

ODONATOLOGICAL ABSTRACTS

2000

- (16969) HUSSAIN, R. & M. RIAS, 2000. Description of the naiads of *Gomphidia t-nigrum* Selys and *Anax parthenope* Selys (Anisoptera: Odonata). *Int. J. Agric. Biol.* 2(1/2): 167-168. – (First Author: Pest Warning & Quality Control of Pesticides, Pakpattan, Pakistan).

The larvae of the 2 spp. are described and illustrated from various localities in Sindh prov., Pakistan.

2001

- (16970) [ALAYO, P.D.] GENARO, J.A., 2001. Obituario Pastor Alayo Dalmau (1915-2001). *Cocuyo* 11: 2-7, with personal recollections by I. Garcia Avila, N. Novoa, G. Alayón García, L.F. de Armas and E. Reyes appended on pp. 7-9. – (*Mus. Nac. Hist. Nat.*, Obispo 61, Habana Vieja-10100, Cuba).

A brief biography and appreciation of work of the noted Cuban entomologist, with a portrait and his complete bibliography (1946-2001). He is the author of several important odonotol. publications, incl. the monograph on the Odon. of Cuba (1968, *Torreia* [N.S.] 2: 1-102, 3: 1-54).

- (16971) RAMOS HERNÁNDEZ, J.M. & L.F. DE ARMAS, 2001. Distribución geográfica de *Remartinia secreta* y *Crocotthemis servilia* en Cuba (Odonata: Aeshnidae, Libellulidae). *Cocuyo* 10: 12-13. – (First Author: Apartado Postal 2204, Sancti Spiritus-60100, prov. Sancti Spiritus, Cuba).

The 2 spp. are described and the known records from Cuba are listed.

- (16972) REYES SÁNCHEZ, E. & A.D. ALVAREZ,

2001. Odonatos (Insecta) depositados en el Instituto de Ecología y Sistemática, Ciudad de la Habana. *Cocuyo* 11: 11-15. – (Inst. Ecol. & Sist., CITMA, Apartado Postal 8029, Habana-10800, Cuba).

A checklist of 78 spp., with localities, all from Cuba.

- (16973) TRNKA, R., 2001. Vážky, vzdušní piráti medzi hmyzom. – [Dragonflies, aerial pirates among insects]. *Ochr. Prir. slovenska* 2001(2): 7. Slovak.). – (Author's address not stated).

A general note on dragonflies, with a brief assessment of the fauna (26 spp.) of the Horná Orava Landscape Park, Slovakia. 10 noteworthy sp. are listed. The park represents the sole known locality for *Leucorrhinia rubicunda* in Slovakia, and the only confirmed locality for *Somatochlora alpestris* in that country.

2002

- (16974) ASAITHAMBI, M. & S. MANICKAVASAGAM, 2002. Odonata of Annamalai University, Annamalaiagar, Tamil Nadu, India. *Zoos' Print J.* 17(2): 704-706. – (Dept Ent., Fac. Agric., Annamalai Univ., Tamil Nadu-608002, India).

23 spp. are brought on record (*Chidambaram, Cuddalore* distr.). *Anax guttatus*, *A. parthenope*, *Hemianax ephippiger*, *Gynacantha hyalina* and *Ictinogomphus rapax* were collected near light at night.

- (16975) FERREIRA-PERUQUETTI, P.S. & P. DE MARCO, 2002. Efeito de alteração ambiental sobre comunidades de Odonata em riachos de Mata Atlântica de Minas Gerais, Brasil. *Revta bras. Zool.* 19(2): 317-327. (With Engl. s.). – (First Author:

Depto Hidrobiol., Univ. Fed. São Carlos, Caixa Postal 676, BR-13565-905 São Carlos, SP).

The effect of riparian deforestation and stram impoundments on an odon. community was studied in areas of the surviving Atlantic forest in Viçosa and in Rio Doce State Park (PERD). During 1997, 29 spp. were documented. In Viçosa, the odon. association with lotic or lentic systems, and in PERD, in areas with or without riparian vegetation were compared. The results suggest that overall odon. species richness is high in areas without riparian vegetation. Probably so, because of productivity increase in such areas and because of invasion by lentic spp.

- (16976) RAMOS HERNANDEZ, J.M. & L.F. DE ARMAS, 2002. Registros nuevos de odonatos (Insecta) para el cabo de San Antonio, extremo más occidental de Cuba. *Cocuyo* 12: 6. – (First Author: Apartado Postal 2204, Sancti Spiritus-60100, Sancti Spiritus prov., Cuba).

A checklist of 20 spp. from Peninsula Guanahacabibas, Pinar del Rio prov., Cuba. 8 spp. are new for the region.

2003

- (16977) CATLING, P.M., 2003. *Dragonflies (Odonata) of the Northwest Territories: status ranking and preliminary atlas*. Univ. Ottawa. 49 pp. Available on-line: <http://www.nwtwildlife.com> – (Biodiversity, Agriculture Canada, Saunders Bldg, Central Exp. Farm, Ottawa, ON, K1A 0C6, CA). 35 spp. are given status ranks, based on the number of occurrences and distributional area within the territory. 9 spp. are ranked as S2 (may be at risk), 19 as S3 (sensitive) and 7 as S4 (secure). The ranking is based on a database of 1040 records; dates, localities and collectors are listed. Rejected data and possible additions are outlined, and regions requiring further survey are noted. Distribution maps for all spp. in the Northwest Territories (Canada) are included.
- (16978) HUSSAIN, R. & K.B. AHMED, 2003. Damselfly naiads (Odonata: Zygoptera) of Sindh, Pakistan. *Int. J. Agric. Biol.* 5(1): 53-56. – (First Author: Pest Warning & Quality Control of Pesticides, Piktattan, Pakistan). One larva is described and illustrated from each of the genera *Lestes*, *Ceriagrion*, *Ischnura* and *Pseudagrion*, based on material from various localities in Sindh prov., Pakistan. The names of the respective spp. are not stated.

grion, based on material from various localities in Sindh prov., Pakistan. The names of the respective spp. are not stated.

- (16979) KOLAR, J., 2003. Dragon encounter. *Treeline Telegraph* 2003 (Sept./Oct.): 1-2. – (c/o Editor, Geauga Park Distr., 9160 Robinson Rd, Chardon, OH 44024-9148, USA). General on dragonflies
- (16980) RAIMUNDO, R.L.G. et al., 2003. *Manual de monitoramento ambiental usando borboletas e libélulas. Reserva Extrativista do Alto Juruá*. Unicamp, Campinas/SP. 36 pp., 12 col. pls incl. (28 odon. spp. on pls 11-12). ISBN 85-86572-13-6. – (Publishers: Mus. Hist. Nat., Inst. Biol., Univ. Campinas, Caixa Postal 6109, BR-13081-970 Campinas, SP). A manual on the application of butterflies and odon. in the environmental monitoring in the Alto Juruá reserve (Acre, Brazil). *Mecistogaster* spp. are said to be good indicators of forest quality.

2004

- (16981) COELHO, J.R., 2004. Insects in rock and roll cover art. *Am. Ent.* 50(3): 142-151. – (Biol. Program, Quincy Univ., 1800 College Ave, Quincy, IL 62301, USA). Cases in which insect images are used on the cover art of published rock and roll music are assembled and analysed. Using the total number of insect-related albums in this study (392, listed in App.) and the once by CDnow listed albums (ca 500.000), insect themes command less than 0.1% of rock and roll covers. Among these, most frequently represented are Lepidoptera (36%), the odon. taking the 5th place, with 8% (31 covers).
- (16982) HUSSAIN, R. & K.B. AHMED, 2004. The description of the naiads of Orthetrum, Trithemis and Sympetrum (Odonata: Libellulidae) from Sindh province [Pakistan]. *Pakistan J. Biol. Sci.* 7(3): 419-422. – (First Author: Pest Warning & Quality Control of Pesticides, Paktattan, Pakistan). The descriptions and illustrations are provided of 1 larva per genus, but the names of the respective spp. are not stated.
- (16983) LANGHEINRICH, U., S. TISCHEW, R.M. GERSBERG & V. LUDERITZ, 2004. Ditches and canals in management of fens: opportunity or risk?

A case study in the Drömling Natural Park, Germany. *Wetland Ecol. Mngmt* 12: 429-445. – (First Author: Dept Water Mngmt, Univ. Appl. Sci. Magdeburg, Breitscheidstr. 2, D-39144 Magdeburg). 25 odon. spp. were documented in canals and ditches of the Park (Sachsen-Anhalt, E Germany). Estimation of ecological integrity by a multimetric index using macroinvertebrates indicates that waterbodies are in good condition according to the standards of the European Water Framework Directive.

- (16984) TAVERNER, J., S. CHAM & A. HOLD, 2004. *The dragonflies of Hampshire*. Pisces Publs, Newbury. viii+136 pp. Hardcover (18.8 × 25.0 cm). ISBN 1-874357-26-9. Price: UK £ 28.50 net. – (Publishers: Nature Bureau, 36 Kingfisher Court, Hambridge Rd, Newbury, Berks, RG14 5SJ, UK).

A thorough, very informative, richly illustrated and beautifully produced monograph on the Odon. of Hampshire co., UK (37 spp.). The titles of the main chapters are: “Geology and hydrology of Hampshire” (pp. 1-5), “The human influence on dragonflies” (pp. 6-12), “Habitats” (pp. 13-35), “Systematic list of species” (pp. 36-124), “Key sites” (p. 125), “Conservation initiatives in Hampshire” (pp. 126-128), and “Dragonfly recording in Hampshire” (pp. 129-130). Species accounts include photographs, a map of records and text sections on distribution, habitat, major localities, population strengths, flight period, and on the earliest/latest dates, with a phenology graph. – A most attractive, high-quality British county dragonfly book.

2005

- (16985) (Anonymous), 2005. Conservation Assessment and Management Plan Workshop for freshwater biodiversity of Pakistan, 13-17 December 2004. *Newsl. Invert. Conserv. Inf. Network Sth Asia* 8(1): 1-2.

Includes a checklist of 59 Pakistani odon. spp. that were assessed during the workshop in Islamabad, organised by the IUCN Pakistan.

- (16986) BRULINSKA, E., P. KALINOWSKA & M. KREJCKANT, 2005. *Wstępna inwentaryzacja fauny bezkręgowej (ze szczególnym uwzględnieniem Lepidoptera, Trichoptera, Coleoptera i Odonata) Welskiego Parku Krajobrazowego*. – [Preliminary inventarisatio

Landscape Park, with particular emphasis on Lepidoptera, Trichoptera, Coleoptera and Odonata]. Studencko-Doktoranckie Kolo Naukowe Ekologów UWM w Olsztynie, Olsztyn-Jeleń, 28 pp. (Pol.). – (No addresses stated).

Includes a checklist of 20 odon. spp.; – Ciechanów prov., Poland.

- (16987) CATLING, P.M., C.D. JONES & P. PRATT, [Eds], 2005. *Ontario Odonata*, Vol. 6 (including observations for the year 2004). Toronto Entomologists' Assoc., Toronto. iv+202 pp. Softcover (21.1×27.2 cm). ISBN 0-921631-30-8. – (Orders to: A.J. Hanks, 34 Seaton Dr., Aurora, ON, L4G 2K1, CA).

Sutherland, D.A., M.J. Oldham, C.D. Jones & P.D. Pratt: Odonata of Ontario's Hudson Bay Lowland (pp. 1-11); – *Catling, P.M.*: Observations of possible migration of *Epithea cynosura* (Say) in Ontario and New York (pp. 12-13); – *Bracken, B. & C. Lewis*: Additions to the Odonata study area of the Britannia Conservation Area, Ottawa, ON (pp. 14-15); – *Bree, D.*: Odonate range fluctuations as illustrated by occurrence records of three species from Prince Edward county, Ontario (pp. 16-20); – *Catling, P.M., B. Kostiuk & F. Conner*: Odonata collected in the vicinity of the Queen's University Biology Station at Chaffey's Lock (pp. 21-30); – *Hutchinson, R. & P.M. Catling*: The Canadian national collection of dragonflies (pp. 31-39); – *Earley, C.*: Gray Jaycatching and eating dragonflies (p. 40); – *Catling, P.*: More on Zebra Mussels attached to exuviae (p. 40); – *Rothfels, C. & P. Catling*: Major dragonfly migration at Hamilton (p. 40); – *Catling, P.*: Global warming a potential explanation for the extension of known range of *Hetaerina americana* (pp. 40-41); – *Foster, R.F.*: [book review] *Damselflies of the Northeast [...]*, by E. Lam (p. 42); – *Anonymous*: Additional observations of Odonata over the period 2001 to 2003 (pp. 43-72); – *Catling, P.M., C.D. Jones & P. Pratt*: Introduction to the year 2004 Ontario Odonata summary records (p. 73); – *Anonymous*: Observations of Odonata in Ontario during 2004 (pp. 74-180); – *Corrections* (p. 181); – *Ontario Odonata projects* (p. 181); – *News and comments* (pp. 181-182); – *Recent literature* (pp. 183-184).

- (16988) CICORT-LUCACIU, A.-S., A. ARDELEANU, D. CUPSA, N. NAGHI & A. DALEA, 2005. The trophic spectrum of a *Triturus cristatus*

- (Laurentus, 1768) population from Plopis Mountains area (Bihor county, Romania). *NWest J. Zool.* 1: 31-39. – (Dept Biol., Fac. Sci., Univ. Oradea, Romania; postal address not stated).
From a pond in the vicinity of the village of Sinteu, stomach contents of 490 newts were analysed during April-June 2003, using the stomach washing method (whereupon the animals were released). Odon. larvae occurred in the stomachs throughout this period.
- (16989) COHEN, A.E., D.A. HENRICKSON, C. PARMESAN & J.C. MARKS, 2005. Habitat segregation among trophic morphs of the Cuatro Ciénegas cichlid (*Herichthys minckleyi*). *Hidrobiológica* 15(2): 169-181. (With Span. s.). – (First Author: Sect. Integrative Biol., Univ. Station No. C0930, Univ. Texas, Austin, TX 78712, USA). Includes a passing (family-wise) reference to Coenagrionidae and Corduliidae in the Poza Majorral Oeste spring pool, Cuatro Ciénegas Coahuila basin, Mexico.
- (16990) DUNCAN, J.R., 2005. *Manitoba Dragonfly Survey citizen's monitoring guide*. Manitoba Dragonfly Surv., Winnipeg. iii+40 pp. – (Publishers: c/o Wildl. & Ecosyst. Prot. Br., Manitoba Conserv., Box 24, 2000 Saulteaux Crescent, Winnipeg, MB, R3J 3W3, CA).
The objectives of the Survey are stated, the required field equipment and that for specimen preservation is described in detail, a checklist of the Manitoba (Canada) spp., and the accounts of selected spp. are provided along with the useful bibliographic references.
- (16991) GARNER, P., 2005. *The dragonflies of Herefordshire*. Hereford Biol. Records Cent., Hereford. 140 pp. Softcover (15.2×20.8 cm). ISBN 978-0-9551880-0-8. Price UK £ 13.99 net. – (Publishers: P.O. Box 144, Hereford, HR1 2YH, UK).
One of the brief introductory chapters, titled "The natural history of dragonflies", was contributed by S. Roe (pp. 21-28). – Odonatologically, Herefordshire is probably one of the least well recorded counties in Lowland Britain, therefore this beautiful book on the 27 county's odon. spp. is particularly welcome. Species accounts are nicely illustrated and contain sections on the status of each sp. (national and in the county, the latter with record maps), flight period, habitat, morphological descriptions, and behaviour. Particularly the behaviour sections contain numerous valuable original observations.
- (16992) GONZALEZ LAZO, D.D., A. TRAPE-RO QUINTANA, C. NARANJO LOPEZ & P. LOPEZ DEL CASTILLO, 2005. Macroinvertebrados duleacuicolas y calidad de las aguas de tres estaciones de Sierra de Nipe y Sierra Cristal, región oriental de Cuba. *Cocuyos* 15: 15-20. – (First Author: Depto Biol., Univ. Oriente, Santiago de Cuba, Cuba).
Hypolestes trinitatis is reported from Rio Grande, and 3 other odon. spp. from La Chivera; both Cuba.
- (16993) MACHIDA, K. & J. SHIMANUKI, 2005. Structure analysis of the wing of a dragonfly. *Proc. SPIE* 5852: 671-676. [Correct abbreviation of the journal title unknown]. – [Second Author: Chiyoda Corporation, 12-1, Tsurumichuo 2-chome, Tsurumi-ku, Yokohama, 230-8601, JA).
It is shown that in *Anotogaster sieboldii* the geometrical nonlinearity for bending is small during flapping flight and the configuration of the costa is complicated in order to cope with the bending moment. The arch structure of the leading edge has the effect of preventing the torsional deformation from becoming large, while nodus prevents the bending moment at the wing centre from becoming large. It is considered that dragonfly wing structure is ideal for flapping flight.
- (16994) STREHLER PERRIN, C., 2005. Zoom sur les milieux prioritaires [de la Grande Cariçaie]. *Bull. Inf. Gestion Grande Cariçaie* 61: 1-8. – (Maison Grande Cariçaie, Champ-Pittet, CH-1400 Yverdon-les-Bains).
Includes a reference to *Ceriagrion tenellum* and *Othetrum coerulescens*; Grande Cariçaie, canton Vaud, Switzerland.

2006

- (16995) ABBOTT, J.C., [Ed.], 2006. *Dragonflies and damselflies of Texas*, Vol. 1. Odon. Surv. Texas, Austin/TX. vi + 321 pp. Softcover (21.5×28.0 cm). ISBN 1-4116-6525-2. Price: UK £ 16.50 net. – (Author & Publishers: Sect. Integrative Biol., Univ. Texas, Austin, TX 78712, USA).
[Contents:] *Abbott, J.C.*: Collection guidelines for the Odonata Survey of Texas (p. 1); – *Anonymous*:

- The Dragonfly Society of the Americas guidelines for collecting (pp. 2-3); – *Abbott, J.C.*: Specific collecting and preservation instructions (pp. 4-5); – Guidelines for field notes & data recording (pp. 6-7); – *Abbott, J.C. & D. Broglie*: OdonataCentral.com: a model for the web-based delivery of natural history information and citizen science (pp. 8-12); – *Lasley, G.W.*: Hornsby Bend it is not just birds (pp. 13-15); – *Hardy, D.*: *Rhionaeschna psilus*: backyard surprise (pp. 16-17); – *Gallucci, T.*: The Odonata of Kerr county and the Guadalupe river system of Texas (pp. 18-22); – *Abbott, J.C.*: History of Odonata study in the South-central U.S. (pp. 23-26); – *Anonymous*: Odonata field guides, resources, societies & suppliers (pp. 28-29); – *Abbott, J.C.*: Life history & morphology of Odonata (pp. 30-36); – Seasonality of Odonata in Texas (pp. 37-52); – *Anonymous*: Statistical summary of Odonata in Texas (p. 53); – *Abbott, J.C.*: Abundance & distribution of Texas Odonata (p. 54); – *Anonymous*: Diversity of Texas Odonata by county (p. 55); – *Abbott, J.C.*: Checklist of dragonflies & damselflies of Texas (pp. 56-58); – *Anonymous*: Dragonflies & damselflies of Texas listed by county (pp. 59-93); – *Anonymous*: Distribution maps of Texas Odonata (pp. 94-316); – *Abbott, J.C.*: Glossary of terms relating to Odonata (pp. 317-318); – *Index of maps* (p. 319). – For the updated maps, distribution data etc., see Vol. 2, listed in *OA* 17017.
- (16996) BENAVENT, A., C. BERNIER & V. SABLAIN, 2006. *Enquête Trithemis / Avis de recherche: La libellule purpurine Trithemis annulata*. Brochure, 4 pp., circulated by Observatoire Naturaliste des Ecosystèmes Méditerranéennes, ONEM, Domaine des Restinclières, F-34730 Prades-le-Lez. In order to draw the attention to the recent expansion of *T. annulata* into France and with the objective to gather from field biologists their current records, the sp. is described, its present occurrence in France is mapped, and its expansion is outlined: Corsica (in the 1980s), Roussillon (early 1990s), Hérault and Toulouse (in 2000s), Bordeaux (2005).
- (16997) DELIRY, C., [Ed.], 2006. *Vingt ans d'odonatologie sur la Réserve Naturelle Nationale du Marais de Lavours (1986-2006)*. Sympetrum, Grenoble 46 pp. ISBN none. – (GRPLS, Chalet 37, Village des Pêcheurs, F-38390 Montalieu). A cumulative report on 2 decades of work on the odon. fauna (55 spp.) of the Reserve (Savoie, France), with summaries of the pertaining documents, bibliography and a commented review of spp.
- (16998) DOMINGUEZ, C.J., E. PALACIOS, A. PÉREZ HERNÁNDEZ & D. HERNÁNDEZ PÉREZ, 2006. Estudio preliminar de los insectos asociados a la cuenca del río Cuyaguatete, Pinar del Río, Cuba. *Cocuyo* 16: 39-47. – (Cent. Invest. & Servicios Ambientales, Carratera Luis Lazo, Apartado 210, CU-20 300 Pinar del Río-1, Cuba). 8 odon. spp. are listed from the basin of the Río Cuyaguatete, Cuba.
- (16999) FULAN, J.A. & R. HENRY, 2006. The Odonata (Insecta) assemblage on *Eichhornia azurea* (Sw.) Kunth (Pontedericeae) stands in Camargo Lake, a lateral lake on the Parapenema river (state of São Paulo, Brazil), after an extreme inundation episode. *Acta limnol. bras.* 18(4): 423-431. (With Port. s.). – (Dept Zool., Inst. Biosci., St. Univ. São Paulo, BR- 18618-000 Botucatu, SP). The abiotic factors, such as water transparency, surface temperature, dissolved oxygen, pH, conductivity and suspended matter were investigated and their values correlated with the occurrence of particular spp. The inundation caused a decrease in macrophyte biomass and suspended matter, hence a reduction of the available shelter and food, therefore it triggered a decrease in odon. abundance.
- (17000) GEISTER, I., 2006. *Popotovanje od Pirana do Ankarana: naravopisni esej*. – [Travel from Pirana to Anaran: a nature-describing essay]. Zavod za favnistiko, Koper. 95 pp. ISBN 951-91043-4-X. (Slovene). – (Kocjančiči 18, SI-6276 Pobjegi). On p. 76, a reference is made to the same 4 odon. spp., from the same locality as given in *OA* 15992.
- (17001) GONZÁLEZ, A., 2006. Acerca de una migración de libélulas. *Cocuyo* 16: 51. – (Cent. Nac. de Areas Protegidas, calle 18A, No. 4114e/41 & 47, Playa, Habana, Cuba). A brief description of an incidental observation of a massive *Erythrodiplax umbrata* migration, at Miramar (Cuba), on 21-XI-2005.
- (17002) GOVEDIČ, M., 2006. *Potočni raki Slovenije: razširjenost, ekologija, varstvo*. – [Freshwater crayfish of Slovenia: distribution, ecology, conservation].

CKFF, Miklavž-na-Dravskem polju. 26 pp. ISBN 961-90512-2-X. (Slovene). – (Available at: www.ckff.si/publikacije).

On p. 6, reference is made to the occurrence of *Cordulegaster heros* in Goričko, Slovenia.

- (17003) JOHANSSON, F. & D. STRAUSEVICI-US, 2006. Trollsländor i helgolandsfällan på Stora Fjäderägg hösten 2005. – [Dragonflies in traps for interception of small birds at the Stora Fjäderägg Ornithological Station, Sweden, late August-mid September 2005]. *Natur i Norr* 25(1): 25-26. (Swed.). – (Dept Ecol. & Envir. Sci., Umeå Univ., S-90187 Umeå).

The odon. are often encountered in traps used for the collecting of small birds for the purpose of ringing. This was also the case with the first Swedish *Hemianax ephippiger* and *Sympetrum fonscolombii* specimens (R. Ottwall, 2001, *Lucanus* 6/1: 13-15). – Here, *Aeshna caerulea*, *A. grandis*, *A. juncea*, *Sympetrum danae* and *S. vulgatum* are recorded and briefly discussed.

- (17004) *LIBELLULA*. Zeitschrift der Gesellschaft deutschsprachiger Odonatologen, GdO (ISSN 0723-6514), Vol. 25, No. 1/2 (1 July), 3/4 (15 Dec. 2006). (With Engl. s's). – (c/o Mrs G. Peitzner, Hamfelderredder 7 a, D-21039 Börnsen). [1/2]: *Schiel, F.-J. & H. Hunger*: Bestandssituation und Verbreitung von *Ophiogomphus cecilia* in Baden-Württemberg (Odonata: Gomphidae) (pp. 1-18); – *Grebe, B., R. Hofland & J. Rodenkirchen*: Neue Nachweise von *Coenagrion scitulum* in Nordrhein-Westfalen (Odonata: Coenagrionidae) (pp. 19-26); – *Pelny, H.-J.*: Erster Nachweis von *Anax parthenope* auf dem Madeira-Archipel (Odonata: Aeshnidae) (pp. 27-30); – *Wildermuth, H.*: Verhaltensgesteuerte Thermoregulation bei *Somatochlora flavomaculata* (Odonata: Corduliidae) (pp. 31-46); – *Westermann, K.*: Strategien frisch geschlüpften *Lestes viridis* zur Vermeidung von Schäden durch Regen (Odonata: Lestidae) (pp. 47-60); – *Brauer, O.*: Univoltine Entwicklung von *Leucorrhinia pectoralis* und *Brachytron pratense* in einem Kleingewässer Nordostbrandenburgs (Odonata: Libellulidae, Aeshnidae); – *Kunz, B. & R. Seidenbusch*: erfolgreiche Larvenentwicklung trotz deutlicher Missbildung der Fangmaske bei *Sympetrum sinaiticum* (Odonata: Libellulidae) (pp. 77-82); – *Martens, A.*: Gomphidenlarven als Substrat für Wohnröhren des Flohkrebse *Cheli-*

corophium robustum? (Odonata: Gomphidae; Amphipoda: Corophiidae) (pp. 83-87); – *Kunz, B., S. Ober & R. Jödicke*: The distribution of *Zygonyx torridus* in the Palaearctic (Odonata: Libellulidae) (pp. 89-108); – *Kipping, J.*: Globalisierung und Libellen Verschleppung von exotischen Libellenarten nach Deutschland (Odonata: Coenagrionidae, Libellulidae) (pp. 109-116); – *Lohr, M.*: Erratum Libellenbeobachtungen in Südportugal (Odonata) (pp. 117-118). – [3/4]: *Miller, E. & J. Miller*: Beobachtungen zum winterlichen Verhalten von *Sympetma fusca* (Odonata: Lestidae) (pp. 119-128); – *Karle-Fendt, A.*: Erstnachweis von *Coenagrion scitulum* in Bayern (Odonata: Coenagrionidae) (pp. 129-134); – *Schneider, T. & O. Müller*: Der Endemit *Boyeria cretensis*: Beobachtungen zur Verhaltensbiologie der Imagines (Odonata: Aeshnidae) (pp. 135-146); – *Kunz, B.*: Entwicklung von *Onychogomphus forcipatus unguiculatus* in einer Kiesgrube in der Provence (Odonata: Gomphidae) (pp. 147-150); – *Bönssel, A.*: Schnelle und Individuenreiche Besiedlung eines revitalisierten Waldmoores durch *Leucorrhinia pectoralis* (Odonata: Libellulidae) (pp. 151-157); – *Schiel, F.-J.*: Nachweis einer zweiten Jahresgeneration von *Erythromma najas* (Odonata: Coenagrionidae) (pp. 159-164); – *Bernauer, D., K. Grabow & A. Martens*: Fang von Libellenlarven durch Elektrofischung (Odonata: Cordulegastriidae) (pp. 165-169); – *Juillerat, L. & H. Wildermuth*: Landmilben als Libellenparasiten: Befall von *Orthetrum coerulescens* mit *Lepetus* sp. (Odonata: Libellulidae; Acari: Erythraeidae) (pp. 171-184); – *Petzold, F.*: Parasitierung von Libellen durch Wassermilben an einem Moorsee in Nordbrandenburg (Odonata; Hydrachnidia) (pp. 185-198); – *Kunz, B. & H. Wildermuth*: Prädation zwischen Libellen und Heuschrecken (Odonata; Saltatoria) (pp. 199-208); – *Weihrauch, F.*: Der Zahnkarpfing *Gambusia holbrooki* als Prädator von Libelleneiern (Teleostei: Poecilidae; Odonata: Libellulidae) (pp. 209-214).

- (17005) MACHIDA, K., T. OIKAWA & J. SHIMANUKI, 2006. The effect of the costal vein configuration of the wings of a dragonfly. *Key Engineering Materials* 326/328: 819-822. – (First Author: Dept Mechanical Engin., Tokyo Univ. Sci., 2641 Yamazaki, Noda-shi, Chiba 278-8510, JA). The arch configuration of the costa in *Anotogaster sieboldii* controls bending and wing torsion. The nodus copes with the high axial force and the high

- moment which are generated by the arch.
- (17006) **MERCURIALE**. Zeitschrift der Schutzgemeinschaft Libellen in Baden-Württemberg (ISSN 1618-9124), No. 6 (Dec. 2006). – (c/o Ms U. Stephen, Im Westengarten 12, D-79241 Thringen).
- Kunz, B. & H. Hunger*: Editorial (p. 1); – *Heitz, S.*: Waldbauliche Massnahmen zur Förderung Larvallebensräume der Quelljungferarten am Bodanrück (*Cordulegaster bidentata* und *C. boltonii*) (pp. 2-8); – *Stephan, U.*: Nachweis von *Gomphus flavipes* am Rheinkanal bei Vogelgrun/Breisach (pp. 9-11); – *Westermann, K. & E. Westermann*: Beträchtlicher Schlüpferfolg vieler Libellenarten in tagelang trocken fallenden Gräben des NSG "Elzwiesen" (pp. 12-14); – *Wildermuth, H.*: Die Südländer fliegen nun auch in Mooren. Ein Blick in die Gegend südlich des Hochrheins (pp. 15-20); – *Salcher, M.*: Erstnachweis mit Reproduktionsnachweis von *Lestes barbarus* für den Nordschwarzwald (pp. 21-22); – *Schiel, F.-J.*: Tagesaktivität von *Enallagma cyathigerum* am Fortpflanzungsgewässer (pp. 22-25); – *Schiel, F.-J. & H. Hunger*: Zufallsfunde von *Sympecma fusca* in mutmasslichen Überwinterungshabitaten fernab geeigneter Entwicklungsgewässer (pp. 26-27); – *Kunz, B.*: Notizen zur Larvalentwicklung von *Lestes viridis* (pp. 28-32); – Einigebiotrische Daten von univoltinen *Aeshna cyanea* (pp. 33-36); – *Schneider, B.*: Kommensalen bei *Anax imperator* (p. 37); – *Kunz, B.*: Beitrag zur unterschiedlichen Färbung der Exuvien von *Aeshna cyanea* (pp. 38-40); – *Schneider, B.*: *Aeshna mixta* in der Klauen einer Wasserkäfer-Larve (p. 40); – *Kirchen, T.*: Mittagssmahl der etwas unüblichen Art (p. 41; ♀ *Ischnura elegans* consuming a just emerged ♀ *Coenagrion puella*); – *Kunz, B.*: Überraschung am Teichboden (p. 42); – *Phänologiedaten* (pp. 42-46); – *Vereinsnachrichten* (pp. 46-54).
- (17007) **NOGUEZ PIEDRAS, S.R., A. BAGER, P.R. ROCHA MORAES, L.A. ISOLDI, O.G. LAUZ FERREIRA & C. HEEMANN**, 2006. Macroinvertebrados bentónicos como indicadores de qualidade de água na barragem Sant Bárbara, Pelotas, RS, Brasil. *Ciencia rural* 36(2): 494-500. (With Engl. s.). – (First Author: Escola Ciênc. Ambientais, Univ. Catól. Pelotas, Rua Professor Arújo 2081, BR-96020-360 Pelotas, RS). The odon. (mentioned order-wise only) were hardly represented in samples; the order is not further considered in this study.
- (17008) **PEROTTI, M.G., L.A. FITZGERALD, L. MORENO & M. PUETA**, 2006. Behavioral responses of *Bufo arenarum* tadpoles to odonate naiad predation. *Herpet. Conserv. Biol.* 1(2): 117-120. – (First Author: Lab. Fotobiol., Cent. Reg. Univ. Bariloche, Univ. Nac. Comahue-CONICET, Quintral 1250, AR-8400 San Carlos de Bariloche, Rio Negro). The indirect effects of *Pantala* sp. larvae predation on activity of *B. arenarum* tadpoles (collected from ephemeral pools in Anillaco, La Rioja, Argentina) were evaluated. The results are consistent with other studies that have shown bufonid tadpoles reduce activity when exposed to predator cues.
- (17009) **PINGUEY, D.K.**, 2006. *The dragonflies of Mortimores Wood (and surrounding area)*. Gem Publishing, Wallingford/Oxford. 48 pp. Softcover (14.7×20.8 cm). ISBN 978-0-9554806-0-7. Price: UK £ 7.99 net. – (Author: damian_pinguey@hotmail.co.uk). Mortimores Wood is located on the Avon, on the outskirts of Chippenham, Wiltshire, UK. Photographs, identification features and flight period graphs are presented for the 19 so far recorded spp.
- (17010) **RICCARDI, C.**, 2006. Odonati-Odonata. In: R. Groppali, [Ed.], *Atlante della biodiversità del Parco Adda Sud*, pp. 74-79, Parco Adda Sud. – (Author's address not stated). A commented list of 31 spp., hitherto recorded from the Park; – *Pianura padana*, N Italy.
- (17011) **SUZUKI, K. & I. KAWASHIMA**, 2006. The insects illustrated in Gen'ichiro Narasaka's "Chûgyo-Zufu". *Bull. Nagoya Univ. Mus.* 22: 211-247. (Jap., with Engl.s.). – (First Author: Grad. Sch. Sci. & Technol., Toyama Univ., Gofuku, Toyama, 930-8555, JA). 21 odon. spp., illustrated in G. Narasaka's (1854-1934) work are identified. Comments on each sp. and an annotated reproduction of the originally handwritten text are provided. The work is compared with the contemporary insect illustration books, *Sen-Chû-Fu* by T. Kurimoto (1756-1834) and *Chôjû-Chûgyo-Fu (Rybu-Hakubutsu-Zufu)* by T. Matsumori (1825-1892). In Engl. abstract, the dates of the 3 works are not stated.

- (17012) TARKOWKA-KUKURYK, M., 2006. Water soldier *Stratiotes aloides* L. (Hydrocharitaceae) as a substratum for macroinvertebrates in a shallow eutrophic lake. *Pol. J. Ecol.* 54(3): 441-451. – (Dept Hydrobiol. & Ichtyobiol., Univ. Agric. Lublin, Akademicka 13, PO-20-950 Lublin). The importance of *S. aloides* as a colonization substrate for epiphytic and mining fauna was investigated in the eutrophic Lake Łukie (Poleski National Park, E Poland). The phytophilous fauna changed with the seasons. In October, Zygoptera occurred in high numbers. Names of the odon. spp. are not stated.
- (17013) TIMM, H., T. MOLS & T. TIMM, 2006. Effects of long-term eutrophication on the abundance and biomass of macrozoobenthos in small lakes of Estonia. *Proc. eston. Acad. Sci. (Biol. Ecol.)* 55(3): 187-198. (With Estonian s.). – (First Author: Inst. Agric. & Envir. Sci., Estonian Univ. Life Sci., EE-61101 Rannu, Tartumaa, Estonia). The effects of eutrophication were studied at 380 sites in 107 lakes. The odonate abundance seems to be favoured by eutrophication.
- (17014) TOMBO. *ACTA ODONATOLOGICA* (ISSN 0495-8314), Vol. 48, No 1/4 (30 Apr. 2006). (Engl. & Jap., mostly with Engl. titles). – (c/o Dr S. Eda, 3-4-25 Sawamura, Matsumoto, Nagano 390-0877, JA).
Hämäläinen, M., A. Sasamoto & H. Karube: Description of *Devadatta cyanocephala* sp. nov. from Vietnam (Zygoptera: Amphipterygidae) (pp. 1-6); – *Kawashima, I. & H. Karube*: External morphology of the last instar larva of probable *Petaliaeschna flavipes* Karube from Laos, Indochina (pp. 7-11); – *Kawashima, I. & A. Sasamoto*: Description of the last instar larva of *Periaeschna laidlawi* (Förster) from Malaysia (pp. 12-17); – *Watanabe, K.*: *Sympetrum fonscolombei* emerged in winter at Ishigaki Is. (p. 17); – *Futahashi, R. & H. Futahashi*: The odonate fauna of the Noto peninsula, Hokuriku district, Honshu, 2 (pp. 18-20); *Fukunaga, K., M. Tomita, M. Murata, K. Matsumura & M. Shirai*: Analysis of mitochondrial DNA in the exuviae of *Libellula angelina* Selys (pp. 21-22); – *Nakada, A.*: An observation of heterogeneric copulation between *Deielia phaon* (Selys) ♂ and *Orthetrum albistylum speciosum* (Uhler) ♀ (pp. 23-24); – *Eda, S.*: The first collector of *Epiophlebia superstes* larva may be Takeo Ito (p. 24); – *Kita, H.*: A heterospecific “Type AB” triple-connection between a male of *Sympetrum infuscatum* (Selys) and a copulating pair of *S. maculatum* Oguma (pp. 25-26); – A female of *Sympetrum speciosum* that copulated after refusing in tandem position (pp. 27-28); – A male of *Indolestes boninensis* connected with a dead female (pp. 28-29); – *Eda, S.*: Old records of *Libellula angelina* in Nagano prefecture (p. 29); – *Yamamoto, T. & N. Nishiura*: A few [cases of] atypical oviposition behavior in *Epithea marginata* (Selys) (pp. 30-32); – *Eda, S.*: Two cases of triple-connection in the Odonata (p. 32); – *Naraoka, H.*: Four continental *Sympetrum* dragonflies collected in Aomori prefecture in 2005 (pp. 33 -34); – *Eda, S.*: *Lestes temporalis* Selys laid eggs unusually into a leaf of cattail grass (p. 34); – *Sugano, T. & T. Umeda*: The first record of *Neurothemis fluctuans* (Fabricius) from Kanagawa prefecture (p. 35); – *Ishikawa, H. & M. Yano*: A record of *Neurothemis fluctuans* (Fabricius) from Tokyo (p. 35).
- (17015) UBONI, C., N. BRESSI & A. COLLA, 2006. Una popolazione urbana di *Cordulegaster heros* Theischinger, 1979 in Italia (Odonata, Cordulegasteridae). *Atti Mus. civ. Stor. nat. Trieste* 53: 207-211. (With Engl. s.). – (Mus. civico di Storia naturale, Piazza Hortis 4, I-34123 Trieste). 6 exuviae and 1 C. *heros* larva are brought on record from the Torrente Farneto (alt. ca 110 m) near Trieste, NE Italy. *Cordulegaster b. bidentata* and *Calopteryx virgo padana* are reported from the same locality.
- (17016) ZAWAL, A. & E.S. DYATLOVA, 2006. Preliminary data for parasitizing on *Ischnura elegans* (Vander Linden, 1820) (Odonata: Coenagrionidae) by *Arrenurus* (Acari: Hydrachnidia) larvae from Odessa province (southwestern Ukraine). *Proc. 2nd Int. Symp. Ecologists Montenegro*, pp. 17-20. – (First Author: Dept Invert. Zool. & Limnol., Univ. Szczecin, Waska 14, PO-71-415 Szczecin). 256 *I. elegans* individuals were examined, on 37 of these, the parasitic *A. claviger* and *A. papillator* were found. The prevalence (7.4%) and the intensity of infestation (1-6) were smaller than in *I. elegans* collected in Poland. The mites preferred the meta- and mesothorax of their hosts. The largest number of parasiting larvae occurred in September, i.e. later than in Poland, which is probably due to longer *A. claviger* mating season in the Black Sea area.

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- (17017) ABBOTT, J.C., [Ed.], 2007. *Dragonflies and damselflies of Texas*, Vol. 2. Odon. Surv. Texas, Austin/TX. vi+310 pp. Softcover (21.5×28.0 cm). ISBN 978-0-6151-4063-6. Price: UK £ 16.50 net. – (Author & Publishers: Sect. Integrative Biol., Univ. Texas, Austin, TX 78712, USA).
 [Contents:] *Lasley, G.W.*: Digital odonate photography: my personal technique (pp. 1-4); – *Behrstock, R.A., J.S. Rose & J.C. Abbott*: First Texas record and second US occurrence of *Tricanthagyna septima* (Selys in Sagra, 1857) (Odonata: Aeshnidae) (pp. 5-6); – *Thomas, B.*: Williamson county Gold Chandler Creek (pp. 7-8); – *Mathews, J.*: What do we know about dragonfly migration on the Texas coast? (pp. 9-11); – *Hatfield, J.*: The dragonflies and damselflies of the Llano Estacado: in search of new species records on the Panhandle South Plains (pp. 12-13); – *Schappert, P.*: New Odonata for Bastrop county and the Stengl “Lost Pines” Biological Station (pp. 14-16); – *Anonymous*: Statistical summary of Odonata in Texas (p. 17); – *Abbott, J.C.*: Abundance & distribution of Texas Odonata (p. 18); – *Anonymous*: Diversity of Texas Odonata by county (p. 19); – *Abbott, J.C.*: Checklist of dragonflies and damselflies of Texas (pp. 20-22); – Seasonality of Odonata in Texas (pp. 23-38); – *Anonymous*: Dragonflies and damselflies of Texas listed by county (pp. 39-72); – Distribution maps of Texas Odonata (pp. 73-295); – *Abbott, J.C.*: Collection guidelines for the Odonata Survey of Texas (p. 297); – *Anonymous*: The dragonfly Society of the Americas guidelines for collecting (pp. 298-299); – *Abbott, J.C.*: Specific collecting & preservation instructions (pp. 300-301); – Guidelines for field notes & data recording (pp. 302-303); – *Anonymous*: Odonata field guides, resources, societies & suppliers (pp. 305-306); – *Abbott, J.C.*: Glossary of terms relating to Odonata (pp. 307-308); – *Index to maps* (pp. 309-310). – This is an indispensable reference work for the 223 spp. so far known from Texas. Of particular importance are the updated species distribution and seasonality accounts and maps.
- (17018) AGENCIJA REPUBLIKE SLOVENIJA ZA OKOLJE, 2007. *Poročilo o kakovosti jezer za leto 2006*. – [Report on the quality of lakes for 2006]. – Ministerstvo za okolje in prostor, Ljubljana. vi+149 pp. (Slovene).
 This is the official report by the (governmental) Agency for the Environment of Slovenia. 9 Slovenian lakes were monitored. Detailed analyses of physical and chemical parameters of water and sediments, and biological analyses are presented. Odonate inventories are listed for Blejsko, Bohinjško, Cerknjsko, Šmartinsko, Lendavsko, Gajševsko and Vogršček lakes.
- (17019) BONSEL, A., J. MATTHES, H. MATTHES & M. RUNZE, 2007. Erfolgskontrollen nach Revitalisierungen von Feldsöllen in Mecklenburg-Vorpommern: Auswirkungen auf Rotbauchunke, Laubfrosch und Libellen. *Natur Landschaft* 82(4): 129-136. (With Engl. s.). – (First Author: Vasenbusch 15, D-18337 Gresenhorst).
 The revitalization measure and their effects on the frogs *Bombina bombina* and *Hyla arborea*, and on 34 odon. spp., as conducted during 2001-2004 in 19 cattle ponds in NE Germany, are reported. A brief biography and a portrait of the first Author are appended.
- (17020) BRACHYTRON (ISSN 1386-3460), Vol. 11, No. 1 (Dec. 2007). (Dutch, with Engl. s's). – (c/o R. Manger, Stoepveldsingel 55, NL-9403 SM Assen).
 The issue is dedicated to a *Sympecma paedisca* research project. A DVD on the life of *S. paedisca* is attached. – **C o n t e n t s**: *Hoogeveen, T.*: Mystery about winter damsels (cover p. 2; reprinted/translated from her 2005 children book: “Winterslaap”, KNNV, Utrecht); – *Ruiter, E., K. Uilhoorn, P. de Boer, R. Ketelaar & R. Manger*: Introduction (pp. 3-4); – *Ketelaar, R., R. Manger, E. J. Ruiter, H. M. G. Uilhoorn & E. P. de Boer*: Analysis of the distribution of *Sympecma paedisca* in the Netherlands (pp. 5-20); – *Ketelaar, R., E. J. Ruiter, H. M. G. Uilhoorn, R. Manger & E. P. de Boer*: Habitat choice of *Sympecma paedisca* in the Netherlands (pp. 21-33); – *Ruiter, E. J., H. M. G. Uilhoorn, R. Manger, R. Ketelaar & E. P. de Boer*: Recapture of *Sympecma paedisca* over great distance (pp. 34-41); – *Ruiter, E. J. & R. Manger*: Hibernation in the Netherlands, not quite easy for *Sympecma paedisca* (pp. 42-49); – *Manger, R. & N. J. Dingemanse*: Survival and biotope selection of *Sympecma paedisca* in a winter habitat in the Netherlands (pp. 52-62); – *Manger, R.*: Exterior characteristics of *Sympecma paedisca* in the Netherlands (pp. 63-74); – *Ruiter, E. J. & E. P. de Boer*: Some observations on the behaviour

- of *Sympecma paedisca* (pp. 75-80); – *Ruiter, E. & K. Uithoorn*: A summary of results of the present 5-year *Sympecma paedisca* research project (pp. 81-82); – *Munger, R.*: Both *Sympecma paedisca* and *S. fusca* in the same breeding habitat (pp. 83-86); – *van Seijen, R. & A. Hofstra*: Records of *Sympecma paedisca* in Germany, near Meppen (pp. 87-88); – *Ruiter, E.J.*: Encounter with a Siberian winter damselfly (*Sympecma paedisca*) after hibernation (pp. 89-90); – *Ketelaar, R., J.H. Bouwman & R.P.W.H. Felix*: Notes on the habitat of *Sympecma paedisca* in Buryatia, Southeast Siberia, Russia (pp. 91-96).
- (17021) BUCZYNSKA, E., P. BUCZYNSKI, L. LECHOWSKI & R. STRYJECKI, 2007. Fish pond complexes as refugia of aquatic invertebrates (Odonata, Coleoptera, Heteroptera, Trichoptera, Hydrachnidia): a case study of the pond complex in Zalesie Kańskie (central-East Poland). *Nat. Conserv.* 64: 39-55. – (Second Author: Dept Zool., MCSU, Akademicka 19, PO-20-033 Lublin). 45 odon. spp. were recorded during 2000-2001. It is emphasized that the Zalesie Kańskie fish pond complex can serve as a model of an area where fish-breeding does not destabilize the ecosystem balance, but rather helps to maintain high biological diversity. Ways of exploiting this area in a nature-friendly manner are indicated.
- (17022) BUCZYNSKI, P. & A. ZAWAL, 2007. Dragonflies (Odonata) of the “Szare Lake” nature reserve. *Parki nar. Rezerv. Przyr.* 26(4): 79-91. (Pol., with Engl. s. & tab. captions). – (First Author: Dept Zool., UMCS, Akademicka 19, PO-20-033 Lublin). The odon. fauna (28 spp.) is listed and analysed; – W Pomeranian Lake distr., NW Poland. The occurrence of larvae is recorded for 13 spp., some were recovered from the depths down to 9 m, i.e. twice as deep as in other lobelian lakes. This is ascribed to the rich food and oxygen supply at the bottom of the lake.
- (17023) CHAM, S., 2007. *Field guide to the larvae and exuviae of British dragonflies*, Vol. 1: *dragonflies (Anisoptera)*. British Dragonfly Soc., Peterborough. ii+75 pp. Softcover (14.5×20.8 cm). ISBN 978-0-9556471-0-9. Price UK £ 8.50 net. – (Publishers: 23 Bowker Way, Whittlesey, Peterborough, PE7 1PY, UK).
- Good and richly illustrated descriptions of 25 British spp., with concise information on the larval habitats of each sp. The introductory chapters are titled: “Anatomy of larvae and exuviae”, “Where to find larvae”, “Where to find exuviae”, “Recording larvae and exuviae”, “Emergence periods”, “A quick guide to size and shape”, and “Key features to species groups”.
- (17024) CUONG, D.M. & D.T.T. HOA, 2007. *Checklist of dragonfly from Vietnam*. Vietnam Natn. Univ., Hanoi. vi+182 pp., 32 col. pls incl. Softcover (13.5×20.4 cm). ISBN none. – (Publishers: 16 Hang Chuoi St., Ha Ba Trung distr., Hanoi, Vietnam; – First Author: Hom thu so 16, Buu Dien 10210, 35 Thai Tinh, Hanoi, Vietnam). In the introductory chapters, the history of odonatul. research in Vietnam is briefly summarized, and the principal types of odon. habitats are outlined. Also included are a list of the 61 Vietnamese provinces and a map indicating their respective topographic locations. – All spp. are listed. For each sp., bibliographic references, localities, a map of the known distribution and 2 phenology graphs (for northern and southern regions separately) are provided. Field photographs of 49 spp. are reproduced on col. pls, both sexes are shown in cases of pronounced sexual dimorphism. An exhaustive national bibliography is appended. – After Thailand (see OA 12674) Vietnam is only the second SE Asian country for which this kind of extremely useful review became available.
- (17025) DIJKSTRA, K.-D.B., 2007. A review of continental afrotropical Cериagrion (Odonata: Coenagrionidae). Erratum. *J. afrotrop. Zool.* 3: 162-163. – (Naturalis, P.O. Box 9517, NL-2300 RA Leiden). In Tab. I in the paper listed in OA 16186, 5 spp. and their synonyms were accidentally omitted. Here, the complete tab. is provided.
- (17026) DIJKSTRA, K.-D.B., 2007. Checklist of Odonata recorded from Ghana. *Bull. biol. Assmt* 47: 137-142. – (Naturalis, P.O. Box 9517, NL-2300 RA Leiden). An annotated list of 177 spp.
- (17027) DIJKSTRA, K.-D.B., 2007. Dragonflies and damselflies (Odonata) of the Atawa range, Ghana. *Bull. biol. Assmt* 47: 50-54. – (Naturalis, P.O. Box 9517, NL-2300 RA Leiden).

72 spp. were found during a Rapid Assessment Program survey of the Arewa Range Forest Reserve. 8 spp. are recorded in Ghana for the first time. Of these, *Atoconeura luxata* is the most significant discovery, being Red-listed ("Vulnerable") in W Africa. The results of the survey indicate a healthy watershed in the Reserve.

- (17028) DUDLEY, S., C. DUDLEY & A. MACKEY, 2007. *Watching British dragonflies*. Subbuteo Nat. Hist. Books, Shrewsbury. 341 pp. Softcover (13.5×21.5 cm). ISBN 978-1-905268-04-7. Price: GBP 27.50 net). – (Publishers: the Rea, Upton Magna, Shrewsbury, SY4 4UR, UK).

This is a completely new style dragonfly book, the first of its kind in the market: a combination of a Field Guide and Where to Watch site guide to finding, identifying and observing dragonflies of Britain and Ireland, covering all 48 resident spp. with full identification notes and splendid original col. paintings of adults. The introductory general part (pp. 27-26) is followed by species accounts (pp. 27-135) and by the Site Guide (pp. 136-239), supplemented by the Site Gazetteer (pp. 240-330), arranged alphabetically for England, Wales, Scotland, Isle of Man, and Northern Ireland. Site Guide includes a map, species list, and information on location, access and areas to search, habitat type, and on the best timing for observations etc. for each site. The relevant addresses, phone numbers, map references and web sites are also provided for all sites, and hints on non-odonatological peculiarities that are of interest to a field biologist are added. – A nationally very important work that will inevitably trigger the gathering of much additional information on local odon. assemblages.

- (17029) DUMONT, H.J., 2007. Odonata from the Mouydir plateau (North central Sahara, Algeria). *Bull. Soc. roy. belg. Ent.* 143: 164-168. – (Anim. Ecol., Univ. Ghent, Ledeganckstraat 35, B-9000 Gent). 9 spp. are reported from the Mouydir, a desert plateau N of the Ahaggar Mts, and 1 sp. from the Ahaggar itself. *Pseudagrion hamoni* was discovered on a permanent lakelet at the oasis of Tajmut, extending the known range of this sp. in the central Sahara by ca 500 km to the W; 1 old ♂ was sighted at Guelta Affilal on the Assekrem plateau. *Sympetrum sinaiticum* was not found in the Mouydir in May, but it was freshly emerging from the Ahaggar waters above 2000 m.

- (17030) ENDERSBY, I., 2007. Worldwide Dragonfly Association International Symposium, Swakopmund, Namibia, 6-10 April 2007. *Newsl. aust. Soc. Limnol.* 45(2): 14-16. – (56 Looker Rd, Montmorney, Vic 3094, AU).

The highlights of the 5th WDA International Symposium of Odonatology are outlined and briefly reviewed.

- (17031) FAASEN, T. et al., 2007. *Rospuda Valley Survey 2007*. Europ. Biodiv. Surv., Groningen. 14 pp. – (First Author: Achilleslaan 35, NL-5631 BS Eindhoven; – Publisheres: Van Royenlaan 42a, NL-9721 ES Groningen).

In June 2007, the threatened Rospuda Valley region (NE Poland) was surveyed on several faunal key groups. A substantial number of spp. were found that confirm the valley's importance to biodiversity maintenance on both national and European levels. 8 focal odon. spp. were recorded as follows: (1) calcareous fens and mares: *Nehalennia speciosa*, *Leucorrhinia pectoralis*; – (2) bogwoodland and alluvial forests: *Somatochlora arctica*, *L. pectoralis*; – (3) riverine habitats: *Coenagrion armatum*, *Aeshna viridis*, *Ophiogomphus cecilia*, *Leucorrhinia albifrons*, *L. caudalis*, *L. pectoralis*; – (4) active raised bogs: *N. speciosa*, *S. arctica*, *L. albifrons*, *L. caudalis*.

- (17032) FERLETIČ, U., 2007. Poročilo odonatološke skupine. – [Lovrenc na Pohorju: Report of the Odonata team]. In: J. Polajnar, [Ed.], *Raziskovalni tabor študentov biologije. Lovrenc na Pohorju 2005*, pp. 39-43. Društvo študentov biologije, Ljubljana. ISBN 978-961-91041-8-7. (Slovene). – (Author: Merezige 1, SI-6273 Merezige).

A commented list of 32 spp., from 37 localities; Pohorje Mts, Slovenia.

- (17033) GLOBEVNIK, L., 2007. *Biomura. Varstvo biodiverzitet reke Mure v Sloveniji*. – [*Biomura. Conservation of the Mura river biodiversity in Slovenia*]. Inštitut za vode Republike Slovenije, Ljubljana. Fold. brochure, 6 pp. (Slovene). – (Author & Publishers: Inštitut za vode, Hajdrihova 28 c, SI-1000 Ljubljana).

A brief description of the objectives of the project BIOMURA LIFE06NAT/SI/000066. The area covered by the project has a surface of 1520 ha, and represents a part of the Natura 2000 area. Among the 18 focal animal spp., the odon. are represented by *Ophiogomphus cecilia*.

- (17034) GROENEVELD, L.F., V. CLAUSNITZER & H. HADRY, 2007. Convergent evolution of gigantism in damselflies of Africa and South America? Evidence from nuclear and mitochondrial sequence data. *Mol. Phylog. Evol.* 42: 339-346. — (Third Author: ITZ, Ecol. & Evol., TiHo Hannover, Bünteweg 17 d, D-30559 Hannover). Extreme large body size is rare in modern Zygoptera. Only the South and Central American Pseudostigmatidae and the African *Coryphagrion grandis* share the morphological trait of gigantism. By means of phylogenetic analyses using 2 mitochondrial markers (16S rDNA and ND1) and one nuclear marker (EF1) in combination with an existing morphological data set, the evolution of gigantism was traced in Zygoptera. Individual and combined data sets were analyzed using the maximum parsimony, minimum evolution and maximum likelihood algorithms. Regardless of the algorithm used and the data set analysed all principal tree topologies support a monophyly of the Zygopt. taxa displaying giant body size. This supports the view that the evolution of gigantism in Zygopt. from Africa and S America is not the result of convergent evolution due to strikingly similar habitat preferences, but rather the result of close genealogical relationship. Because modern odonates evolved before the split of Africa from Gondwanaland, the proposed phylogeny suggests that *C. grandis* represents a Gondwana relict.
- (17035) HADRY, H., J. TIMM, B. STREIT & S. GIERE, 2007. A panel of microsatellite markers to study sperm precedence patterns in the emperor dragonfly *Anax imperator* (Odonata: Anisoptera). *Mol. Ecol. Notes* 7: 296-298. — (First Author: ITZ, Ecol. & Evol., TiHo Hannover, Bünteweg 17 d, D-30559 Hannover). With the development of 10 microsatellites for *A. imperator*, the function and priority patterns of the multiple ♀ sperm storage organs can be studied and compared between spp. in natural populations. In addition, 2 microsatellite loci, developed for the sister sp. *A. parthenope*, are also highly polymorphic in *A. imperator*. For the presented 12 microsatellite loci, the number of alleles per locus ranged from 2 to 24. The observed heterozygosity ranged from 0.07 to 0.88.
- (17036) HADRY, H., A. WARGEL, S. GIERE & B. KRAUS, 2007. A panel of microsatellite markers to detect and monitor demographic bottlenecks in the riverine dragonfly *Orthetrum coerulescens* F. *Mol. Ecol. Notes* 7: 287-298. — (First Author: ITZ, Ecol. & Evol., TiHo Hannover, Bünteweg 17 d, D-30559 Hannover). Odon. are important indicators for monitoring anthropogenic impacts on freshwater ecosystems. Here, a panel is developed of microsatellite loci for *O. coerulescens*, inhabiting small streams. By using 2 different isolation techniques, 9 microsatellite loci have been isolated. Screening of 209 individuals resulted in an overall number of 88 alleles, ranging from 3 to 19 alleles per locus. The observed heterozygosity ranged from 0.37 to 0.83. One locus showed a significant deviation from the Hardy-Weinberg equilibrium.
- (17037) ISHIAZAWA, N., 2007. *A survey of Odonata fauna of Mikajima Bog at Tokorozawa Campus of Waseda University*. Report prepared for the Research Laboratory of Natural Environment, Waseda University. 16 pp., 2 col. pls incl. — (Author: 1644-15 Yamaguchi, Tokorozawa, Saitama pref., 359-1145, JA). A review of 28 spp. recorded during Apr.-Nov. 2006, with annotations on habitats, biology and behaviour. Of particular interest is a tab. showing monthly changes in the occurrence and abundance of the spp. of the bog community. The locality is situated in the W area of the Tokorozawa Campus, Saitama pref.
- (17038) KRUNER, U., 2007. Der Südliche Blaupfeil, *Orthetrum brunneum* (Fonscolombe, 1837), am Entwässerungsgraben der Halde Emil Mayerisch, Kreis Düren (NRW). *Entomologie heute* 19: 51-57. (With Engl. s.). — (Gelderner Str. 39, D-41189 Mönchengladbach). The drainage ditch at a coal damp in the district of Düren nr Aachen (Germany) was colonized by *O. brunneum* 15 yr ago. Its life history was studied in 1993. Due to the optimal environmental conditions, part of the population emerged 1 yr after oviposition, while another part required 2 yr. The sp. is on wing from June to Aug. The population is maintained by regular removing of mud and aquatic vegetation.
- (17039) LAJEUNESSE, M.J., 2007. Ectoparasitism of damselflies by water mites in central Florida. *Fla Ent.* 90(4): 643-649. (With Span. s.). —

(Dept Ecol. & Evol. Biol., Cornell Univ., Ithaca, NY 14853-2701, USA).

A field survey is presented of Zygoptera and their water mite parasites, made in late May 2006 at Lake Placid. *Ischnura hastata* and *Nehalennia gracilis* (both captured only at pond sites), and *Argia fumipennis* and *Ischnura ramburii* (both captured at a lake site) were abundant. Only pond spp. had water mites, and 12.2% and 12.5% of *I. hastata* and *N. gracilis* were parasitized, respectively. These are 2 novel and unreported odonate-acari associations for this area (central Florida, USA). The within-species differences in ectoparasitism by sex, body size and wing-cell fluctuating asymmetry were also examined. These factors did not relate to the prevalence and intensity of parasitism in the field. The study indicates that brief surveys of odon. in central Florida will likely generate novel, unreported associations with parasitic water mites.

(17040) LE DU, P., 2007. Compte-rendu de la sortie entomolo du 22 septembre. *Lettre Réseau Naturalistes costarmoricains* 2007(10): 2-3. — (Author's address not stated).

12 odon. spp., collected from 5 localities, Côtes d'Armor, France.

(17041) *LIBELLULA*. Zeitschrift der Gesellschaft deutschsprachiger Odonatologen, GdO (ISSN 0723-6514). Vol. 26, Nos 1/2 (1 July), 3/4 (15 Dec. 2007). (With Engl. s's). — (c/o Mrs G. Peitzner, Hamfelderredder 7 a, D-21039 Börnsen).

[1/2]: *Brockhaus, T.*: Überlegungen zur Faunengeschichte der Libellen in Europa während des Weichselglazials (Odonata) (pp. 1-17); — *Clausnitzer, H.J., C. Clausnitzer & R. Hengst*: Zur Ökologie von *Ceriagrion tenellum* im Bereich der nordöstlichen Verbreitungsgrenze in Niedersachsen (Odonata: Coenagrionidae) (pp. 19-34); — *Bowman, J. & D. Groenendijk*: New records of *Somatochlora arctica* in northwestern Lower Saxony (Odonata: Corduliidae) (pp. 35-40); — *Haacks, M. & R. Peschel*: Die rezente Verbreitung von *Aeshna viridis* und *Leucorrhinia pectoralis* in Schleswig-Holstein: Ergebnisse einer vierjährigen Untersuchung (Odonata: Aeshnidae, Libellulidae) (pp. 41-57); — *Wildermuth, H.*: *Leucorrhinia pectoralis* in der Schweiz: aktuelle Situation, Rückblick und Ausblick (Odonata: Libellulidae) (pp. 59-76); — *Osterwalder, R.*: Gomphiden Exuvienfunde an renaturierten Uferabschnitten und neu angelegten Seitenarmen zwei-

er Schweizer Flüsse (Odonata: Gomphidae) (pp. 77-92); — *Kunz, B.*: *Coenagrion hastulatum* in Hohenlohe: Fallbeispiel für das regionale Verschwinden einer Libellenart (Odonata: Coenagrionidae) (pp. 93-106); — *Seidenbusch, R. & H. Heidemann*: Ein neues Merkmal zur Identifikation der Larven von *Diplacodes lefebvrei* unter den paläarktischen Libellulidae (Odonata) (pp. 107-112); — *Schneider, B. & H. Wildermuth*: Erstnachweis von *Sympyca fuscata* als Wirt parasitischer Wassermilben (Odonata: Lestidae; Hydrachnidia) (pp. 113-117); — *Burkart, G. & W. Burkart*: Die Libellenfauna der Ostseeinsel Gotland (Odonata) (pp. 119-142). — [3/4]: *Wildermuth, H.*: Polarotaktische Reaktionen von *Coenagrion puella* und *Libellula quadrimaculata* auf Erdbeerkulturen als ökologische Falle (Odonata: Coenagrionidae, Libellulidae) (pp. 143-150); — *Mauersberger, R.*: Erstnachweis von *Ceriagrion tenellum* in Mecklenburg-Vorpommern (Odonata: Coenagrionidae) (pp. 151-156); — *Clausnitzer, H.J., C. Clausnitzer & R. Hengst*: Ergänzungen zur Ökologie von *Ceriagrion tenellum* in der südlichen Luneburger Heide (Odonata: Coenagrionidae) (pp. 157-160); — *Jödicke, R.*: Die Verbreitung von *Ceriagrion tenellum* in Deutschland, mit Hinweisen auf das aktuelle Vorkommen in Westniedersachsen (Odonata: Coenagrionidae) (pp. 161-188); — *Schirrmacher, K., F.-J. Schirl & A. Martens*: Einjährige Entwicklung von *Gomphus pulchellus* und *Leucorrhinia caudalis* in einem neu angelegten Gewässer (Odonata: Gomphidae, Libellulidae) (pp. 189-192); — *Mauersberger, R. & T. Schneider*: Schlupfbereite Larven von *Epitheca bimaculata* als Opfer des Strassenverkehrs (Odonata: Corduliidae) (pp. 193-202); — *Kohl, S.*: *Cordulegaster boltonii* als Beute des Gerandeten Jagdspinne *Dolomedes fimbriatus* (Odonata: Cordulegasteridae; Aranea: Pisauridae) (pp. 203-206); — *Wildermuth, H.*: Anheftung der parasitischen Landmilbe *Leptus* sp. an *Orthetrum coeruleascens* (Parasitengona: Erythraeidae; Odonata: Libellulidae) (pp. 207-212); — *Brauner, O.*: Winterbeobachtungen von Libellen auf Gomera und La Palma. Kanarische Inseln (Odonata) (pp. 213-232); — *Stubing, S. & N. Stubing*: Notizen zur Entwicklung von *Anax imperator* und *Sympetrum fonscolombii* auf La Palma. Kanarische Inseln (Odonata: Aeshnidae, Libellulidae) (pp. 233-241); — *Olias, M., F. Weihrauch, M. Bedjanić, N. Hacet, M. Marinov & A. Šalamun*: *Lestes parvidens* and *L. viridis* in southeastern Europe: a chorological analysis (Odonata: Lestidae) (pp. 243-272); — *Lohr, M.*,

F. Wehrauch & H. Wildermuth: [Buchbesprechung] Les libellules de France, Belgique et Luxembourg, von D. Grand & J.-P. Boudot (pp. 273-277).

(17042) *LIBELLULA* (SUPPL.) (ISSN 0723-6514). Vol. 8 (9 March 2007): *Von den Anfängen 1981 bis Band 25 im Jahr 2006*. 72 pp. – (c/o Mrs G. Peitzner, Hemfelderredder 7 a, D-21039 Börnsen).

List of Editors and members of the Editorial Board and indices of authors, published papers, species, subjects, and countries/regions are presented along with publication dates for *Libellula* vols 1-25 (14 Feb. 1981-15 July 2006).

(17043) LIN, R.-S., C.-T. YAO & P.-F. LEE, 2007. The diet of fairy pitta, *Pitta nympha*, nestlings in Taiwan as revealed by videotaping. *Zool. Stud.* 46(3): 355-361. – (Third Author: Inst. Ecol. & Evol. Biol., Dept Life Sci., Natn. Taiwan Univ., Taipei-106, Taiwan).

The diet was studied in central Taiwan by videotaping 8 broods from 2000 to 2002. In total, 1062 feeding visits were recorded, food items were clearly identified on 661 visits. Earthworms of several spp. were the most common food (73 %), followed by Lepidoptera and their larvae and pupae (11 %). Slugs, snails and various arthropods (incl. Odon.) were rarely recorded.

(17044) [LUKMAN ZUNEC, D.] (Anonymous), 2007. Sprehod in morda še navdih za ustvarjanje. – [A walk and perhaps also an inspiration for creative work]. *Večer*, Maribor 63(262): 33 (issue of 14 Nov.). (Slovene).

A daily's article on the Komarnik lake near Lenart, NE Slovenia. It harbours 35 odon. spp. (*Lestes virens vestalis* and *Brachytron pratense* are mentioned here), and reference is made to the local *Epitecha bimaculata* population, considered the largest of this sp. in central Europe.

(17045) MAHER, I., [Ed.], 2007. (*Tisoč in en kal – tisoč in ena zgodba o življenju*) 1001 kal – 1001 zgodba o življenju. – [1001 karst ponds – 1001 stories of life]. Zavod Republike Slovenije za varstvo narave, Ljubljana. 179 pp. ISBN 978-961-91505-9-7. (Slovene).

The book is a collection of articles on history and the present state of numerous karst ponds in Slovenia, written by primary school pupils. The following articles include general references to, and/

or photographs of Odon.: Švab, D.: Karst ponds in my native village (pp. 59-66); – Ražem, N. & P. Tavčar: Zeleno jezero, karst pond in Dobravlje (pp. 69-78); – Mikuletič, J.: The well and karst pond at Mala Bukovica near Ilirska Bistrica (pp. 169-173); – Bratovič, N., M. Štemberger, D. Čekada & K. Šlosar: The karst pond in Jelšane (pp. 175-177).

(17046) MAHMOOD-ur-RAHMAN, [...], T. HUSNAIN et al., 2007. Insect resistance and risk assessment studies of advanced generations of basmati rice expressing two genes of *Bacillus thuringiensis*. *Electronic J. Biotechnol.* 10(2): 240-251. – (Correspondence to: T. Husnain, Natn. Cent. Excellence in Mol. Biol., 87-W, Canal Bank Rd, Univ. Punjab, Lahore, Pakistan).

Advanced generations of different transgenic lines of indica basmati rice (Basmati-370), expressing 2 unrelated *Bt* genes, were evaluated for resistance to yellow stem borer (*Scirpophaga incertulus*) and rice leaf folder (*Cnaphalocrocus medinalis*) under field conditions. The transgenic lines had no significant effect on non-target insects, such as Odon.

(17047) MARCZAK, D., 2007. Materials required for knowledge of dragonflies of the Olsztyn Lake District. *Przegl. zool.* 51(1/2): 67-77. (Pol., with Engl. s.). – (Katedra Zool., Univ. Warmińsko-Mazurski, Oczapowskiego 5, PO-10-719 Olsztyn).

A commented review of the fauna (37 spp.) as documented during Apr.-Aug. 2007); – NE Poland.

(17048) MATUSHKINA, N. & S. GORB, 2007. Mechanical properties of the endophytic ovipositor in damselflies (*Zygoptera*, Odonata) and their oviposition substrates. *Zoology* 110: 167-175. – (First Author: Evolutionary Biomaterials Gr., Dept Arzt, Max Planck Inst. Metals Res., Heisenbergstr. 3, D-70569 Stuttgart).

Zygoptera ♀♀ use their ovipositor valves to saw aquatic plants in order to insert their eggs into the plant tissues. Stiffness of the plant substrata is therefore an important parameter for oviposition substrate choice. Using a force transducer combined with a motorised micromanipulator, the bending stiffness of the ovipositor at the axial compressional load was studied in 7 European spp. and compared to the local stiffness of 7 preferred plant substrates. The puncture force of tested plant samples ranged from 105 to 1500 mN, and their local stiffness ranged from 208 to 1776 N/m. The bending

stiffness of the ovipositor was estimated as 173-409 N/m, depending on the sp. Using original and literature data, a significant positive correlation between mechanical properties of the ovipositor and preferred oviposition substrates was demonstrated. Possible behavioural adaptations to overcome high stiffness of plant tissues during oviposition are discussed.

- (17049) NATURSCHUTZ & LANDSCHAFTS-PFLEGE, 2007. *Rote Listen von Rheinland-Pfalz*. Landesamt für Umwelt, Mainz. 138 pp. – (Correspondence to: L. Simon, Landesamt für Umwelt Rheinland-Pfalz, Kaiser-Friedrich-Str. 7, D-55116 Mainz).

The updated Red List Odonata of the Rhineland-Palatinate (Germany) appears on pp. 4-7.

- (17050) PETERS, G. & G. THEISCHINGER, 2007. Die gondwanischen Aeshniden Australiens (Odonata: Telephlebiidae und Brachytronidae). *Denisia* 20: 517-574. (With Engl. s.). – (Second Author: NSW Dept Envir. & Conserv., P.O. Box 29, Lidcombe, NSW 1825, AU).

The study of the relationships of the genus *Dendroaeschna* Tillyard led to a phylogenetic analysis of the genus *Austroaeschna* Sel., the fam. Telephlebiidae Cockerell and the clade *Euaeshnida* Bechly. Autapomorphies and synapomorphies are listed for all the taxa involved, details are discussed and illustrated in 3 phylograms. The taxa *Pulchraeschna* subg. n. (type sp.: *Austroaeschna unicomis pulchra* Tillyard) and *Notoaeschna* trib. n. (type gen.: *Notoaeschna* Tillyard) are formally established. The Australian “brachytronine aeshnids” (Panbrachytronoda tax. n.: Telephlebiidae s. n. and *Dendroaeschna* Tillyard) are characterized in terms of their chorology and ecology. Numerous photographs of live dragonflies and prepared specimens document the diversity of morphology and coloration in these insects.

- (17051) [PFAU, H.K.], 2007. Visitors: Hans Klaus Pfau. *EntNews* 22(6): 5, with portrait on the cover.

A note on his visit (25 May 2007) of the Odon. collection, Dept Ent., Smithsonian Natn. Mus. Nat. Hist., to study and photograph the axillary plates of wings of Petaluridae and primitive Gomphidae. After his retirement from the Zool. Inst., Univ. Tübingen (Germany), Dr Pfau is continuing his life-

long studies on the functional morphology of flight mechanics and complex mating systems in Odon.

- (17052) RIDEI, N., L. KHROKALO & I. PAV-LUSENKO, 2007. National Ecological Network of Ukraine and the state of research on odonatofauna in protected territories. *Wiad. ent.* 26(4): 237-249. (With Pol. s.). – (Education & Res. Inst. of Nature Prot. & Biotechnologies, Natn. Agric. Univ., prov. Sils'kogospodars'ky 4 korp. 17, UKR-03041 Kyiv).

Summarised and updated information is presented on the odon. fauna of 11 protected areas in the Ukraine. For 6 nature reserves, odon. checklists are provided for the first time.

- (17053) THEISCHINGER, G., 2007. The final instar larvae of *Gynacantha rosenbergi* Kaup and *Antipodogomphus proselythus* (Martin) (Odonata: Aeshnidae & Gomphidae). *Linz. biol. Beitr.* 39(2): 1233-1237. – (NSW Dept Envir. & Conserv., P.O. Box 29, Lidcombe, NSW 1825, AU).

The 2 Australian spp. were bred out. Their larvae are described from final instar exuviae and compared with their closest allies.

- (17054) [THEISCHINGER, G. & J. HAWKING] MARCHANT, R., 2007. The complete field guide to dragonflies of Australia, by G. Theischinger & J. Hawking. *Newsl. aust. Soc. Limnol.* 45(1): 21-22. – (Author's postal address not stated).

A descriptive and appreciative review of the work described in *OA* 16798.

- (17055) TOMBO. *ACTA ODONATOLOGICA* (ISSN 0495-8314). Vol. 49, Nos 1/4 (30 Jan. 2007). (Engl. & Jap., mostly with Engl. titles). – (c/o Dr S. Eda, 3-4-25 Sawamura, Matsumoto, Nagano, 390-0877, JA).

Sasamoto, A.: Description of a new *Nososticta* species from Biak Island, Indonesia (Zygoptera: Protoneuridae) (pp. 1-4); *N. hiroakii* sp. n.; – *Sasamoto, A. & I. Kawashima*: Description of the last instar larva of *Amphigomphus nakamurai* Karube, 2001 from northern Vietnam, Indo-China (pp. 5-9); – *Kawashima, I. & A. Sasamoto*: Descriptions of the last two instar larvae of *Heliaeschna filostyla* Martin, 1906 from Sulawesi Island, Indonesia (pp. 9-14); – *Naraoka, H. & K. Takahashi*: The landing from the water and the terrestrial period before emergence of the final instar larvae of *Epiophlebia*

- superstes Selys (pp. 15-21); – *Eda, S.*: Color patterns of the larvae of *Epiophlebia superstes* Selys (p. 22); – *Ozono, A., H. Karube & N. Muramatsu*: A new record for the Japanese fauna of *Neurothemis r. ramburii* (Kaup in Brauer, 1866) from Yonaguni-jima Is., SW Ryukyus (pp. 23-26); – *Nishiura, N.*: Records of *Sympetrum fonscolombii* and *S. uniforme* in Osaka prefecture (pp. 27-28); – *Matsuhira, K.*: A new record of *Sympetrum fonscolombii* from Amami-Oshima Is., Amami Islands (p. 29); – *Ueda, A., H. Karube, W.A. Noerdjito & K. Fukuyama*: A new record of *Brachythemis contaminata* (Fabricius, 1793) from Borneo (pp. 29-30); – *Eda, S.*: On a mature male of *Planaeschna milnei* (Selys) with the reflecting wings (p. 30); – *Osada, M.*: An observation of the oviposition site of *Chlorogomphus okinawensis* Ishida (pp. 31-32); – *Kimura, S., K. Ikeda & T. Teramoto*: Adults of *Boyeria macclachlani* collected firstly from Yamanashi prefecture (p. 32); – *Kita, H. & A. Ozono*: Notes on the oviposition of a libellulid species, *Brachythemis contaminata* (Fabricius, 1793), in Ishigaki-jima Is., Yaeyama Isls, SW Ryukyus (pp. 33-34); – *Eda, S.*: A recollection of *Lestes temporalis* Selys as a noxious insect to mulberry and fruit trees (pp. 35-40); – An introduction to “Fundamental study of animals for teaching material” (pp. 40-43); – *Itoh, S.*: A case of horizontal perching in *Pantala flavescens* (Fabricius) (p. 43); – *Matsuhira, K.*: The first record of *Rhipidolestes okinawanus* (Asahina, 1951) from Yero-jima Is., Amami Islands (p. 44); – *Eda, S.*: On the puncta of nodi on the wings of *Libellula quadrimaculata* asahinai Schmidt (p. 48).
- (17056) VAN GOSSUM, H., K. HEIRINCKX, M.R. FORBES & T.W. SHERRATT, 2007. Do current hypotheses explain continental and seasonal variation in female morph frequencies of the damselfly *Nehalennia irene*? *Biol. J. Linn. Soc.* 90: 501-508. – (First Author: *Evol. Biol. Gr.*, Univ. Antwerp, Groenenborgerlaan 171, B-2020 Antwerp).
- ♀-limited colour polymorphism occurs in many *Zygopt. sp.*, where one morph resembles the ♂ (andromorph) and the other is dissimilar (gynomorph). Explanations for this phenomenon vary, but most assume that andromorphism has arisen in odon. as a response to excessive ♂ harassment. Here, the extent of continental and seasonal variation in ♂ morph frequencies is quantified in a widely-distributed damselfly and it is asked whether the spatio-temporal patterns in andromorph frequency can be understood on the basis of sexual harassment theory. *N. irene* was sampled among regions across Canada, and at several sites, over the reproductive season, within central Canada. Andromorph frequencies ranged from 0 to >90% across Canada. In particular, sites in W Canada had consistently high andromorph frequencies, whereas andromorph frequencies among central sites were lower and variable and, among eastern sites, were lower still (except 1 site) and relatively invariant. For populations in central Canada, both andromorph frequencies and population densities varied significantly over time, reaching a peak mid-season. As expected, morph frequency covaried significantly with estimates of harassment in some cases, but estimates of ♂ harassment did not consistently account for variation in morph frequencies within all regions. Additional factors such as genetic drift may influence morph frequency at the edge of a species' range. Future work also should test, and attempt to explain causation, for seasonal variation in morph frequency.
- (17057) VAN TOL, J. & D. GASSMANN, 2007. Zoogeography of freshwater invertebrates of Southeast Asia, with special reference to Odonata. *In: W. Renema, [Ed.], Biogeography, time and place: distributions, barriers and islands*, pp. 45-91, Springer. – (First Author: *Naturalis, P.O. Box 9517, NL-2300 RA Leiden*).
- The present knowledge of the historical biogeography of aquatic invertebrate groups is reviewed. Most orders of aquatic insects have a fossil record starting in the Early Permian, or Middle Carboniferous (Odon.), making even the break-up of Gondwana (Late Jurassic) relevant to understanding present distributional patterns. The complex geological history of Asia is summarized, and geological area cladograms presented. Biogeographical studies are seriously hampered by the limited information on subaerial history of the various islands and teranes. The historical biogeography of the Platynemididae, with special reference to the subfamily Calicnemiinae, is presented as one of the first examples of such a study of a widespread group. The species of southeast Asia derived from African Platynemididae. Malesian Calicnemiinae derived from ancestors on the mainland of Asia, and may have dispersed along the Izu-Bonin Arc (40-50 Ma), or along the Late Cretaceous “Inner Melanesian Arc” sensu Polhemus. A clade of the genera *Lieftinckia* and

Risocnemis (Solomon Islands and the Philippines) represents a more recent westward dispersal of the Calicnemiinae, via the Caroline and Philippine Arcs during the Oligocene. Various other more limited phylogenetic reconstructions and biogeographical analyses of other freshwater invertebrates, particularly Odon. and Hemiptera, are discussed. Areas of endemism on New Guinea are generally congruent with geological entities recognized, e.g., the microterranes along the northern margin of New Guinea. Special attention is paid to the fauna of Sulawesi. Area cladistic reconstructions based on distribution patterns and phylogenetic reconstructions of, e.g., Protosticta Selys (Platystictidae) and genera and species of Chlorocyphidae show a pattern of (northern arm [SW arm – central and SE arm]), which is a reflection of the geological history of the island. Biogeographical patterns recognized in freshwater invertebrates of Malesia do not principally differ from those found in strictly terrestrial taxa. The distribution of land and water seems to be the driving force in speciation during the Cenozoic. It is unresolved whether rafting of biota on the various island arcs, or congruent patterns in dispersal, are to be considered the underlying principle. The extreme habitat requirements and poor dispersal power of many spp. involved seem to make a dispersal scenario unlikely. However, recent studies show that such habitat specialization may develop rapidly.

- (17058) VERAGHTERT, W. & B. VOGELS, 2007. De zuidelijke heidelibel (*Sympetrum meridionale*) in Bospolder te Ekeren. – [*Sympetrum meridionale* in Bospolder at Ekeren, Antwerp prov., Belgium]. *Antenne* 1(1): 8-9. (Dutch). – (First Author: Denenlaan 13, B-2500 Lier).
2 ♀ (13/18-VIII-2006) are brought on record, and the recent records from Flanders are reviewed. At present, the number of records of this sp. in Flanders (Belgium) is moderately increasing.
- (17059) VON ELLENRIEDER, N. & R.W. GARRISON, 2007. Untangling some taxonomic riddles on damselfly genera (*Zygoptera*) from the neotropical region. *Int. Dragonfly Fund Rep.* 11: 1-34. – (Second Author: Plan Pests Diagnostics, California Dept Food & Agric., 3294 Meadowview Rd, Sacramento, CA 95832-1448, USA).
Examination of type material deposited in the Royal Belgian Institute of Natural Sciences, Brussels, Bel-

gium and in the British Museum of Natural History, London, UK allowed to solve taxonomic riddles regarding several *Zygoptera* genera from the neotropical region. Notes on the status of several types are provided, and the following new synonymies are introduced: *Argia huallaga* Fraser, 1946 = *A. adamsi* Calvert, 1902; *Argia makoka* Fraser, 1946 = *A. kokama* Fraser, 1946; *Argia mollusca* Fraser, 1946 = *A. collata* Selys, 1865; *Argia trifoliata* Fraser, 1946 = *A. variegata* Förster, 1914; *Argia umbriaca* Fraser, 1946 = *A. indicatrix* Calvert, 1902; *Amphigrion amphion* Selys, 1876 = *Ischnura verticalis* (Say, 1840); a new combination: *Oxygrion cardinalis* Fraser, 1946 to *Leptobasis cardinalis* (Fraser, 1946); and three lectotype designations (for *Acanthagrion gracile* race? *lancea* Selys, 1876, *Acanthagrion trimaculatum* Selys, 1876, and *Leptagrion flammeum* Selys, 1876).

- (17060) WALIA, G.K., 2007. Cytomorphological studies on *Gynacantha milliardi* Fraser of the family Aeschnidae (Anisoptera: Odonata). *Cytologia* 72(1): 57-62. – (Dept Zool., Punjabi Univ., Patiala-147002, Punjab, India).
In individuals from Mangalore (Karnataka, S India), 2 karyotypes occur in a spermatogenesis, viz. $2n \delta = 27 m$, $n \delta = 14 m$, and $2n \delta = 25$, $n \delta = 13$, with XO sex determining mode in both cases.
- (17061) WARE, J., M. MAY & k. KJER, 2007. Phylogeny of the higher Libelluloidea (Anisoptera: Odonata); an exploration of the most speciose superfamily of dragonflies. *Mol. Phylogen. Evol.* 45: 289-310. – (First Author: Dept Ent., Rutgers Univ., 93 Lipman Dr., New Brunswick, NJ 08901, USA).
This study provides a well-substantiated phylogeny of the Libelluloidea generated from gene fragments of 2 independent genes, the 16S and 28S ribosomal RNA (rRNA), and using models that take into account non-independence of correlated rRNA sites. 93 ingroup taxa and 6 outgroup taxa were amplified for the 28S fragment; 78 ingroup taxa and 5 outgroup taxa were amplified for the 16S fragment. Bayesian, likelihood and parsimony analyses of the combined data produce well-resolved phylogenetic hypotheses and several previously suggested monophyletic groups were supported by each analysis. Macromiinae, Corduliidae s.s., and Libellulidae are each monophyletic. The corduliid (s.l.) subfamilies Syntemistinae, Gomphomacromiinae, and Idi-

onychinae form a monophyletic group, separate from the Corduliinae. Libellulidae comprises 3 previously accepted subfamilies (Urothemistinae, a very restricted Tetrathemistinae, and a modified Libellulinae) and 5 additional consistently recovered groups. None of the other previously proposed subfamilies are supported. Bayesian analyses run with an additional 71 sequences obtained from GenBank did not alter these conclusions. The evolution of adult and larval morphological characters is discussed here to suggest areas for future focus. This study shows the inherent problems in using poorly defined and sometimes inaccurately scored characters, basing groups on symplesiomorphies and failure to recognize the widespread effects of character correlation and convergence, especially in aspects of wing venation.

- (17062) WINKEL, S., M. SCHROTH, W. BRESSLER, E. FLÖBER & M. KUPRIAN, 2007. Wiederfund der Kleinen Zanglibelle (*Onychogomphus forcipatus*) im Natura 2000-Gebiet 5818-401 "Main bei Mühlheim und NSO Rumpfenheimer & Bürgeler Kiesgruben" und Rückkehr der Art an den Untermain. *Insecta* 10: 123-128. – (First Author: NABU LAG Naturentwicklung & Biodiversität, Pommernstr. 7, D-63069 Offenbach am Main). In Hessen (Germany), *O. forcipatus* was almost extinct in the 1970s and 1980s. In the early 1990s, the sp. was restricted to small populations on the Kinzig and the Eder. Since then, the province of Hessen appears in the process of re-population again. A chronological review is presented of the 1992-2006 records and observations on the Lower Main R. and in the district of Waldeck-Frankenberg. The general improvement of water quality and habitat structure, as well as the climatological warming up are considered responsible for the current expansion.
- (17063) YU, X. & W. BU, 2007. Two new species of *Coenagrion* Kirby, 1890, from China (Odonata: Zygoptera: Coenagrionidae). *Zootaxa* 1664: 55-59. – (Inst. Ent., Coll. Life Sci., Nankai Univ., Tianjin-300071, China). *C. aculeatum* sp. n. (holotype ♂: Chongqing, Jiangjin, 23-V-2001; deposited in Life Sci. Coll., Hebei Univ., Baoding, China) and *C. tengchongensis* sp. n. (holotype ♂: Yunnan, Tengchong, Zhengding, alt. 1800 m, 15-VIII-2006; deposited in Inst. Ent., Life Sci. Coll., Nankai Univ., Tianjin, China) are

described, illustrated and compared with similar spp.

2008

- (17064) ANP, 2008. Provincie op de bon om libelle. – [The province booked for a dragonfly]. *AD Utrechts Nieuwsblad* (Utrecht Oost) 3(172): 8; issue of 22 March. (Dutch). The province of Groningen (the Netherlands) and the watership of the Hunze and Aa were fined by the Environment Police for destructing the *Aeshna viridis* eggs (deposited in *Stratiotes aloides*) while working on the Kiel-Windeweer waterway. The province and the watership had to stop the work.
- (17065) BARQUIN, J. & R.G. DEATH, 2008. Physical and chemical differences in karst springs of Cantabria, northern Spain: do invertebrate communities correspond? *Aquat. Ecol.* 2008: 11 pp. DOI 10.1007/s10452-008-9170-2. – (First Author: Insto Hidráulica Ambiental, Dpto CYTAMA, Univ. Cantabria, Avda Los Castros s/n, ES-Santander, Cantabria). Benthic macroinvertebrate communities were studied and environmental variables were measured in 6 rheocene springs. The odon. were represented by *Onychogomphus* sp. and *Aeshna* sp.
- (17066) CONTRERAS-CARDUNO, J., J. CANALES-LAZSCANO, J.G. JIMÉNEZ-CORTÉS, N. JUÁREZ-VALDEZ, H. LANZ-MENDOZA & A. CÓRDOBA-AGUILAR, 2008. Spatial and temporal population differences in male density and condition in the American rubyspot, *Hetaerina americana* (Insecta: Calopterygidae). *Ecol. Res.* 2008: 9 pp. DOI 10.1007/211284-008-0476-2. – (Last Author: Depto Ecol. Evolutiva, Inst. Ecol., UNAM, Apdo Postal 70-275, Ciudad Universitaria, MX-04510 Mexico, D.F.). Increased resource availability should favour higher animal density. It may also affect sex ration, the ♂ condition, and mating competition over access to ♀♀, although the direction of these variables is not straightforward to predict. Using a non-experimental approach, preliminary research was carried out using the territorial *H. americana* by comparing 2 spatially separated populations and the same population in 2 different seasons (each comparison with varying population densities). First the sex ratio was compared by counting ♂♂ (using 2 categories, territorial and non-territorial) and ♀♀;

relative foraging time (as an indicator of how much feeding resources each site provides); wing spot size (a sexual ornament), body size and immune melanization response (these 2 variables were used to assess ♂ condition); and fighting time and contest number (to assess competition). For the seasonal comparison, a third population was used, in which only ♂ spot size and 2 indicators of condition and immune response phenoloxidase (PO) and nitric oxide (NO) was compared. The high-density population had higher values of non-territorial ♂♂ (but similar sex ratio), relative foraging time, contest time and number, wing spot (but similar body size) and melanization response than the low-density population. According to season, at high density, ♂♂ had higher values of wing spots, PO, and NO. The results suggest that in a population where animals have more dietary resources, ♂♂ reach a better condition despite the competition being more intense.

- (17067) COSTA, J.M., C.T. RAVANELLO & G.M. SOUZA-FRANCO, 2008. Description of a new species of *Neocordulia* Selys, 1882 (Odonata: Libellulidae, Corduliinae) from southern Brazil. *Zootaxa* 1704: 64-68. – (First Author: Depto Ent., Mus. Nac. UFRJ, Quinta da Boa Vista, São Cristóvão, BR-20940-040 Rio de Janeiro, RJ). *N. santacarinensis* sp. n. and its larva are described and illustrated, based on a reared ♂ and its exuviae. Holotype ♂: Brazil, Santa Catarina, Irani R., Ponte Serrada, emerged IX-2006; deposited at MNRJ, Rio de Janeiro. It is similar to *N. andrognis* (Sel.); the separating features are outlined.
- (17068) *DIGEST OF JAPANESE ODONATOLOGICAL SHORT COMMUNICATIONS*, No. 21 (March 2008). – Compiled, translated and produced by K. Ishizawa (1644-15, Yamaguchi, Tokorozawa, Saitama, 359-1145, JA). *Iswaki, M.*: Dragonfly fauna of Hirata-no-satoyama in Kagoshima, southern Japan (pp. 1-3); – *Kimura, S.*: Field observation on emergence of *Aeshna mixta soneharai* Asahina (pp. 4-6); – *Naraoka, H.*: Weather factor on the reproductive behaviour of *Lestes temporalis* Selys (pp. 6-8); – *Kano, K. & T. Miyahata*: Death mimicry of *Bayera brevicauda ishigakiana* Asahina and *Euphaea yayeyamana* Oguma (pp. 8-9); – *Kano, K. & S. Kato*: Posture of a female in copulating flight of *Synictinogomphus clavatus* (Fabricius) (pp. 9-10); – *Ishizawa, N.*: Three events in oviposition behaviour of *Sympetrum frequens* Selys (p. 10).
- (17069) DIJKSTRA, K.-D.B., 2008. *Libellen van Europa. Veldgids met alle libellen tussen Noordpool en Sahara.* – [*Dragonflies of Europe. Field guide covering all species between the northpolar region and the Sahara*]. Tirion, Baarn. 320 pp. Hardcover (14.0×22.0 cm). ISBN 978-90-5210-700-4. (Dutch). – (Publishers: P.O. Box 390, NL-3740 AH Baarn). Dutch edition of the work described in OA 16332.
- (17070) FINCKE, O.M., & I. HEDSTROM, 2008. Differences in forest use and colonization by neotropical tree-hole damselflies (Odonata: Pseudostigmatidae): implications for forest conservation. *Stud. neotrop. Fauna Envir.* 43(1): 35-45. – (First Author: Dept Zool., Univ. Oklahoma, Norman, OK 73019, USA). Differential habitat use in primary and secondary forests is documented for 2 genera, important predators of tree-hole breeding mosquitoes in tropical forests. In a lowland moist forest of Panama, adults moved between old primary (400 yr old) and contiguous secondary forest (60 yr old) and reproduced seasonally in both types. However, *Mecistogaster linearis* and *M. ornata* were more common in secondary forest, whereas *Megaloprepus caeruleus* was most common in primary forest. These differences in landscape use were reflected in differential colonization of tree-hole analogs (plastic pots) in primary forest and highly altered secondary growth (20yr old) in a lowland wet forest in Costa Rica, where reproduction of both spp. was aseasonal. *M. linearis* larvae were commonly found in pots at both habitat types, whereas *Megaloprepus* rarely colonized pots in altered sites. The results suggest that *Megaloprepus* is particularly susceptible to forest conversion, and call for increased focus on the dispersal ability of all pseudostigmatids. In tropical moist and wet forests that harbour water-filled tree-holes, the presence of the conspicuous *Megaloprepus* and similar spp. may serve as bio-indicators of a healthy predator guild, the loss of which may adversely impact human health.
- (17071) GLIGOROVIĆ, B. & V. PEŠIĆ, 2008. Contribution to knowledge of the dragonflies (Odonata) from Lake Skadar's drainage basin (Montenegro). *Acta ent. serb.* 12(2): 11-16. (With Serbian s.). –

(Dept Biol., Fac. Sci., Univ. Montenegro, Cetinjski Put b.b., ME-81000 Podgorica).

45 spp. and ssp. are listed, of which *Sympecma fusca* and *Ceriagrion tenellum* are new for the fauna of Montenegro (cf. *OA* 16968), while *Aeshna isosceles* and *Brachytriton pratense* are recorded for the first time from Lake Skadar basin. With reference to the distribution of the *Orthetrum coerulescens* infraspecific taxa in this part of the world, the occurrence of the nominate form is of particular interest.

- (17072) KALKMAN, V.J., V. CLAUSNITZER, K.-D.B. DIJKSTRA, A.G. ORR, D.R. PAULSON & J. VAN TOL, 2008. Global diversity of dragonflies (Odonata) in freshwater. *Hydrobiologia* 595: 351-363. – (First Author: Naturalis, P.O. Box 9517, NL-2300 RA Leiden).

Larvae of almost all of the 5680 odon. spp. are dependent on freshwater habitats. Many spp. have small distributional ranges, and are habitat specialists, including inhabitants of alpine mountain bogs, seepage areas in tropical rain forests, and waterfalls. They are often successfully used as indicators for environmental health and conservation management. The highest diversity is found in flowing waters in rain forests in the tropics, the oriental and neotropical regions being the most speciose. This paper discusses diversity, summarises the biogeography in the different biogeographical regions and gives the total number of spp. and gen. per fam. per biogeographical region. Examples are given of areas of particular diversity, in terms of areas of endemism, presence of ancient lineages or remarkable recent radiations, but no well-based review of areas with high endemism is available so far. The conservation status of Odon. is briefly discussed. Spp. confined to small remnants of forest in the tropics are most under threat of extinction by human activities.

- (17073) KIAUTA, B., 2008. Voorwoord. – [Foreword]. In: K.-D.B. Dijkstra, *Libellen van Europa*, p. 5, Tiron, Baarn (ISBN 978-90-5210-700-4). (Dutch). – (Callunastraat 6, NL-5853 GA Siebengewald).

It includes a reference to the recent discovery of *Trithemis kirbyi* in southern Spain (cf. D. Chelmick & B.P. Pickess, 2008, *Notul. odonatol.* 7: 4-5).

- (17074) KUKALOVÁ-PECK, J., 2008. Phylogeny of

higher taxa in Insecta: finding synapomorphies in the extant fauna and separating them from homoplasies. *Evol. Biol.* 35: 4-51. – (Earth Sci., Carleton Univ., Ottawa, ON, K1S 5B6, CA).

Most currently applied systematic methods use post-groundplan character states to reconstruct phylogenies in modern higher Insecta/Arthropoda taxa. But, this approach is unable to separate synapomorphies from frequently occurring homoplasies. Conflicting, unresolved and unrealistic higher-level phylogenies result. The reasons are analysed. A contrasting “groundplan” method, long used in Vertebrata and found to be superior in resolving higher-level phylogenies, is described. This method, as used for insects, uses a highly diversified morphological organ system (such as limb/wing), identifies its homologues in all subphyla and classes, records the full history of its character transformation series in all lineages from the shared Paleozoic ancestor to modern times, pursues the full homologization of its character states in all modern orders, and verifies these data with evidence from other fields of biology. Only such an extremely broad dataset provides the complex information needed to identify and homologize the groundplan character states in modern orders and other higher taxa in the insect/arthropod fauna. After this is accomplished, the gate to recognizing higher-level synapomorphies is open. Only groundplan-level character states include distinct synapomorphies, since homoplasies are either absent or easily detectable. Examples are given. The interpretations of higher phylogenies and evolutionary processes in Hexapoda, based on the unpredictable and often misleading post-groundplan character states found in extant, Tertiary and Mesozoic fauna, are critically compared with those based on the evolution of organ systems, by using the groundplan method.

- (17075) MIROGLU, A. & V. KARTAL, 2008. Additional notes on the Odonata fauna of Kurupelit (Samsun, Turkey). *Turk. J. Zool.* 32: 33-41. (With Turk. s.). – (Dept Biol., Fac. Sci. & Arts, Ondokuz Mayıs Univ., TR-55139 Kurupelit, Samsun).

Kurupelit is located in the Black Sea region of Turkey. 27 spp. are listed, 9 of which new for the fauna of Samsun.

- (17076) NEW, T.R., 2008. What's in common names: are they really valuable in insect conservation? *J. Insect Conserv.* 2008: 3 pp. DOI 10.1007/

S10841-007-9127-0. – (Dept Zool., La Trobe Univ., Victoria-3086, AU).

The exhaustive considerations on the subject are concluded by the statement: “In contexts such as conservation advocacy, where nonspecialist interest becomes paramount, well-focused common names for insects are important in facilitating communication and should be coined and used with pride”.

- (17077) *ODONATOLOGICAL ABSTRACT SERVICE* (ISSN 1438-0269), No. 21 (Feb. 2008), 76 pp. – (Distributor: M. Schorr, Schulstr. 7b, D-54314 Zerf).

Abstracts Nos 6413-6841 of works published in 1997-2008.

- (17078) OHBA, S.-y., H. MIYASAKA & F. NAKA-SUJI, 2008. The role of amphibian prey in the diet and growth of giant water bug nymphs in Japanese rice fields. *Popul. Ecol.* 50: 9-15. – (First Author: Lab. Insect. Ecol., Grad. Sch. Envir. Sci., Okayama Univ., Tsushima, Okayama, 700-8530, JA).

A rearing experiment demonstrated that *Kirkaldyia* (= *Lethocerus*) *deyrolli* larvae (Heteroptera: Belostomatidae) provided with tadpoles had greater specific growth rates at all stages, except for the final stage, than those fed on other prey (frogs and larval *Copera annulata*, *Lestes* spp., *Anax parthenope julius*, *A. nigrofasciatus*, *Gynacantha japonica*, *Orthetrum albistylum speciosum*, *Sympetrum frequens* and *S. infuscatum*).

- (17079) *PTEROBOSCA*. Newsletter of the Japanese Society for Odonatology (ISSN none), Nos 10/A (15 June 2004), 10/B (25 Feb. 2005), 11/A (10 July 2005), 11/B (10 Jan. 2006), 12/A (30 June 2006), 12/B (20 Jan. 2007), 13/A (5 July 2007), 13/B (20 Feb. 2008). (Jap.). – (c/o Dr S. Eda, 3-4-25 Sawamura, Matsumoto, Nagano, 390-0877, JA). [Translation of titles not available.]

- (17080) RACH, J., R. DeSALLE, I.N. SARKAR, B. SCHIERWATER & H. HADRY, 2008. Character-based DNA barcoding allows discrimination of genera, species and populations in Odonata. *Proc. R. Soc. (B)* 275: 237-247. – (Last Author: ITZ, Ecol. & Evol. Biol., TiHi Hannover, Bünteweg 17d, D-30559 Hannover).

DNA barcoding has become a promising means for identifying organisms of all life stages. Currently, phenetic approaches and tree-building methods

have been used to define species boundaries and discover ‘cryptic species’. However, a universal threshold of genetic distance values to distinguish taxonomic groups cannot be determined. As an alternative, DNA barcoding approaches can be ‘character based’, whereby species are identified through the presence or absence of discrete nucleotide substitutions (character states) within a DNA sequence. Here the potential of character-based DNA barcodes is demonstrated by analysing 833 odon. specimens from 103 localities belonging to 64 spp. A total of 54 spp. and 22 gen. could be discriminated reliably through unique combinations of character states within only one mitochondrial gene region (NADH dehydrogenase 1). Character-based DNA barcodes were further successfully established at a population level discriminating 7 population-specific entities out of a total of 19 populations belonging to 3 spp. Thus, for the first time, DNA barcodes have been found to identify entities below the species level that may constitute separate conservation units or even species units. These findings suggest that character-based DNA barcoding can be a rapid and reliable means for (i) the assignment of unknown specimens to a taxonomic group, (ii) the exploration of diagnosability of conservation units, and (iii) complementing taxonomic identification systems.

- (17081) SHARMA, A., R.C. SHARMA & A. ANTHWAL, 2008. Surveying of aquatic insect diversity of Chandrabhaga river, Garhwal Himalayas. *Environmentalist* 2008: 10 pp. DOI 10.1007/s10669-007-9155-z. – (Second Author: Dept Envir. Sci., H.N.B. Garhwal Univ., P.O. Box 67, Srinagar, Garhwal-246174, India).

Aquatic insect diversity was surveyed during Oct. 1999-Sept. 2001, and all the important physico-chemical environmental variables were measured. Odon. contributed 2% to the aquatic insect diversity, and were represented by “*Agrion*” and *Brachythemis*. Specific names are not stated.

- (17082) VAN KLEEF, H., G. VAN DER VELDE, R.S.E.V. LEUVEN & H. ESSELINK, 2008. Pumpkinseed sunfish (*Lepomis gibbosus*) invasions facilitated by introductions and nature management strongly reduce macroinvertebrate abundance in isolated water bodies. *Biol. Invasions* 2008: 10 pp. DOI 10.1007/s10530-008-9220-7. – (Second Author: Naturalis, P.O. Box 9517, NL-2300 RA Lei-

den).

The investigations were carried out at 8 pools in the Netherlands; 4 of these housed large *Lepomis* populations the other 4 did not contain *Lepomis*. Macroinvertebrate abundance in pools populated by *Lepomis* was 83% lower than in those without the fish. The average odon. densities in the *Lepomis* pools were 5.4 ± 4.2 individuals/m², and in those without *Lepomis* 40.3 ± 6.7 .

- (17083) ZESSIN, V., J. ZALOHAR & T. HITIJ, 2008. A new fossil dragonfly (Insecta, Odonata, Libellulidae) of the Miocene (Lower Sarmatian of Tunjice Hills, Slovenia). *Virgol MittBl. ent. Ver. Mecklenburg* 11(1): 86-96. (With Germ. s.). – (First Author: Lange Str. 9, D-19230 Jasnitz; – Second Author: Dept Geol., Univ. Ljubljana, Aškerčeva 12, SI-1000 Ljubljana).
Sloveniatrum robici gen. n., sp. n. is described from the upper part of the sixth bed of the Coprolitic Ho-

rizon of the Tunjice Hills, Slovenia (age ca 11.6-12.7 Myr BP), based on a plate and counterplate of an isolated fore- and hindwing. It is compared with the fossil libellulid genera of similar age.

- (17084) ZHANG, B., D. REN & H. PANG, 2008. New dragonflies (Insecta: Odonata: Gomphaeschnidae) from the Yixian Formation in Inner Mongolia, China. *Progr. nat. Sci.* 18: 59-64. – (Second Author: Coll. Life Sci., Capital Normal Univ., Beijing-100037, China).
Sophoaeschna frigida gen. n., sp. n. and *Falsisophoaeschna generalis* gen. n., sp. n. are described from the Yixian Formation (Upper Jurassic-Lower Cretaceous) in Liutiaogou village, Ningcheng co. The holotypes are deposited in Coll. Life Sci., Capital Normal Univ., Beijing, China. This is the first report on Odon. from this formation in Inner Mongolia and the second record of fossil Gomphaeschnidae from China.