used as a measure of the number of clutches produced. Mean lifetime clutch production was 5.91 clutches per ♀, equating to 1447 eggs per ♀ per lifetime. Eggs were hatched in the laboratory at temperatures comparable with those in the field. Hatching was highly synchronised and the overall hatching success was 75.1%. Causes of egg mortality in the laboratory were limited to infertility and unhatchability. Since no other sources of egg mortality could be found at the study site, this value was a good reflection of hatching success in the field. Lifetime egg production and hatching success were

used to estimate the number of viable offspring produced per ♀, giving a higher order estimate of reproductive success than has previously been published for a zygopteran.

- (10797) BLUCZYŃSKI, P., 1995. Ważki (Odonata) wybranych torfowisk Poleskiego Parku Narodowego i jego okolic. – [Dragonflies (Odonata) of selected moors in the Poleski National Park and its surroundings]. *Mater. 42 Zjazd. pol. Tow. ent., Poznan*, p. 10. (Pol.). – (Zakład Zool., IB UMCS, ul. Akademicka 19, PO-20-033 Lublin). 10 spp. are mentioned from 7 localities; Poland.

- (10798) BÖHM, E., H. DOMBROWE, G. RAUSCH & P. SCHÖNEGGE, 1995. Libellen. In: E. Böhm et al., Tiere und Pflanzen in Neu-Isenburg, pp. 69-74; locality list on p. 178. Momos-Verlag, Neu-Isenburg, ISBN 3-930578-05-0. – (Publishers: Carl-Friedrich-Gauss-Str. 6, D-63263 Neu-Isenburg). A commented review of the Neu-Isenburg fauna (34 spp., from 12 localities), Baden-Württemberg, Germany.

- (10799) ČERNE, I., 1995. *Meritve ličinke vrste Onychogomphus forcipatus v potoku Močilnik*. – [The measurements of *Onychogomphus forcipatus* larvae in the Močilnik Stream]. Seminar thesis, Dept Biol., Univ. Ljubljana. 50 pp. (Slovene). – (c/o M. Bedjanič, Fram 117/a, SI-2313 Fram). At the locality studied (Vipavska Valley, Slovenia) the larval development takes 2 yr. On the basis of the covariance equation, there is a clear relationship between the total body length and the head width. The ♂:♀ ratio was recorded on 12-IV, 18-V and 21-VI, viz. 0.38:0.62, 0.6:0.4, and 1:1, resp.

- (10800) CLAUSNITZER, V., 1995. *Verhaltensökologie von Notiothemis robertsi Fraser, 1944 (Odonata: Libellulidae)*. DiplArb., FB Biol., Philipps Univ., Marburg/Lahn. ii+120 pp. – (Kirchweg 5, D-35043 Marburg/Lahn). The modalities of territorial and reproductive behaviour were studied in the Kakamega Forest, W Kenya (Dec. 1994-Feb. 1995) and are compared with those known in other tropical spp. – The sp. breeds in small rainforest ponds, seasonal patterns are not detectable. Reproductive activities take place between 10.00-16.00 h. The territorial ♂♂ are holding small territories during up to 45 days (max. longevity 63 days). The territorial success of a ♂ is conditioned by the

- value of its total body length/hindwing length ratio rather than by the overall size of the individual. There is no courtship display. After a brief copulation (2.5 min), in sitting position, the ♀ leaves the site. The unaccompanied oviposition occurs at different time and place. Eggs are deposited in a kind of low hovering flight (♀ legs grasping the substrate), and are anchored on the substrate close above the water surface. – Comparative behavioural notes are provided for *N. jonesi*, *Tetrathemis corduliformis* and for some other tetrathemine spp. – Among the 53 spp. & sspp. evidenced in the Kakamega Forest, Chlorocnemis pauli, Pseudagrion guichardi, P. kibalense, Enallagma sinuatum, Tetrathemis camerunensis, T. corduliformis, Notiothemis robertsi, Hadrothemis camarensis and Lokia corydoni were not previously reported from Kenya. – This is a very well documented study, and one of the few dealing with a tropical rainforest libellulide sp.
- (10801) DE GROOT, T., 1995. *Libellen in het Vechtplassengebied*. – [Dragonflies in the Vechtplassen region, The Netherlands]. Vereniging Natuurmonumenten, 's-Graveland, viii+61 pp. (Dutch). – Price: NLG 12.50 net. – (Orders to: Vereniging Natuurmonumenten, Noordereinde 60, NL-1243 JJ 's-Graveland).
This is a comprehensive and excellently executed report on the 1995 odon. inventarisatie (29 spp.) in the wetland areas between Ankeveen and Tienhoven. The Hol and the Hollands Ankeveen-oost are the richest localities. The concise species "monographs" contain much information that will be of interest also to the non-regional workers.
- (10802) DE MARMELS, J., 1995. La larva de Euthore fastigiata meridana Selys, 1879 (Odonata: Polythoridae). *Boln Ent. venez.* (N.S.) 10(2): 131-134. (With Engl.s.). – (Inst Zool. Agríc., Fac. Agron., Univ. Central Venezuela, Aptdo 4579, Maracay 2101-A, Venezuela).
The larva, reported in OA 10410, is here described and illustrated, and notes on the habitat are provided.
- (10803) DUNN, R., 1995. 1994 dragonfly (Odonata) report. *J. Derbyshire ent. Soc.* 119: 4-7. – (4 Peakland View, Darley Dale, Matlock, Derbys., DE4 2GF, UK). The sequel in the series as listed in OA 9849, including a general map of squares covered during 1977-1994, and the 1994 notable records of 9 spp.,
- (10804) DURANI, S. & O.P. SHARMA, 1995. On the chromosomes of four species of damselfly from Shillong, North-East India. *Chrom. Inf. Serv.* 59: 4-5. – (Anim. Cytol. Lab., Dept Biosci., Univ. Jammu, Jammu-180004, J & K, India).
Notes on the ♂ germ cell chromosomes are presented for *Disparoneura atkinsoni* (n=13, m), *Neurobasis chinensis* (n=12), *Ceragrion fallax cerinomelas* (n=14, m), and *Aciagrion pallidum* (n=13, m).
- (10805) EXUVIAE. *Journal of the Slovene Odonatological Association*, Vol. 2, No. 1 (dated 1995, published March 1996). (Engl. & Slovene, with Eng. s's). – (Orders outside Slovenia: c/o Odonatologica, P.O. Box 256, NL-3720 AG Bilthoven).
[Vol. 1, No. 2 not published; Vol. 2, No. 2 and Vol. 3, Nos 2 & 3 to appear in 1996]. – Contents: *Kotarac, M., M. Bedjanič, A. Pirnat & A. Šalamun*: Contribution to the knowledge of odonate fauna of Bela krajina (SE Slovenia) (pp. 1-9); – *Bedjanič, M.*: *Lestes macrostigma* (Eversmann, 1836), a new species for the dragonfly fauna of Slovenia and rediscovered in Croatia (Odonata: Lestidae) (pp. 10-12); – *Voljč, I.*: New data about the dragonflies of Ribnica river, southern Slovenia (pp. 13-14); – *Kotarac, M.*: *Somatochlora meridionalis* Nielsen, 1935, a new species for the odonate fauna of France (pp. 15-16).
- (10806) FERRERAS-ROMERO, M. & V. PUCHOL-CABALLERO, 1995. Desarrollo del ciclo vital de *Aeshna cyanea* (Müller, 1764) (Odonata: Aeshnidae) en Sierra Morena (sur de España). *Boln Asoc. esp. Ent.* 19(3/4): 115-123. (With Engl.s.). – (First Author: Depto Biol. Anim./Zool., Fac. Cien., Univ. Córdoba, Avda San Alberto Magno s/n, ES-14004 Córdoba).
In different portions of its range, the life cycle in *A. cyanea* lasts 1-4 yr. The population from S Spain, here studied, is semivoltine; the larvae spend their last winter either in the F-3, or in F-2 instar. Emergence takes place between late Aug. and early Oct. While in N and central Europe the sp. is common in farm ponds, small lakes, canals, etc., in S Spain it breeds in small permanent streams, with deciduous trees along the banks. The voltinism seems to be conditioned by abiotic factors, but the phenology is apparently regulated also by biotic factors. These may induce adaptive responses with long-term effects on life history.
- (10807) GÄDE, G., 1995. Functional and evolution-

- ary aspects of peptides of the AKH/RPCH family: the Odonata and Dictyoptera story. In: D. Konopinska, [Ed.], *Insects: chemical, physiological and environmental aspects*, [1st Int. Conf., Ladek-Zdroj, Poland; Sept 26-29, 1994], pp. 28-34, Techn. Univ. Wroclaw, Wroclaw, ISBN 83-229-1303-6. – (Zool. Dept, Univ. Cape Town, Private Bag, Rondebosch-7700, RSA).
[Not available for abstracting].
- (10808) GEISTER, I., 1995. Nakelska Sava. *Kranjski Zb.* 1995: 274-286. (Slovene). – (Pokopališka pot 13, SI-4202 Naklo).
Contains a list of 10 odon. spp. from a swamp (“Na Savi”) in the Nakelska Sava area nr Naklo, Upper Carniola, Slovenia.
- (10809) HUTACHARERN, C. & N. TUBTIM, 1995. *Checklist of forest insects in Thailand*. Office Environ. Policy & Planning, Bangkok. 391 pp. ISBN 974-7978-70-9 [OEPP Biodiv. Ser., vol. 1] – (Publishers: 60/1 Rama VI Rd, Bangkok-10400, Thailand).
The odon. checklist appears on pp. 157-171; it is based on the work listed in *OA* 6178.
- (10810) HUTCHINSON, R., 1995. Une quatrième station de capture au Québec de *Somatochlora brevicincta* Robert (Odonata: Corduliidae). *Faberies* 20(3): 109-110. – (12, ch. de La Savane, app. 12, Gatineau, Que., J8T 1P7, CA).
1 ♂, 3-VIII-1995, at km 195 along the Chibougama-Ashuapmushuan (No. 167) road. The previous 3 Quebec records are listed and the significance of the present record is stated.
- (10811) HUTCHINSON, R. & G. BÉLANGER, 1995. Liste annotée d'odonates capturés dans Bonaventure (Québec) en 1994. *Faberies* 20(1): 29-40. (With Engl.s.). – (Second Author: 175, rang 2 Ouest, Maria, Que, G0C 1Y0, CA).
Annotated and commented list of 29 spp.; Baie-des-Chaleurs in the Gaspé peninsula, Quebec, Canada.
- (10812) JARMAN, R.A., 1995. Ecological restoration: the end of status quo-ism in the National Trust? *Biol. J. Linn. Soc.* 56 (Suppl.): 213-215. – (National Trust, 33 Sheep St., Cirencester, Gloucesters., GL7 1QW, UK).
On the occasion of the centenary celebration of the [British] National Trust, which is considered the “largest conservation organization in Europe”, some of its policies, achievements and future tasks and perspectives are briefly reviewed. Among its environmental issues, the creation of dragonfly habitats is also mentioned.
- (10813) [LINNAEUS, C.] SOBAN, D., 1995. *Carolus Linnaeus Johannesu Antoniusu Scopoliju 1761-1773: posnetki rokopisov pisem s slovenskim in angleškim prevodom*. – *Carolus Linnaeus to Johannes Antonius Scopoli 1761-1773: photocopies of the manuscripts [= letters], [with] Slovene and English translations*. Prih. Dr. Slovenije, Ljubljana. 119 pp. ISBN none. – Price: SIT 2500.- net. (Bilingual: Slovene-Engl.). – (Available from: Nat. Hist. Soc. of Slovenia, Novi trg 2, SI-1000 Ljubljana).
Facsimile reproductions of 13 letters (15 Jan. 1761-17 March 1773), with Slovene and Engl. translations, comments and annotations. The letter of 8 March 1771 contains a reference to the odon.
- (10814) LOTZING, K., 1995. Zum Vorkommen der Keilflecklibelle (*Aeshna isosceles* Müll.) (Insecta, Odonata) am südlichen Rand der Magdeburger Börde. *Ent. Mitt. Sachsen-Anhalt* 3(1/2): 17-20. – (Str. d. Deutschen Einheit 7, D-39418 Stassfurt).
A review is given of the 1959-1994 Börderand records of *Anaciaeschna isosceles*, and the habitat of a population in the Seehof area, N of Colbe/Saale is described and its odon. fauna is listed.
- (10815) MADHAVI, R. & V.G.M. SWARNAKUMARI, 1995. The morphology, life-cycle and systematic position of *Orthetrotrema monostomum* Macy and Basch, 1972, a progenetic trematode. *Syst. Parasitol.* 32(3): 225-232. – (Dept Zool., Andhra Univ., Visakhapatnam-530003, India).
The life cycle of *O. monostomum*, occurring in the haemocoel of larval *Tramea limbata*, is described. The snail, *Thiara tuberculata*, acts as the intermediate host. The cercaria is xiphidiocercous, monostomate, and belongs to the “Microcotylous” group. The development of the cercaria into a mature adult fluke is followed in the haemocoel of larvae which had been exposed to cercariae. On the basis of intraspecific variations, noted in the adult flukes obtained experimentally from odon. larvae, *O. longicaeca* Hanumantha Rao & Swamy, 1975, is synonymised with *O. monostomum*. Evidence is provided for the inclusion of the genus *Orthetrotrema* into the Eumegacetidae. The diagnosis of the family

is amended.

rized.

- (10816) MITRA, T.R., 1995. [Fauna of Indravati Tiger Reserve]. Insecta: Odonata. *Zool. Surv. India Fauna Conserv. Areas* 6: 31-44. – (18/1 Dakshin Para Rd, Calcutta-700028, India).
22 spp. are listed from the Reserve (Bastar distr., Madhya Pradesh), and a checklist of 39 spp. from other parts of central India is added. *Elatoneura nihari* sp.n. is described and illustrated (holotype ♂: Chhindwara, Madhya Pradesh, India, 20-XI-1971; deposited at ZSI, Calcutta, No. 4096/H13). – (*Abstracter's Note*: Due to a printer's error, the information on the etymology of the new sp. is omitted. It is named in memory of Author's father, the late Nihar Ranjan Mitra).
- (10817) MÜLLER, J., 1995. *Cordulegaster bidentatus* Selys, 1843 (Odonata) im Jahre 1995 im Ostharz wiederentdeckt. *Ent. Mitt. Sachsen-Anhalt* 3(1/2): 23-24. – (Frankfelde 3, D-39116 Magdeburg).
The last record of *C. bidentata* from the Harz, E Germany, is dated in 1912, and the sp. was considered regionally extinct. On 23-VII-1995, 2 individuals were sighted in the Benneckenstein area.
- (10818) MÜLLER, J., 1995. Vorläufige Mitteilung zum Vorkommen der Südlichen Mosaikjungfer *Aeshna affinis* (Odonata) im Jahre 1995 in Sachsen-Anhalt. *Ent. Mitt. Sachsen-Anhalt* 3(1/2): 21-22. – (Frankfelde 3, D-39116 Magdeburg).
Gives a map (without locality names) of the 1995 *A. affinis* records in Sachsen-Anhalt, E Germany.
- (10819) PAUL, J., 1995. Overwintering Orthoptera and other insects in Crete. *Ent. Rec. J. Var.* 107(9/10): 221-223. – (Author's address not stated).
In Apr. 1994, *Ceragrion tenellum* and *Ischnura elegans* were sighted in coastal seepages at Georgopolis, Crete, Greece.
- (10820) PEMBERTON, R.W., 1995. Catching and eating dragonflies in Bali and elsewhere in Asia. *Am. Entomologist* 41(2): 97-99. – (Aquatic Plant Management, Agric. Res. Serv., US Dept Agric., 3205 College Ave., Ft Lauderdale, FL 33314, USA).
Various methods of traditional dragonfly catching and cooking preparations in Bali, Indonesia, as narrated/demonstrated to the author by the local informers, are described. Some published evidence on this subject in various other Asiatic countries is also summarized.
- (10821) PERCIVAL, T.J., R.F. CLOPTON & J. JANOVY, 1995. Two new menosporine gregarines, *Hoplorhynchus acanthatholius* n.sp. and *Stegano-rhynchus dunwoodyi* n.g., n.sp. (Apicomplexa: Eugregarinorida: Actinocephalidae) from coenagrionid damselflies (Odonata: Zygoptera). *J. evol. Microbiol.* 42(4): 406-410. – (Sch. Biol. Sci., Univ. Nebraska, Lincoln, NE 68588-0118, USA).
H. acanthatholius sp.n. is described from adult *Enallagma civile* and *S. dunwoodyi* gen.n., sp.n. from adult *Ischnura verticalis*. Both from Oak Lake, Lancaster Co., Nebraska, USA.
- (10822) PILON, J.-G. & D. LAGACÉ, 1995. Notes sur la présence printanière de *Boyeria grafiana* Williamson (Odonata: Aeshnidae) et la présence automnale de *Sympetrum vicinum* (Hagen) (Odonata: Libellulidae) au Québec. *Faberies* 20(1): 24-28. (With Engl.s.). – (576 Terrasse Magnan, Ste Thérèse, Que, J7E 4Z4, CA).
The capture of *B. grafiana* in early spring in southern Quebec represents an extension of the flight period of the sp. in this region. In the same region, fall collections of *S. vicinum* add information to its known flight period and behaviour at that time of the year (cf. also OA 8581).
- (10823) REINHARDT, K., 1995. Die Libellen des Mittleren Saaletales (Insecta: Odonata). *Thür. faun. Abh.* 2: 63-72. (With Engl.s.). – (Inst. Ökol., Univ. Jena, Neugasse 23, D-07743 Jena).
A commented review of the "Mittleres Saaletal" fauna (40 spp.), nr Jena, Thuringia, E Germany.
- (10824) REINHARDT, K. & F. SANDER, 1995. Nachweis der Südlichen Mosaikjungfer *Aeshna affinis* (Vander Linden, 1820) in Thüringen. *Veröff. Mus. Gera* (Naturw.) 21/22: 167-170. (With Engl.s.). – (First Author: Inst. Ökol., Univ. Jena, Neugasse 23, D-07743 Jena).
14-VII-1994, a single *A. affinis* ♂ was sighted in the vicinity of Weimar. In Thuringia, the sp. has not been recorded since 1952 (cf. OA 1392). The features for identification in the field are stated and the record is briefly discussed.
- (10825) RICHARDSON, J.M.L. & B.R. ANHOLT, 1995. Ontogenetic behaviour changes in larvae of the damselfly *Ischnura verticalis* (Odonata: Coena-

grionidae). *Ethology* 101(4): 308-334. – (First Author: Dept Biol. Sci., Dartmouth Coll., Hanover, NH 03755, USA).

Larvae of most animals go through large changes in size. Because change in size can lead to changes in ability to gain food and in predation risk, changes in behaviour are predicted to reflect this. Models consider change in amounts of the same behaviour, but different selective pressures on different larval sizes may also lead to qualitative differences in behavioural repertoire. In *I. verticalis*, ontogenetic changes in behaviour were studied under controlled laboratory conditions. Frequency and duration of feeding behaviour and behaviour related to activity were increased in larger instars. Larger larvae also had higher transition probabilities to the behaviour abdomen wave, straight abdomen raise, and rotate + head out. The larval behavioural repertoire changed with development: some behavioural patterns were performed almost exclusively by smaller larvae (F-4 to F-7), while others were performed almost exclusively by larger larvae (F-3 to F-0).

(10826) RUUSMAA, J., 1995. Kiilid linnuvõrgus. – Dragonflies caught in a trammel. *Eesti Lodus [Estonian Nature]* 1995(9): 254-255, cover p. 3. (Estonian, with Engl.s.). – (Inst. Zool. & Hydrobiol., Vanemuise 46, EE-2400 Tartu).

In Sept. 1994, 205 individuals of 11 spp. were collected in an ornithological net at Kabli, W coast of Estonia. Most of them are referable to various *Aeshna* spp. Among the spp. that are rare in Estonia, there were *A. subarctica* and *Sympetrum sanguineum*. Most astonishing was the abundant occurrence of *A. mixta*, of which only 2 specimens were so far on record from Puhtu, 1951.

(10827) SAVARD, M., 1995. Présence de la libellule migratrice *Pantala hymenaea* (Say) dans La Haute-Côte-Nord (Odonata: Libellulidae), une quatrième mention pour le Québec. *Fabreriers* 20(1): 15-18. (With Engl.s.). – (1665, av. des Engoulevents, Chicoutimi, Que, G7H 5Y2, CA).

The observation of *P. hymenaea* at Les Escoumins, MRC La-Haute-Côte-Nord (Saguenay) is only the fourth record for this sp. in Quebec, Canada. The maturity of the ♂, collected on 11-VII-1994, demonstrates that the presence of this sp. at that date at that locality on the shore of the St Lawrence R. can be explained only by the immigration of teneral individuals from outside the province.

(10828) SELUGA, K. & U. MAMMEN, 1995. Nachweis der Helm-Azurjungfer *Coenagrion mercuriale* (Charp.) im Köthener Ackerland. *Ent. Mitt. Sachsen-Anhalt* 3(1/2): 25-26. – (Brücknerstr. 3, D-06110 Halle/Saale).

The population and its habitat at Sixdorf, distr. Bernburg, Sachsen-Anhalt, E Germany, are described. It is a ditch along a maize field.

(10829) WILSON, K.D.P., 1995. *Hong Kong dragonflies*. Urban Council, Hong Kong. x+212 pp., incl. col. photographs. ISBN none. – (Available from the Eds of *Odonatologica*, P.O. Box 256, NL- 3720 AG Bilthoven, at NLG 85.- net).

This beautiful book, by a well known Hong Kong odon. student, is the first commercially produced Engl. work of this scope hitherto available on a region of continental E Asia. It provides details on the regional habitats, concise descriptions and keys for 102 spp., information on the known Hong Kong localities and on the general range of each sp., and col. photographs of various types of habitats and of all sp. In the introductory chapter, general dragonfly biology and life history are outlined with reference to the Hong Kong fauna. – This is an excellent and indispensable work to all those interested in the odon. fauna of E and SE Asia.

(10830) ZEROVA, T.E. & V.N. FURSOV, 1995. The study of European Chalcidoidea parasitizing the eggs of aquatic insects. In: E. Wajnberg, [Ed.], *Colloques de l'INRA*, No. 73: *Trichogramma* and other egg parasitoids, [4th Int. Symp., Cairo, Egypt, Oct. 4-7, 1994], pp. 47-49, Inst. Natn. Rech. Agron., Paris, ISBN 2-7380-0618-3. – (Schmalhausen Inst. Zool., Ukrain. Acad. Sci., B. Chmelnickogo 15, UKR-252601 Kiev).

[Not available for abstracting]. – Deals with Odon., Coleoptera and Heteroptera.

1996

(10831) ARGIA. *The news journal of the Dragonfly Society of the Americas*, Vol. 8, No. 1 (Apr. 1, 1996). – (c/o Dr & Mrs T.W. Donnelly, 2091 Partridge Lane, Binghamton, NY 13903, USA).

[Signed articles]: *Donnelly, N.*: The 1963 Colloquium on the Odonata (pp. 4-5); – *Tennessen, K.*: Escapade in Equador, pt 1 (pp. 5-8); – *Walter, S.*: Fort Tilden dragonfly migration watch (pp. 8-13); – *Daigle, J.*: New records of Odonata for the Dominican Repub-

lic (p. 13); – *Roble, S.M. & D.J. Stevenson*: First records of *Telebasis byersi* from Virginia, including a new northern range limit (pp. 13-14); – *Carpenter, G.*: *Libellula axilena* new to New England (p. 15); – *Donnelly, N.*: Dragonflies in the news and not quite in the news (pp. 15-16); – *Tennessee, K.*: Specimens moving in your alcohol dish? (p. 16); – *Müller, B.*: Avoiding wet nets (p. 16); – *Paulson, D.*: Collection inventories (p. 17); – *Beckemeyer, R.*: More Odonata Web sites (pp. 17-18); – *Smith, L.M.*: The (un)common dragonfly (poem) (p. 18). – Among the other texts, there are an anonymous obituary for Paul Harwood (p. 3; born 1906, deceased 30 Dec. 1995), Birthday congratulations for Dr Minter Westfall (p. 2), and various minor news items.

(10832) *ASAHINA, S.*, 1996. Records of the northern Vietnamese Odonata taken by the expedition members from the National Science Museum, Tokyo. 2. Gomphidae. *Bull. natn. Sci. Mus. Tokyo* (A)22(1): 21-32. – (Takadanobaba 4-4-24, Shinjuku-ku, Tokyo, 169, JA).

This is the continuation of the series, the first part of which is listed in *OA* 10674. 10 spp. are dealt with. As new are described *Asiagomphus xanthenatus* acco ssp.n. (holotype ♂: Cuc Phuong, Gia Vien, Ninh Binh prov., alt. 440 m, 27-V-1995) and *Leptogomphus uenoi* sp.n. (holotype ♀: Ban Khoang, Sa Pa, Lao Cai prov., alt. 1450 m, 14-V-1995).

(10833) *BARBOUR, M.T., J. GERRITSEN, G.E. GRIFFITH, R. FRYDENBORG, E. McCARRON, J.S. WHITE & M.L. BASTIAN*, 1996. A framework for biological criteria for Florida streams using benthic macroinvertebrates. *Jl N. Am. benthol. Soc.* 15(2): 185-211. – (First Author: Tetra Tech Inc., 10045 Red Run Blvd, Suite 110, Owings Mills, MD 21117, USA).

An approach to biological assessment is developed that would document effects of pollution on benthic macroinvertebrate assemblages in Florida streams. The odon. are only order-wise considered.

(10834) *BEDJANIČ, M. & M. KOTARAC*, 1996. Contribution to the knowledge of the odonate fauna of Bloke Plateau, Slovenia. *Opusc. zool. flumin.* 148: 1-14. – (First Author: Fram 117a, SI-2313 Fram). 33 spp. are listed for the area (Dec. 1991-July 1994). For 12 of these, the localities on the plateau (alt. 720-760 m) are the highest so far known in the country. Among the notable spp. are *Aeshna juncea* and

Somatochlora arctica, which are otherwise rare in the Dinaric range. The plateau remains the only known locality of *Sympetrum pedemontanum* in Slovenia. The need for protection of, and a tentative management plan for the area are stated.

(10835) [BELLE, J.] (Anonymous), 1996. Lintjes voor Withaar en Belle. – [Royal decorations awarded to Mr Withaar and Dr Belle]. *De Gelderlander* 148(100): Vo-reg 2, issue of 27 April. (Dutch). – (c/o Dr J. Belle, Onder de Beumkes 35, NL-6883 HC Velp).

A regional daily's notice, with a portrait. In recognition of his odonatological work, Dr J. Belle was awarded Knighthood in the Order of the Netherlands Lion.

(10836) *BOURNAUD, M., B. CELLOT, P. RICHOUX & A. BERRAHO*, 1996. Macroinvertebrate community structure and environmental characteristics along a large river: congruity of patterns for identification to species or family. *Jl N. Am. benthol. Soc.* 15(2): 232-253. – (Ecol. eaux douces, Univ. Lyon-I, F-69622 Ville-urbane).

The paper deals with the Rhone R. in France. 5 odon. fam. are considered, but only 3 spp. are mentioned.

(10837) *BULLETIN OF AMERICAN ODONATOLOGY*, Vol. 3, No. 4 (1 May 1996). – (c/o Dr & Mrs T.W. Donnelly, 2091 Partridge Lane, Binghamton, NY 13906, USA).

Miller, K.B. & D.L. Gustafson: Distribution records of the Odonata of Montana (pp. 75-88). – [82 spp. are listed, of which 16 spp. are reported here for the first time. County records, adult seasonal distributions, and notes on biology are provided for all of them. Important regional publications are reviewed. Some problems associated with early records are lack of good locality data, poor curatorial techniques and mislabelling. Montana Odon. display 4 distinct distributional patterns: eastern spp. in the prairie, boreal spp. in the mountains, western spp. in NW Montana, and southern spp. in thermal springs. A brief chapter on "Future investigation possibilities" is appended].

(10838) *CLAUSNITZER, V.*, 1996. Odonata records from Nepal (around Annapurna, Chitwan district, Royal Bardia National Park). *Opusc. zool. flumin.* 147: 1-8. – (Kirchweg 5, D-35043 Marburg). 47 spp. are listed from 18 localities (20-VII/9-X-1995). *Anisopleura subplatystyla*, *Gynacantha*

- subinterrupta and Tetrathemis platyptera are new for the fauna of Nepal. Several altitude extensions are also given. – Cf. *OA* 6907.
- (10839) DAVID, S., 1996. Výskyt vážky Somatochlora arctica (Odonata) ve Slovenské Republice. – The occurrence of Somatochlora arctica (Odonata) in the Slovak Republic. *Entomofauna carpathica* 8: 19-21. (Slovak, with Engl.s.). – Tekovske Muz., P.O. Box 69, SK-93469 Levice).
The adults are reported from a locality in Vysoké Tatry (alt. 1358 m) and the larvae from a Sphagnum bog in Volovské vrchy (alt. 1152 m). The distribution and status of the sp. in the adjacent countries are briefly outlined.
- (10840) *DIGEST OF JAPANESE ODONATOLOGICAL SHORT COMMUNICATIONS*, No. 4 (May 1996). – Published by N. Ishizawa (1644-15, Yamaguchi, Tokorozawa, Saitama, 359, JA).
Usui, T.: How to make specimens of Odonata dried by an air conditioner (p. 1; cf. also *OA* 10903); – *Kondoh, S.*: Records for the duration of egg and larval stages in some dragonflies (p. 2); – *Taketo, A.*: Data on insects in the second half of 1993 (p. 2; odon. only); – On the maturity and oviposition of *Sympetrum frequens* (pp. 3-4); – *Ichikawa, Y.*: *Indolestes peregrinus* collected at Iriomote-jima island (p. 4); – *Takasaki, Y.*: Male *Lestes sponsa* trying to make tandem position to a dead female (p. 4); – *Ishizawa, N.*: Non-tandem oviposition of a female *Sympetrum parvulum* with frequent rests (p. 4).
- (10841) *The DRAGON-FLIER. Newsletter of the Ohio Dragonfly Survey*, Columbus, Vol. 6, No. 2 (May 1996). – (c/o B. Glotzhober, Ohio Hist. Soc., 1982 Velma Ave., Columbus, OH 43211-2497, USA).
Among the noteworthy notes are some brief considerations on the projected modalities of the (US) wildlife conservation funding, and on the odonatul. "value" of fishless ponds. The latter article contains information provided by *D. Johnson* and *M. McPeck*. Also included is the Agenda of the 1996 Annual Meeting of the Survey.
- (10842) DUNN, R., 1996. Derbyshire dragonfly (Odonata) report 1995. *J. Derbyshire ent. Soc.* 123: 4-7. – (4 Peakland View, Darley Dale, Matlock, Derbysh., DE4 2GF, UK).
In addition to the general report, the notable 1995 observations are provided for 12 resident spp.
- (10843) EDA, S., 1996. Annual review of entomology for 1995 in particular insect groups. Dragonflies. *Gekkan-Mushi* 302: 32-37. (Jap., with Engl. title). – (3-4-25 Sawamura, Matsumoto, Nagano, 390, JA).
Sequel in the series, the last paper of which is listed in *OA* 10271. It deals with the papers on the fauna of Japan, and with those by Japanese workers.
- (10844) EDA, S., 1996. Chronicle of Japanese odonatology in 1995, with supplemental notes of 1994. *Nature & Insects* 31(4): 35-41. (Jap., with Engl. title). – (3-4-25 Sawamura, Matsumoto, Nagano, 390, JA).
Sequel in the series, the last paper of which is listed in *OA* 10272.
- (10845) FINCKE, O.M., 1996. Larval behaviour of a giant damselfly: territoriality or size-dependent dominance? *Anim. Behav.* 51(1): 77-87. – (Dept Zool., Univ. Oklahoma, Norman, OK 73019, USA).
Behavioural interactions and habitat use by larval *Megaloprepus coerulatus* were studied in Panama. These larvae live in water-filled holes in fallen and living trees. Despite potential advantages for larval territoriality in this species, *M. coerulatus* did not exhibit exclusive use of resources, probably because their prey were not spatially clumped. Both well-fed and starved larvae initiated agonistic displays typical of other damselfly species, and even small differences in relative size affected their behaviour towards conspecifics. Habitat use in *M. coerulatus* varied with levels of food and cover. When cover was abundant, as it is in natural holes, larvae were hyperdispersed. A larva rarely showed exclusive use of a given area from one day to the next, however, even when both cover and motile prey were experimentally limited. The ability of larger individuals to displace smaller ones as they move around the habitat is best described as size-dependent (and site-independent) dominance rather than territoriality. The results suggest that it is premature to characterize an animal as 'territorial' on the basis of its behaviour in the laboratory, unless the abundance and distribution of resources that are provided are realistic, and the experimental design is sufficient to differentiate between size-dependent dominance and site-specific exclusion of conspecifics from a critical resource.
- (10846) [GEISTER, I.], DOLGAN, M., 1996. Geister, Iztok. In: J. Kos, K. Dolinar & A. Blatnik, [Eds], Slovenska književnost, p. 106, Cankarjeva založba,

- Ljubljana, ISBN 86-361-0929-9. (Slovene). – (c/o I. Geister, Pokopališka pot 13, SI-4202 Naklo).
A brief biography and bibliography of this well known Slovene writer and poet, with a reference to his odonatological work. – Cf. also e.g. OA 10216.
- (10847) GERHOLDT, J.E., 1996. *Dragonflies*. Abdo & Daughters, Edina. 22 pp. Hard cover 20x25 cm. ISBN 1-56239-484-3. – Price: ca US \$ 10.- net. – (Publishers: 4940 Viking Drive, Suite 622, Edina, MN 55435, USA).
A children book, with the following chapters: “Dragonflies”, “Life cycle”, “Sizes”, “Shapes”, “Colors”, “Where they live”, “Senses”, “Defense”, “Food”, “Glossary” and “Index”. Each chapter consists of a single text page, with a beautiful col. phot on the opposite page.
- (10848) GOELDIN DE TIEFENAU, P. & M. SARTORI, 1996. En mémoire de Jacques Aubert (1916-1995). *Bull. romand Ent.* 14(1): 89-99. – (Mus. Zool., Palais de Rumine, C.P. 448, CH-1000 Lausanne-17).
A brief biography (portrait incl.), appreciation of work and a complete bibliography of this well known Swiss plecopterologist. In odonatology, he is noted for his insect migration studies at Col de Bretolet, Valais, Switzerland.
- (10849) *GOMPHUS*. *Mededelingsblad van de Belgische libellenonderzoekers*. – *Bulletin de liaison des odonatologues belges*, Vol. 11, No. 3/4 (May 1996). (Dutch & Fr.). – (c/o G. De Knijf, Hofstraat 58, B-9000 Gent).
Tailly, M.: Editorial (pp. 53-54); – *Gysels, J.*: Le statut de *Calopteryx virgo* en Flandre (pp. 55-62); – *Vanderhaeghe, F.*: Les libellules à Roulers (Flandre occidentale) (pp. 63-71); – Guide d'identification (pp. 72-75; description of the work listed in OA 10906); – *Stoks, R.*: Rappel à propos *Lestes barbarus* (pp. 76-77, inlay excl.); – Publications odonatologiques récentes (pp. 78-82); – *Excursions* (pp. 83-86).
- (10850) GRUTTKE, H., 1996. Berner Konvention und wirbellose Tiere. *Natur & Landschaft* 71(1): 7-11. (With Engl.s.). – (Inst. Tierökol., Konstantinstr. 110, D-53179 Bonn).
The programme and views of a new “Bern Convention Group” are outlined. Its objective is the improvement of invertebrate conservation (incl. the habitats) at pan-European level. The paper contains a list of 9 “strictly protected” odon. spp. in Germany.
- (10851) GUČEK, M., 1996. Poročilo skupine za biološko oceno kvalitete vode. – Report of the group for the biological assessment of water quality. *In*: M. Bedjanič, [Ed.], Raziskovalni tahr študentov biologije Kozje '95, pp. 17-22, ZOTKS – Gibanje znanost mladini, Ljubljana (Slovene, with Engl.s.). – (Antoličičeva 1, SI-2204 Miklavž-na-Dravskem-polju).
6 odon. spp. are listed from various streams in the Kozjansko region, E Slovenia.
- (10852) HÄMÄLÄINEN, M., 1996. *Amphigomphus somnuki* n.sp. from North Thailand (Odonata: Gomphidae). *Ent. Z.* 106(5): 177-180. – (Sunankalliontie 13, FIN-02760 Espoo).
The new sp. is described and illustrated from both sexes. Holotype ♂: Chiang Mai prov., Doi Suthep, 20-VI-1990; deposited in St Gabriel's Coll., Bangkok. Its generic affiliation is not straightforward, since the new sp. combines characters of *Amphigomphus* and *Orientogomphus*. It is placed in the former on basis of the external genitalia structure.
- (10853) HARRISON, F., 1996. [Book review]. Atlas of the dragonflies of Britain and Ireland, by R. Merritt, N.W. Moore and B.C. Eversham. *J. Derbyshire ent. Soc.* 123: 8. – (Author's address not stated).
Book review of the volume listed in OA 10884.
- (10854) HAVENS, K.E., L.A. BULL, G.L. WARREN, T.L. CRISMAN, E.J. PHILIPS & J.P. SMITH, 1996. Food web structure in a subtropical lake system. *Oikos* 75(1): 20-32. – (First Author: Sth Florida Water Manag. Distr., West Palm Beach, FL 33416-4680, USA).
From Lake Okeechobee, Florida, USA, 11 odon. taxa are listed, but only a few of these are identified to the sp. level.
- (10855) HEFTE DER BREMER LIBELLENGRUPPE, No. 4 (March 1996): *Die Libellen der Westpaläarktis. Eine systematische Liste der Arten und Unterarten*. 15 pp. Compiled & produced by, and available from Dipl.-Ing. J. Ruddek (Butendiek 34, D-28865 Lilienthal).
A checklist of 284 spp. and ssp., based on the works of Davies & Tobin (OA 5014, 5042), Tsuda (OA 8012) and Bridges (OA 10070).

- (10856) HIRVONEN, H. & E. RANTA, 1996. Prey to predator size ratio influences foraging efficiency of larval *Aeshna juncea* dragonflies. *Oecologia* 106(3): 407-415. – (Div. Popul. Biol., Dept Ecol. & Syst., P.O. Box 17, FIN-00014 University of Helsinki).
Larval foraging behaviour was investigated in order to examine the significance of prey density and body size in predator-prey dynamics. *A. juncea* were offered separately 3 size-classes of *Daphnia magna* at low and high densities. The data were collected with direct observations of the foraging individuals. Large larvae could better enhance their intake of prey biomass as prey size and prey density increased than their smaller conspecifics. However, increasing feeding efficiency of both larval instars was constrained by declining attack success and search rate with increasing prey size and density. With small *D. magna*, in contrast to large *A. juncea*, small *A. juncea* increased their searching efficiency as prey density increased keeping *D. magna* mortality rate at a constant level. In a predator-prey relationship this indicates stabilizing potential and feeding thresholds set by both prey density and prey-predator size ratio. Attack success dropped with prey size and density, but did not change in the course of the foraging bout. For both *A. juncea* sizes prey handling times increased as more medium and large prey were eaten. The slope of the increase became steeper with increasing prey-predator size ratio. These observations indicate that components of the predator-prey relationship vary with prey density, contrary to the basic assumptions of functional response equations. Moreover, the results suggest that the effects of prey density change during the ontogeny of predators and prey.
- (10857) HOSHODA, A., 1996. *Libellula angelina* in Okegayanuma, Iwata city. *Nature & Insects* 31(6): 22-26. (Jap., with Engl. title). – (Author's address not state).
[Abstract not available].
- (10858) HOSTETTLER, K., 1996. Libellenfauna im Raume Lauterach-Lustenau-Dornbirn. Bestandsaufnahme (1991/1992) 1993. *Vorarlberger Naturschau* 1: 301-321. (With Engl.s.). – (Schulstr. 7, CH-8590 Romanshorn).
37 spp. are evidenced from the westernmost area of Vorarlberg prov., W Austria. The paper contains some references to the Rhine Valley fauna in Switzerland as well.
- (10859) ICHIKAWA, N., 1996. Present habitat conditions of aquatic insects and the future problem for conservation. *Nature & Insects* 31(6): 2-4. (Jap., with Engl. title). – (Author's address not stated).
[Abstract not available].
- (10860) ISHIDA, K., 1996. A new species of the genus *Chlorogomphus* from Hainan island, China (Odonata, Cordulegastridae). *Jap. J. syst. Ent.* 2(1): 51-54. – (Zool. Lab., Fac. Agric., Meijo Univ., Tempaku-ku, Nagoya, 468, JA).
C. usudai sp.n. is described, illustrated and compared with *C. brunneus*. Holotype ♀: Tongza, Hainan China, 29-IV-1994; deposited in Nagoya Insect Mus.
- (10861) [ISHIZAWA, N., translator], 1996. *Dragonflies of Nagatoro*. Postcard Ser. 4, Saitama Mus. Nat. Hist. (Jap., with a separate Engl. translation). – (c/o N. Ishizawa, 1644-15 Yamaguchi, Tokorozawa, Saitama, 359, JA).
A series of 5 postcards (*Lestes temporalis*, *Epiophlebia superstes*, *Trigomphus melampus*, *Orthetrum albistylum speciosum*, *Sympetrum croceolum*), with species-wise annotations, and with a general outline of the Nagatoro area dragonfly world; – Saitama, Japan.
- (10862) JIANG, Y.-H., 1996. Identifications of six male and female dragonflies and damselflies on larval stage. *Ent. Knowledge/Kunchong Zhishi* 33(1): 45-47. (Chin., with Engl. title in Contents tab.). – (Author's address not transliterated).
Descriptive notes on the larvae of *Anotogaster sieboldii*, *Anax nigrofasciatus*, *A. parthenope julius*, *Sinictinogomphus clavatus*, *Pantala flavescens* and *M. b. basilaris*.
- (10863) *JOURNAL OF THE BRITISH DRAGONFLY SOCIETY*, Vol. 12, No. 1 (Apr. 1996). – (c/o Dr W.H. Wain, Haywain, Hollywater Rd, Bordon, Hants, GU35 0AD, UK).
Pittman, S.: Migrant species of *Sympetrum* in Norfolk, 1995 (p. 1); – *Prendergast, E.D.V.*: The Southern Damselfly *Coenagrion mercuriale* (Charpentier) on the Ministry of Defence Ranges, Lulworth, Dorset (pp.2-10); – *Jones, S.P.*: The first British record of the Scarlet Dragonfly *Crocothemis erythraea* (Brullé) (pp. 11-12); – *Flory, J.E.*: Dragonflies of the Grand Western Canal, Tiverton, Devon (pp. 12-16); – *Smith, P.D.*: The breeding dragonflies of Wessex rivers (pp. 17-22); – *Seidenbusch, R.*: Notes on the

- identification of the exuviae of *Coenagrion pulchellum* (Vander Linden) and *C. puella* (Linnaeus) (pp. 22-25); – *Waring, E.*: *Coenagrion pulchellum* (Vander Linden) in England since 1990 (pp. 26-29); – *Richards, M.A.*: *Somatochlora metallica* (Vander Linden) ovipositing: some observations (p. 29); – *Paine, A.*: Notes and observations (pp. 30-31); – *Recent odonatological publications* (p. 32); – *Obituary notice for Dr Peter Miller* (p. 32).
- (10864) KALKMAN, V., 1996. Libellen, de libellen-dag en het libellenproject. *Natura, Utrecht* 93(4): 75-78. (Dutch). – (Bokkingshang 1, NL-7411 GG Deventer).
A general article on dragonflies and on the current odon. mapping project in the Netherlands. June 29-30, 1996 is announced as the national "Dragonfly Day", when various chapters of the Royal Neth. Nat. Hist. Soc. (KNNV) are to organise dragonfly field trips in their respective areas.
- (10865) KIMMINSIA. *Newsletter of the U.K. National Office of the International Odonatological Society (SIO)*, Vol. 7, No. 1 (May 1996). – (Orders to: Mrs J. Silsby, 1 Haydn Ave., Purley, Surrey, CR8 4AG, UK). The issue is dedicated to the memory of the late Dr P.L. Miller (deceased March 24, 1996). – Signed articles: *Moore, N.*: Peter Miller – an appreciation (pp. 1-2); – *Miller, P. & K. Miller*: *Hemianax ephippiger* & *Aeshna mixta* in Istanbul (p. 3); – *Vick, G.*: *Epiophlebia laidlawi* (p. 3); – *Silsby, J.*: More on the *Synlestidae* front (pp. 3-4); – *Allen, P. & C. Allen*: "Gomphids" [spring dragonfly encounters in Florida] (pp. 4-5); – *Davies, A.*: Weeks, dragonflies & ants in NW Borneo (pp. 5-6); – *Mackenzie Dodds, R.*: Kari & Ruary visit another Sanctuary [Belvedere Lake in Central Park, New York] (p. 7); – *Silsby, J.*: Review [Atlas of the dragonflies of Britain & Ireland, by R. Merritt, N.W. Moore & B.C. Eversham; HMSO, no date] (p. 8); – The standard sections included are: "News from members" (p. 2; 5 contributions); – "News from universities" (p. 2; 1 contribution); – and "Conservation" (pp. 2-3; 1 contribution). – Inlay: "The Peter Miller Memorial appeal". The BDS set up a Fund to honour the memory of this great odonatologist, by furthering the educational, research and conservation aims. Information is available from the Ed.
- (10866) KORTOVIČ, V., 1996. [Exlibris Tom van Koolwijk]. *Obvest. Dr. Exlibris Slov.* 128: cover, Slovene caption on p. 4. – (c/o Prof. Dr R. Pavlovec, Trubarjeva 14, SI-1000 Ljubljana).
A better and larger reproduction of the same book-plate as in OA 10293. – (Cf. also e.g. OA 1919, 6425, 6505).
- (10867) KOTARAC, M., 1996. Favna kačjih pastirjev (Odonata) v Posočju. – [Dragonfly fauna (Odonata) in the Soča R. basin]. In: I. Sivec et al., [Eds], *Inventarizacija favne reke Soče*, pp. 36-40, Prirodoslovni muzej Slovenije, Ljubljana. (Slovene). – (Antoličičeva 1, SI-2204 Miklavž-na-Dravskem-polju).
A summary of the paper listed in OA 10754.
- (10868) KOTARAC, M., A. PIRNAT, A. ŠALAMUN & M. BEDJANIČ, 1996. Prispevek k poznavanju favne kačjih pastirjev (Odonata) širšega območja Kozjanskega, vzhodna Slovenija. – Contribution to the knowledge of the odonate fauna of the Kozjansko region, eastern Slovenia. In: M. Bedjanič, [Ed.], *Raziskovalni tabor študentov biologije Kozje '95*, pp. 37-48, ZOTKS – Gibanje znanost mladini, Ljubljana. (Slovene, with Engl.s.). – (Last Author: Fram 117/a, SI-2313 Fram).
46 spp., evidenced at 131 localities, are listed without record data. The results of the preliminary marking studies of adult ♂♂ and the larval morphometric data on *Somatochlora meridionalis* are included.
- (10869) KURSTJENS, G. & M. DE VELD, 1996. Libellen in de zuidelijke Maasvallei in 1995. – Dragonflies in the southern Meuse Valley in 1995. *Natuurh. Maandbl.* 85(6): 131-132. (Dutch, with Engl.s.). – (First Author: Le Bron de Vexelastraat 27, NL-6042 AN Roermond).
A list is given of 26 spp., 7 of which were not recorded in 1993-1994, and the occurrence of which is discussed in some detail. The Jan. 1995 floods triggered larval drift of *Gomphus vulgatissimus*, *Onychogomphus forcipatus* and *Cordulegaster boltoni*, the hot summer brought the mediterranean *Lestes barbarus*, *Aeshna affinis* and *Crocothemis erythraea*.
- (10870) KURZFASSUNGEN DER VORTRÄGE GdO-JAHRESTAGUNG 1996 IN BERLIN. Stencil, 7 pp. – (c/o Prof. Dr G. Peters, Inst. Syst. Zool., Mus. Naturk., Humboldt-Univ., Invalidenstr. 43, D-10115 Berlin).
Günther, A.: Die Schabrackenlibelle *Anax ephippiger*

(Burmeister) in Brandenburg (p. 1); – *Ott, J.*: Aktuelle Bestandsveränderungen in der Odonatenfauna Deutschlands und Europas als Auswirkungen einer Klimaveränderung? (p. 1); – *Lempert, J.*: Libellenwanderungen auf der Nordseeinsel Mellum (p. 1); – *Zimmermann, W.*: Somatochlora alpestris im Thüringer Wald – ein Situationsbericht (p. 2); – *Jödicke, R.*: Neue Aspekte zur Systematik und Nomenklatur von *Sympecma paedisca* (p. 2); – *Lohmann, H.*: Funktionsmorphologische Aspekte im Paarungsverhalten der Anisoptera: Präkopulation und Funktion der männlichen "Ohrchen" (p. 2, paper not read in the meeting); – *Samways, M.J.*: From the Cape to the Krueger National Park – the ecologically varied South African dragonfly fauna (p. 3); – *Clausnitzer, H.-J.*: Veränderungen der Libellenfauna in der Süddeide von 1975 bis 1995 (p. 3); – *Schötte, C., P. Schridde & F. Suhling*: Veränderungen in der Libellenlebensgemeinschaft eines Flussgewässers infolge einer manuellen Räumung (p. 3); – *Schmidt, E.*: Die Odonaten der Issel (NO Wesel am Niederrhein): Sichtserfassungen im Vergleich mit limnologischen Erfassungen der Makroinvertebraten, nebst Mitteilung über ein androchromes Weibchen von *Calopteryx splendens* (p. 4); – *Hartung, M.*: Libellen an Berliner Stadtparkteichen (p. 4); – *Burbach, K., I. Faltin, M. Königsdorfer & M. Winterholler*: Untersuchungen zum Artenhilfsprogramm "Vogel-Azurjungfer in Bayern" (p. 4); – *Ewers, M.*: Die Sumpflibelle *Sympetrum depressiusculum* (Selys, 1841) im NSG Ahlhorner Fischteiche (p. 5); – *Göcking, C.*: Bemerkungen zur Bionomie und Ökologie von *Platynemis pennipes* (Pallas) (p. 5); – *Clausnitzer, V.*: Territorialverhalten von *Notiothemis robertsi* Fraser: Anpassungen einer tropischen Libellulidae an kleine Regenwäldertümpel (p. 5); – *Inden-Lohmar, C.*: Revier- und Fortpflanzungsverhalten von *Aeshna cyanea* (Müller) (Anisoptera: Aeshnidae): Entwurf eines raum-zeitlichen Modells (p. 6); – *Martens, A.*: Eiablageplatzwahl von *Sympecma fusca* (p. 6); – *Jeppel, H.*: Beobachtungen zum Beutefangverhalten der Larven von *Anax imperator* (p. 6); – *Brockhaus, T.*: Populationsdynamik der Federlibelle *Platynemis pennipes* (Pallas, 1771) an ihrer regionalen Verbreitungsgrenze im Erzgebirge (Zygoptera: Platynemididae) (p. 7).

Ott, L.A.U.B., Hölzengraben 2, D-67657 Kaiserslautern).

[Papers of odonatological contents]: *Handke, K.*: Verstärktes Auftreten wärmeliebender Wirbellosenarten und andere faunistische Veränderungen in der Bremer Flussmarsch (p. 4); – *Ott, J.*: Aktuelle Bestandsveränderungen in der Odonatenfauna Deutschlands und Europas als Auswirkungen einer Klimaveränderung? (p. 12).

- (10872) *La LETTRE DES SOCIÉTAIRES Société Française d'Odonatologie*, No. 7 (March 15, 1996). – (c/o J.-L. Dommanget, 7 rue Lamartine, F-78390 Bois-d'Arcy).

Contains the 1995 Balance Account of the Society, and the text of the modifications of Constitution.

- (10873) *LIBELLENNIEUWSBRIEF* (Themanummer) 1 (Apr. 1996). (Dutch). – (c/o S. Turnhout, Uilenstede 162, NL-1183 AN Amstelveen).

The issue contains no signed articles. Its 30 pp. are devoted entirely to the faunistically inadequately explored areas and to the less known spp. in the Netherlands.

- (10874) *LIBELLULA. Mitteilungsblatt der Gesellschaft deutschsprachiger Odonatologen (GdO)*, Vol. 15, No. 1/2 (March 1996). – (c/o Mrs U. Krüner, Gelderner Str. 39, D-41189 Mönchengladbach).

Finch, O.-D. & R. Niedringhaus: Die auf der Nordseeinsel Borkum in den Jahren 1932 bis 1934 von F. und R. Struve gesammelten Libellen (pp. 1-10); – *Oly, M.*: Beitrag zur Odonatenfauna im Stadtbereich Bochum (pp. 11-26); – *Hess, M., U. Heckes & M. Schön*: *Epitheca bimaculata* (Charpentier) in Bayern (Anisoptera: Corduliidae) (pp. 27-44); – *Gasse, M. & C. Kröger*: Schlüpfende Grosslibellen (Anisoptera: Aeshnidae) als Beute der sozialen Faltenwespe *Vespa vulgaris* L. (Hymenoptera: Vespidae) (pp. 45-55); – *Wildermuth, H. & E. Knapp*: Räumliche Trennung dreier Anisopterenarten in einem subalpinen Moorweiher (pp. 57-73); – *Juritzka, G.*: Seltsame Schlafstellung eines Männchens von *Sympetrum striolatum* (Charpentier) (Anisoptera: Libellulidae) (pp. 75-77); – *Bauhus, S.*: Funde von *Crocothemis erythraea* (Brullé) und *Aeshna affinis* Vander Linden in der Lippe-Aue (Anisoptera: Libellulidae, Aeshnidae) (pp. 79-84); – *Fliedner, T.*: Der Buntspecht *Dendrocopos major* (Aves: Picidae) als Grosslibellenjäger (Anisoptera) (pp. 85-87); – *Busse, R. & R. Jödicke*: Langstreckenmarsch bei der

- (10871) *KURZFASSUNGEN DER VORTRÄGE "KLIMAÄNDERUNG – KONSEQUENZEN FÜR FLORA, FAUNA, LEBENSÄUME"*, 1996. AG Klimaänderung, Kaiserslautern, 16 pp. – (c/o Dr J.

- Emergenz von *Sympetrum fonscolombii* (Selys) in der marokkanischen Sahara (Anisoptera: Libellulidae) (pp. 89-92). – In 1 a y: *Sternberg, K.*: Erhebungsbogen zur Erfassung migrierender Libellen (4 pp.).
- (10875) LOPAU, W., 1996. Libellenbeobachtungen auf Kreta im Sommer 1994. *Naturk. Reiseber.* 10: 58-70. – (Kuhstedtmoor 26, D-274442 Gnarrenburg). The paper is organized in a similar way as that listed in OA 10876. 16 spp. are listed from 27 localities on the island of Crete. Particularly valuable are descriptive notes on *Calopteryx splendens cretensis*.
- (10876) LOPAU, W., 1996. Libellenbeobachtungen in Griechenland 1989 bis 1995. Festland, Lefkáda und Peloponnes. *Naturk. Reiseber.* 10: 3-57. – (Kuhstedtmoor 26, D-274442 Gnarrenburg). With his traditional precision and sense for meticulous and concise field observations, the Author is dealing with 50 spp., from 116 localities. In the first part, the localities are briefly described, and the odon. list (with quantitative data) is given for each of them. In the second part, the taxa are dealt with species-wise. The comments include notes on the regional status, ecology, behaviour, etc.
- (10877) MARINOV, M., 1996. Opazvaneto na vodnite koncheta i tehните mestoobitaniya: "Apel't ot Kushiro". *Neophron* 1996(1): 5. (Bulg.). – (k/c Meden rudnik, P.O. Box 9, BG-8011 Bourgas). A Bulgarian translation of the "Kushiro Appeal", as published originally in the work listed in OA 10044.
- (10878) MARTENS, A., 1996. *Die Federlibellen Europas (Platycnemididae)*. Westarp Wissenschaften, Magdeburg & Spektrum Akademischer Verlag, Heidelberg-Berlin-Oxford. 149 pp., 2 col.pls incl. ISBN 3-89432-458-9. [*Neue Brehm-Bücherei* 626 / *Libellen Europas* 1]. – Price DEM 40.- net (available from the Eds of *Odonatologica*, Bilthoven). – (Author: Zool. Inst., Techn. Univ., Spielmannstr. 7, D-38092 Braunschweig). Subsequent to the publication of the Aeshnidae volume, as listed in OA 6147, the publishers of the popular *Neue Brehm-Bücherei* collection have now set up a special series of titles on the dragonflies of Europe, the first volume in which is the present book, authored by one of the leading odonatologists in Germany and the authority on the biology of this Old World family. For his PhD work on the subject cf. OA 8729. – The first part of the book gives a review of the world fauna of the family, with a key to the adults and larvae of the European and Mediterranean spp. The second (and main) part of the monograph deals with the biology and ecology of the European *Platycnemis pennipes*. A comprehensive bibliography concludes the work. – The book certainly is a must in every odonatol. library. It is unfortunate that only 1500 copies were printed.
- (10879) MARTINIA. *Bulletin des odonatologues de France*, Vol. 12, No. 1 (March 1996). – (c/o J.-L. Dommanget, 7 rue Lamartine, F-78390 Bois-d'Arcy). *Prot, J.M.*: Tératologie chez *Orthetrum albistylum* (Sély, 1848) (Odonata, Anisoptera, Libellulidae) (pp. 3-4); – *Dommanget, J.-L.*: Nouvelles observations de *Sympetrum flaveolum* (L., 1758) dans les départements de la Manche et de l'Essonne (Odonata, Anisoptera, Libellulidae) (p. 4); – *Coutanceau, J.-P.*: *Orthetrum brunneum* (Fonscolombe, 1837) et *Sympetrum flaveolum* (L., 1758) observés dans la vallée des Evoissons (sud-ouest amiénois, Somme) (Odonata, Anisoptera, Libellulidae) (pp. 5-8); – *Marquis, S.*: *Sympetrum flaveolum* (L., 1758), espèce nouvelle pour la Bretagne (Odonata, Anisoptera, Libellulidae) (p. 8); – *Grand, D.*: *Somatochlora meridionalis* Nielsen, 1935 en Provence et autres observations d'odonates dans les départements du Var et des Alpes-Maritimes (Odonata, Anisoptera, Corduliidae) (pp. 9-18); – *Dusoulier, F.*: Observations odonatologiques sur l'île de Tenerife aux Canaries (pp. 19-21); – *Charrier, M.*: Observation d'*Epithea bimaculata* (Charpentier, 1825) en Brenne, département de l'Indre (Odonata, Anisoptera, Corduliidae) (p. 22); – *Fournier, A.*: Quelques espèces peu communes en arrondissement d'Avesnes/HELPE (département du Nord) (pp. 23-24); – *Greff, N. & A. Marie*: Record d'altitude chez *Calopteryx splendens* (Harris, 1782) (Odonata, Zygoptera, Calopterygidae) (p. 24); – *Kerihuel, C.*: Redécouverte de *Lestes dryas* Kirby, 1890 et de *Aeshna isosceles* (Müller, 1767) dans le département de la Sarthe (Odonata, Zygoptera, Lestidae et Anisoptera, Aeshnidae) (pp. 25-26); – *Mashaal, M.*: Analyses d'ouvrages (pp. 26-28).
- (10880) MATSUKI, K. & Y. SAITO, 1996. A new species of *Drepanosticta* from Hong Kong (Platystictidae, Odonata). *Nature & Insects* 31(3): 39-43. (Jap., with a comprehensive Engl. description & Engl. fig. captions). – (First Author: Hasama-cho 3-1575-14, Funabashi-shi, Chiba, 274, JA).

- D. ogatai sp.n. is described and illustrated. Holotype ♂, allotype ♀ (incl. various paratypes of both sexes): Hong Kong: Ng tung chai, 21-V-1994 & 29-IV-1994, resp.
- (10881) MATSURA, T. & O. KUROKAWA, 1996. Aquatic insect communities in containers left in the field: a way to secure more dragonfly larvae. *Insectarium, Tokyo* 33(1): 16-21. (Jap., with Engl. title, tab. & fig. captions). – (Dept Biol., Kyoto Univ., Fushimi-ku, Kyoto, 612, JA). [Abstract not available].
- (10882) MATTILA, K., 1996. Hyönteistiedonannot 1995. – [The 1995 insect records]. *Diamina* 5: 32-33. (Finn.). – (Author's address not stated). Various Finnish records are listed for 4 odon. spp., incl. *Aeshna crenata*.
- (10883) MEIER, C. & A. MAIBACH, 1996. 8. Symposium der Vereinigung schweizerischer Libellenkundler. *Nouvelles Cent. suisse Cartogr. Faune* 11: 29-32. – (First Author: Gibel Bannholz, CH-8638 Goldingen). Contains the following abstracts of papers presented at the Symposium: *Kohl, S.*: Neu geschaffene Weiher und Feuchtbiopte und ihre Libellenfauna in Uster (p. 29); – *Hoess, R.*: Die Libellenfauna der Alten Aare – eine aktuelle Bestandsaufnahme (p. 29); – *Hertzog, M.*: Libelleninventar und Pflegeeinsätze in der Kiesgrube Trubeschloo, Homburg, 1977-95 (p. 30); – *Wolf, M.*: Die Sibirischen Winterlibelle (*Sympetma paedisca*) im Kanton Zürich nach 110 Jahren wieder aufgetaucht (p. 30); – *Hostettler, K.*: Neue Beobachtungen zur Ökologie von *Sympetma paedisca* aus dem Kanton Thurgau (p. 30); – *Monnerat, C.*: Nouvelles observations de libellules dans la région de Delémont JU (pp. 30-31); – *Wagner, A.*: Aperçu de la faune des libellules de la Valée de Joux (VD) (p. 31); – *Lepori, F.*: Qualcune novita odonatologica del cantone Ticino (p. 31); – *Wildermuth, H. & E. Knapp*: Wie teilen sich verschiedene Libellenarten einen Lebensraum auf (p. 31); – *Vonwil, G.*: *Hemianax ephippiger* und Co. – Vorböten der Klimaerwärmung? (pp. 31-32).
- (10884) MERRITT, R., N.W. MOORE & B.C. EVERS-HAM, 1996. *Atlas of the dragonflies of Britain and Ireland*. Her Majesty's Stationary Office, London. xiii+150 pp., 8 col. pls excl. ISBN 0-11-701561-X. – Price: £ 15.95 net. – (Orders to: HMSO Publications Centre, P.O. Box 276, London, SW8 5DT, UK). The volume is the result of 25 yr of organised work, based on close to 110.000 records, incl. those extracted from publications and collections, coming from ca 3000 recorders, and spanning a period of some 160 yr, up to the end of 1990 (with some information up to 1995 incl.). It is not merely a distribution atlas of the British Isles, but rather a well balanced handbook on the status and biology of the regional spp. (Britain 40, Ireland 22, Channel Islands 23). – Chapter titles: "Foreword", "Preface", "Acknowledgements", "Introduction", "History of recording", "Fieldwork and data management", "Species accounts and maps", "Seasonal occurrence", "Future recording", "Dragonflies and nature conservation", "Literature and references", 2 Appendices and "Index to species". – In addition to the maps, the following information is provided for each sp.: "Description", "Habitat", "Breeding biology", "Flight periods", "Status and distribution", and "European and world distribution". – Col pls contain 40 photographs, showing some characteristic habitats, and the portraits of adults and larvae of some spp. – This kind of works can never be final and complete, but the value of the book certainly is "timeless". As a tool in dragonfly conservation efforts its value is unparalleled and cannot be exaggerated. In its kind, it is the best yet published and it should certainly serve as a model for preparation of similar atlases elsewhere.
- (10885) NACHTIGALL, W., 1996. Insect flight behaviour in a natural environment. 5. Equipment, recording and evaluation methods for insect flight analysis by camcorders with high-speed shutter. 2. *Entomol. gener.* 20(4): 225-239. (With Germ.s.). – (Zool. Inst., Univ. Saarland, D-66440 Saarbrücken). The earlier parts of this series were published in *Entomol. gener.* 17/1 (1992): 1-8, 17/4 (1993): 241-254, 19/1-2 (1994): 29-37, and 19/4 (1995): 267-279. The papers contain various referenes to the odon.
- (10886) NEL, A., A. ARILLO & X. MARTINEZ-DELCLÓS, 1996. New fossil Odonata (Insecta) from the Upper Miocene of France and Spain (Anisoptera and Zygoptera). *Neue Jb. Geol. Paläont. Abh.* 199: 167-219. (With Germ.s.). – (Second Author: Cated. Ent., Depto Biol. Animal I/Zool., Fac. Biol., Univ. Complutense, ES-28040 Madrid). The following new taxa are described and illustrated:

- Megapodagrionidae*: *Vulcanagrion andan-censis* sp.n. (Lower Turolian; nr Privas, Ardèche, France), *V. cantalensis* sp.n. (Upper Miocene; Murat, Cantal, France); – *or Pseudolestidae*: *Cerdanyagrion miocenicus* gen. n., sp.n. (Upper Vallesian-Lower Turolian; nr Bellver de Cerdanya, Lleida, Spain); – *Aeshnidae*: *Allopetalia europaea* sp.n. (Upper Miocene; Murat, Cantal, France); – *Corduliidae*: *Somatochlora(?) brisaci* sp.n. (Lower Turolian; nr Privas, Ardèche, France); – *Libellulidae*: *Celithemis cantalensis* sp.n. (Messinian; Murat, Cantal, France), and *Sympetrum cantalensis* sp.n. (Upper Messinian; Murat, Cantal, France). The types are in MNHN, Paris. Several incompletely identified fossils are also described. – The affinities of the new spp. and of some genera are discussed. Remarkable is the discovery of the neotropical *Allopetalia* in the Upper Miocene of Europe.
- (10887) *NEWSLETTER [OF THE] BRITISH DRAGON-FLY SOCIETY*, No. 29 (Spring, 1996). – (c/o Mrs J. Silsby, 1 Haydn Ave., Purley, Surrey, CR8 4AG, UK). 19 pp. of concise reports, announcements, management news, etc. The following information will be of general interest, [verbatim]: "The BDS has decided to launch an appeal to raise funds to enable small grants to be given to young people (i.e. under 30 yr of age) to help them carry out projects on dragonfly biology, monitoring or conservation. These are to be called Philip Corbet Awards as a way of honouring [Dr Corbet] whose enormous contributions to the study and conservation of dragonflies certainly out-shine those of anyone else in Britain, indeed probably anywhere else at all..."
- (10888) *NORDISK ODONATOLOGISK FORUM NYHETSREVEJ – NORDIC ODONATOLOGICAL SOCIETY NEWSLETTER*, Vol. 2, No. 1 (Apr. 1996) (Nordic languages, with Engl.s's). – (c/o H. Olsvik, N-6598 Foldfjorden).
Nielsen, O.F.: 3rd Nordic odonatological meeting in Ry, Denmark, 14-16 June 1996 (p. 3); – *Holmen, M. & H. Pedersen*: Odonata i Danmark, forelobig status 1995 (pp. 4-7); – *Sahlén, G.*: Some impressions from the Second Nordic odonatological meeting in Uppland, Sweden, June 9-11, 1995 (pp. 8-10); – The distribution of the Swedish dragonflies by regions (pp. 11-12); – An informational note on the book "Sveriges trollsländor, 2nd edition" (p. 13); – *Olsvik, H.*: News from Norway 1995 (p. 13); – *Løfall, B.P.*: Dragonflies in Østfold, status per 1995 (pp. 14-15); – *Olsvik, H.*: Odonata in Møre & Romsdal county, western Norway, status 1995 for the mapping programme (pp. 16-22); – *Nielsen, O.F.*: *Anax imperator* found again in Denmark (p. 23); – *Ottvall, R.*: *Hemianax ephippiger* observed in southern Öland in June 1955 (p. 23); – *Olsvik, H.*: *Hemianax ephippiger* and *Aeshna serrata* observed in Norway 1995 (p. 24); – Flight periods and phenological extremes for Odonata in Norway (p. 25); – Checklist of Nordic Odonata per 1995 (p. 26); – *Adressliste* (p. 27). – (*Abstracter's Note*: The issue listed in OA 10304 is the only one previously published).
- (10889) OKAMOTO, M., K. YASUDA & A. AZUMA, 1996. Aerodynamic characteristics of the wings and body of a dragonfly. *J. exp. Biol.* 199(2): 281-294. – (Third Author: Inst. Interdiscipl. Res., Fac. Engin., Univ. Tokyo, 37-3 Miyako-cho, Saiwai-ku, Kawasaki, 210, JA).
The aerodynamic characteristics were studied in *Anax parthenope julius* and in artificial wing models, by conducting 2 types of wind-tunnel tests and a number of free-flight tests of gliders made using dragonfly wings. The results were consistent between these different tests. The effects of camber, thickness, sharpness of the leading edge, and surface roughness on the aerodynamic characteristics of the wings were characterized in the flow field with Reynolds numbers (Re) as low as 10^3 to 10^4 .
- (10890) PAINTER, M.K., K.J. TENNESSEN & T.D. RICHARDSON, 1996. Effects of repeated applications of *Bacillus thuringiensis israelensis* on the mosquito predator *Erythemis simplicicollis* (Odonata: Libellulidae) from hatching to final instar. *Environ. Ent.* 25(1): 184-191. – (Second Author: 1949 Hickory Ave., Florence, AL 35630, USA).
Dragonfly larvae were exposed to *Bacillus* at 1.2 ppm once a week for an entire life cycle in a controlled laboratory environment. 8 weekly applications were administered to 2 treatment groups: external contact only, and external + internal contact using prey (mostly anopheline larvae) that had fed on *B. thuringiensis*. Each *B. thuringiensis*-treated group and a control group consisted of 15 larvae. Mortality was not affected by *B. thuringiensis* applications. Repeated *B. thuringiensis* applications did not affect development to the adult stage, morphology, or maiden flight capability. Larval size of the external contact group, measured by hind femur length and head width, was substantially smaller compared with

- the control group in most instars from 4-12. However, adult size, based on head width and hind wing length comparisons, did not differ among the 3 groups. Prey consumption and instar duration, which were highly correlated, did not account for the differences in size. Sex ratio (lower proportion of large ♀♀ in the external group) and initial size (slightly smaller in instar 2 in the external group) appeared to be the major factors contributing to the size differences in the external group. However, these variables were not responsible for the external + internal contact group being smaller in instar 10 compared with the controls, as sex ratios and initial size were equal. If repeated *B. thuringiensis* applications affect size in *E. simplicicollis*, the effect may be insignificant in terms of reproductive success, as published studies do not show a positive relationship between size and reproductive success in dragonflies.
- (10891) PEDROCCHI-RENAULT, C. & M. FERRERAS-ROMERO, 1996. Odonatos capturados en balsas temporales de Los Monegros (Aragón, España). *Boln Soc. ent. aragon.* 13: 64. – (Second Author: Depto Biol. Anim./Zool., Fac. Cien., Univ. Córdoba, Avda San Alberto Magno s/n, ES-14004 Córdoba).
Ischnura pumilio, *Crocothemis erythraea* and *Sympetrum fonscolombi* are listed; all evidenced by exuviae.
- (10892) PRASAD, M., 1996. Odonata in the Thar Desert. In: A.K. Ghosh et al., [Eds], Faunal diversity in the Thar Desert: gaps in research, pp. 145-149, Scientific Publishers, Jodhpur, ISBN 81-7233-118-5. – (Publishers: P.O. Box 91, 5 A New Pali Rd, Jodhpur, India).
Presents a checklist of 31 spp. and an exhaustive bibliography. It is not explicitly stated whether this is solely based on literature, or it includes also the previously unpublished records.
- (10893) REHFELDT, G.E., 1996. Copulation, oviposition site selection and predation risk in the dragonfly species *Crocothemis erythraea* (Odonata: Libellulidae). *Entomol. gener.* 20(4): 263-270. (With Germ.s.). – (Roseggerweg 41, D-38304 Wolfenbüttel).
In *C. erythraea*, ♀♀ show multiple matings with several ♂♂ during one visit of the reproductive site. They oviposit at various locations of the water. Pairs which are harassed by other ♂♂ during copulation fly off in the copulation wheel, and they copulate for a longer period of time before starting oviposition at another site. Escape flights increase the reproductive success of the ♂ by extending the duration of the subsequent oviposition. Multiple matings occur when ovipositing ♀♀ are harassed by other ♂♂ which patrol above the oviposition site. At high ♂ densities, ♀♀ copulate more often than at low densities. Because of the frequent changes of site during multiple matings, the ♀ exposes herself to predator (frog) attacks during oviposition. ♀ behaviour for avoiding further copulations after harassment by ♂♂ is discussed as an anti-predator defense.
- (10894) RICHARDSON, J.M.L. & R.L. BAKER, 1996. Function of abdomen wave behavior in larval *Ischnura verticalis* (Odonata: Coenagrionidae). *J. Insect Behav.* 9(2): 183-195. – (First Author: Dept Biol. Sci., Dartmouth Coll., Hanover, NH 03755, USA).
The behaviour, here called "abdomen wave", has been considered to be both an aid to respiration and an aggressive display to conspecifics. It was found that, under laboratory conditions, abdomen wave was not increased when the oxygen concentration was low or when larvae were in the presence of conspecifics. This suggests, the behaviour is not involved in oxygen uptake or in agonistic interactions. The behaviour was increased when larvae had food in their guts and was most dramatically increased in the hours preceding a molt. Abdomen wave may function to loosen the exoskeleton prior to molting and/or release of metabolites.
- (10895) RYAZANOVA, G.I. & G.A. MAZOKHIN-PORSHNYAKOV, 1996. Prostrannstvennoe povedenie lichenok raznokrylyh strekoz (Odonata): territorial'naya konkurenciya ili sluchaynoe raspredelenie? – The spatial behavior of dragonfly larvae (Odonata): territorial competition or accidental distribution? *Zool. Zh.* 75(3): 350-357. (Russ., with Eng.l.s.). – (Dept Ent., Fac. Biol., Lomonosov St. Univ., RUS-117234 Moscow).
The spatial distribution of F-0 to F-2 larvae of *Aeshna cyanea*, *Onychogomphus forcipatus*, *Libellula depressa*, *Sympetrum striolatum* and *S. sanguineum* was studied in the laboratory. Unaccidental distribution was shown in all spp. A territorial competition, similar to that in the Zygopt., was revealed in the Aeshnidae, the mode of life of which is similar to that of the Zygopt. The benthic Gomphidae and

- Libellulidae larvae show: (1) attachment to the site, – (2) division of the territory into individual lots, – (3) significantly rare contacts with conspecific individuals within these lots. Supposedly, these spp. have also the territorial competition, which (similarly to that in periphytonic animals) is a mechanism of the dispersion of individuals at the sites of aggregation, reducing the probability of intraspecific contacts of these inclined to cannibalism predators.
- (10896) SALOKANNEL, J., 1996. Kesäretki Konnevedelle. – [A field trip to Konnevesi]. *Diamina* 5: 4-5. (Finn.). – (Mielikinkatu 16, FIN-33730 Tampere). 3 spp. are recorded from 2 localities; S Finland.
- (10897) SALOKANNEL, J., 1996. Rauhoitettujen hyönteisten uusi hinnoittelu. – [Fines for illegal insect collecting]. *Diamina* 5: 3. (Finn.). – (Mielikinkatu 16, FIN-33730 Tampere).
On 23 Oct. 1995, the following fines were defined by Finnish government for illegal collecting/killing of the protected dragonflies: *Aeshna viridis* FIM 2500.-, *Leucorrhinia albifrons*, *L. caudalis* and *L. pectoralis* FIM 100.- each.
- (10898) SANBORN, A.F., 1996. The cicada *Diceroprocta delicata* (Homoptera: Cicadidae) as prey for the dragonfly *Erythemis simplicicollis* (Anisoptera: Libellulidae). *Fla Ent.* 79(1): 69-70. – (Sch. Nat. & Health Sci., Barry Univ., 11300 N.E. Second Ave., Miami Shores, FL 33161, USA).
This predator/prey relationship is considered unusual, since it involves a non-periodical cicada.
- (10899) SULZBACH-ROSENBERGER LIBELLEN-RUNDBRIEF. No. 3 (Apr. 1996). (All papers with Eng. s's). – (c/o R. Seidenbusch, Klenze Str. 5, D-92237 Sulzbach-Rosenberg).
Seidenbusch, R.: Suchstrategien für wenigverbreitete Exuviae des europäischen und mediterranen Raumes (pp. 1-4); – Kartierung von Imagines oder gezielte Kartierung von Exuviae bei Odonaten (pp. 5-6); – Die Bedeutung der Mentumgelenkbeulen und des Mentumborstenwinkels für die Larvaldetermination am Beispiel einiger Coenagrionidae (pp. 7-10); – Schlupf eines unbekanntes Pseudagrion-Weibchens (pp. 11-13); – Occipitalstrukturelle Merkmale bei Weibchen der westpaläarktischen Cordulegastridae und deren mögliche taxonomische Bedeutung (pp. 14-17).
- (10900) SYMPETRUM, HYOGO, Vol. 3 (Feb. 18, 1996).
Published by the Hyogo Society of Odonatology, Kobe. (Jap., with Engl. s's). – (Distribution outside Japan: K. Inoue, 5-9, Fuminosato 4-chome, Abeno-ku, Osaka, 545, JA).
Nishu, S.: A hybrid aeshnid supposed to be *Anax parthenope julius* × *A. n. nigrofasciatus* (cover phot.); – On the publication of the issue, Vol. 3 (p. 2); – *Aoki, T.*: Odonata fauna of Kobe city, 4: Libellulidae, 1, genus *Sympetrum* (pp. 3-10); – *Ohgai, H.*: A list of Odonata recorded from Ako city, Hyogo prefecture (pp. 10-13); – *Nishu, S.*: A hybrid aeshnid supposed to be *Anax parthenope julius* × *A. n. nigrofasciatus* first recorded in Hyogo prefecture (pp. 13-15); – Report of the survey trip of the Hyogo Society of Odonatology, 1995 (pp. 15-19); – *Address list of the members* (p. 20); – *Editor's postscript* (p. 20).
- (10901) THOMAS, B., 1996. Niers: grosser Libellenreichtum an naturnahen Abschnitt. *Heimatb. Kr. Viersen* 1996: 293-300. – (P.-Therstappen-Str. 92, D-41334 Nettetal).
15 spp. were evidenced in a refeatured section of the Niers R., nr Mönchengladbach, Northrhine-Westphalia, Germany. Their local status and occurrence are stated.
- (10902) TORRALBA-BURRIAL, A., 1996. Odonata versus Odonata. *Boln Soc. ent. aragon.* 13: 65. – (c/ Menéndez Pidal 9, 2°F, ES-22003 Huesca).
An incidental observation: an anisopteran larva was seen to grasp and consume a zygopteran ♀ while, during tandem oviposition, the latter was dipping her abdomen under water surface. In the vicinity, 75 zygopteran wings were counted, drifting on water surface, probably representing the remains of the same kind of predation.
- (10903) USUI, T., 1996. [How to dry dragonfly specimens by air conditioner]. *Yosegaki* 78: 2029-2030. (Jap.). – (454-3, 1-chome, Ageo, Saitama, 362, JA).
A method is described of getting dragonfly specimens dried in an air cage, ventilated by an ordinary air conditioner. At 20-25°C, the cage is simply to be hung on an air conditioner for ca 24 h, whereafter colour preservation of the dry specimens is similar to that of those kept in refrigerator. The case is illustrated with col. photographs of the treated specimens of *Anax parthenope julius* and *Crocothemis servilia mariannae*. – For Engl. translation cf. OA 10840.
- (10904) VALENCIUC, N., D. CIRCEI & A.

- DAVIDEANU, 1996. Food and feeding of *Rana ridibunda* Pall. (Amphibia). *Anal. stiint. Univ. Al. I. Cuza* (Biol. anim.) 38/39 [1992/1993]: 121-126. – (Authors' addresses not stated).
Quantitative data are presented of stomach contents in monthly samples (Apr.-Sept.). Among the items considered are 8 insect orders, incl. the odon.
- (10905) VALTONEN, P., 1996. Karvaukonkorento, *Brachytron pratense* (Müller), Suomessa ja Pirkanmaalla. – Das Geschlecht *Brachytron* (Odonata: Aeshnidae) in Finnland und in Pirkanmaa. *Diamina* 5: 13-16. (Finn., with Germ. s.). – (Kaukolankuja 2, FIN-36200 Kangasala).
This is one of the spp., the Finnish distributional pattern of which has changed markedly during the past 40 yr; the former "coastal" sp. is now regarded a South Finnish sp. – It was first recorded in 1881 (at Rantala in Marmasku). By 1952, only 3 inland records were known, as compared to the 22 now. Yet, the sp. seems to be lacking on the Ålands and in the W coastal area. Its inland adult season lasts only 2 weeks. – The possible reasons for this distributional pattern are discussed.
- (10906) VANDERHAEGHE, F., 1996. *Voorlopige libellengids voor Benelux*. 1: *Zygoptera* (juffers). – [A preliminary key for the Benelux, 1: *Zygoptera* (damselflies)]. *Gomphus*, Gent. 31 pp. (Dutch). – (Orders to: G. De Knijf, Hofstraat 58, B-9000 Gent).
A useful and simple key for the adults, giving mainly 3 most characteristic structural features per sp. The Anisoptera part is scheduled to appear in 1998. – For a complete and more detailed Belgian key cf. OA 3960.
- (10907) WASSCHER, M.T., 1996. *Libellen in de amsterdamse waterleidingduinen. Verkennende inventarisatie 1995*. [Dragonflies in the water supply dunes of Amsterdam. A pilot survey, 1995]. *Europ. Invert. Survey-Nederland*, Leiden & Gemeentewaterleidingen Amsterdam, Vogelenzang. ii+72 pp. (Dutch). – (Orders to: Afd. Procesontwikkeling, Gemeentewaterleidingen Amsterdam, Vogelenzangseweg 21, NL-2114 BA Vogelenzang).
26 spp. are evidenced, of which at least 18 spp. are autochthonous. The descriptions of dragonfly communities per habitat are followed by concise and very detailed species accounts. Well balanced management suggestions, and some suggestions for a future research in the area conclude this interesting and useful publication.
- (10908) WEIDEGER, P., 1996. Dragons and damselflies: a garden crusade for winged victory. *Garden Design* 1996 (June/July): 33-34. – (Author's address not stated).
An easy-to-read article on the Ashton Water Dragonfly Sanctuary & Museum, nr Oundle, NW of London, UK, in a US magazine. It gives also some information as to the opening days, hotel prices, etc.
- (10909) WILDERMUTH, H. (text) & A. KREBS (col. pls), 1996. *Safari vor der Haustür*. *Silva-Verlag*, Zürich. 167 pp., col. pls excl. ISBN 3-908486-73-4. – A French edn was published simultaneously by the same publishers.
The garden pond dragonflies are dealt with on pp. 151-156. The biology of *Aeshna cyanea* is described in detail, and various other Swiss garden pond spp. are briefly mentioned.