Kawakatsu's Web Library on Planarians: November 15, 2011.

MISCELLANEOUS PAPERS ON "TURBELLARIANS"

By

MASAHARU KAWAKATSU, EUDOXIA MARIA FROEHLICH, HUGH D. JONES, MIYUKI KAWAKATSU and TETSUYA KAWAKATSU

ARTICLE I

A LIST OF PUBLICATIONS ON JAPANESE "TURBELLARIANS" (2010).... INCLUDING TITLES OF PUBLICATIONS ON FOREIGN "TURBELLARIANS" WRITTEN BY THE JAPANESE AUTHORS....

Compiled and annotated by MASAHARU KAWAKATSU, MIYUKI KAWAKATSU and TETSUYA KAWAKATSU

In a series of publications, of which this is the forty-third, we have collected and classified chronologically the titles of papers and records with regard to our Turbellarians, which were published during the year 2010. As usual we have added the English titles of Japanese papers with no foreign language. Titles in Japanese are omitted in this version.

At the end of ARTICLE I, comments on several papers on planarians recently published will be given.

The pdf versions of 'A List of Publications on Japanese Turbellarians' (published after: 2001) are available at Kawakats's website: http://victoriver.com . Left button: planarian.net mirror. See also Left buttons: Miscellaneous 05, 06, 07, 08, 09, 010.

Digital versions of various taxonomic and ecological papers published by Kawakatsu's team are available at Kawakatsu's private collection (magneto-optical disc). Digital versions of teaching guides and popular scientific articles are also available (mainly in Japanese).

July 1, 2011. Sapporo and Kisarazu, Japan.

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A LIST OF PUBLICATIONS ON JAPANESE "TURBELLARIANS" (2010)

Additional Key to the Japanese Journals

Center for Ecological Research, Kyôto University: News. Ôtsu, Japan.

Chikyû-Kankyô. Association of International Research Initiation for Environmental Studies. Tôkyô, Japan.

Information. International Information Institute. Koganei, Tôkyô-To, Japan.

1971 (Shôwa 50-Nen)

Sugino, H., Okuno, Y. & Yoshinobu, J. Effect of transplanted pieces from non-X-irradiated worms on irradiated ones in *Dugesia japonica*. Mem. Ôsaka Kyôiku Univ., III, Nat. Sci. and App. Sci., 19: 63-76.

1996 (Heisei 8-Nen)

Timoshkin, O. A. Sayonara, and hope to see you again! Center for Ecol. Res., Kyôto Univ.: News, (40): 3 pages (without pagination).

2005 (Heisei 17-Nen)

Nishino, M. & Ohtaka, A. [Change of benthonic animals in the profundal zone of the Northern Basin of Lake Biwa-ko]. Lake Biwa Study Monograph, (22): Prefatory color page including photographs of *Bdellocephala annandalei* and *Phagocata kawakatsui* + pp. 187-196. (Jap.)
http://www.lberi.jp/root/jp/31kankou/3113kenkyureport/syoho_bi/22/22-26.pdf
http://www.lberi.jp/root/jp/31kankou/3113kenkyureport/syoho_bi/22/22-03.pdf

2006 (Heisei 18-Nen)

Naumova, T. V., Novikova, 0. A. & Timoshkin, O. A. Zoogeographical analysis of the distribution of *Bdellocephala* species (Platyhelminthes: Tricladida : Paludicola). Hydro-biologia, 568 (S): 177-181.

Novikova, O. A., Naumova, T. V. & Timoshkin, O. A. Karyotypes and current approach to the systematica of endemic Baikal representatives of *Bdellocephala* genus (Turbellaria, Dendrocoelidae). Hydrobiologia, 568 (S):183-191.

2007 (Heisei 19-Nen)

Hase, S., Kashiwagi, E., Kobayashi, K., Hoshi, M. & Matsumoto, M. Characterization of novel genus expressed specifically in the sexual organs of the planarian *Dugesia ryukyuensis*. Int. Jour. Dev. Biol., 51: 345-349.

2008 (Heisei 20 Nen)

Minakoshi, Y. [Ômisuji-kôgaibiru (*Bipalium nobile*) and Kuroiro-kôgaibiru (*Diversibipalium* sp.) from Tôkyô-To, Japan). In: Minakoshi, Y. (Supervision by Watanabe, H.), "A Handbook for Small Soil Animals", p. 24 (text with 2 photos). Bun'ichi Sôgô Shuppan Co., Tôkyô. (Jap.)

Sugiura, S., 2008. Hot water tolerance of soil animals: utility of hot water immersion in preventing invasions of alien soil animals. Jap. Jour. Appl. Entomol Zool., 43 (2): 207-212.

2009 (Heisei 21 Nen)

Chinone, S. (Freshwater and blackish water planarians recorded from Ibaraki Prefecture, Kantô Region, Honshû, Japan]. In: Report of Comprehensive Surveys of Plants, Animals and Geology in Ibaraki Prefecture by the Ibaraki Nature Museum. - Trends of Insects and Other Invertebrates in 2008-, Prefatory 2 color photos (*Phagocata papillifera* and its locality: a draw up well of Mr. Y. Ishizuka's residence); pp. 69-72. (Jap.)

Note. The collection records the following 6 species in Ibaraki Prefecture with black-and-white photographs of live specimens are recorded. They are: *Dugesia japonica* Ichikawa et Kawakatsu, 1964; *Girardia tigrina* (Girard, 1850), an exotic species; *Phagocata vivida* Ijima et Kaburaki, 1916); *Phagocata papillifera* (Ijima et Kaburaki, 1916); *Seidlia auriculata* (Ijima et Kaburaki, 1916); *Paucumara trigono-cephala* (Ijima et Kaburaki, 1916).

Sugiura, S. Impacts of the invasive flatworm *Platydemus manokwari* on island-endemic land snails. Chikyû-Kankyô, 14 (1): 25-32. (Jap. with Eng. title.)

Sugiura, S. Impacts of alien predators on endemic land snails of the oceanic Ogasawara Islands. Tentacle, (17): 28-30.

Sugiura, S. Seasonal fluctuation of invasive flatworm predation pressure on land snails: Implications for the range expansion and impacts of invasive species. Biol. Conservat., 142: 3013-3019.

Takeda, H., Nishimura, K. & Agata, K. Planarians maintain constant different cell types during changes in body size by using the stem cell system. Zool. Sci. (Tôkyô), 26: 805-813.

2010 (Heisei 22 Nen)

Agata, K. Brain regeneration in the planarian *Dugesia ,japonica*. 1st International Meeting on Planarian Biology, May 25-28, 2010, Münster, Germany. EuropeanNet, DFG, pp. 2021. http://www.europlanet.org .

Agata, K. Brain regeneration in the planarian *Dugesia japonica*. 1st International Meeting on Planarian Biology, Münster, Germany, May 25-28, 2010 (Preliminary Program), p. 5. By title only.

Chiba, S. Morphological and ecological shifts in a land snail caused by the impact of an introduced predator. In: Kawakami, K. & Okochi, I., eds.: Restoring the Oceanic Island Ecosystem. Impact and Management of Invasive Alien Species in the Bonin Islands. Pp. 57-64. Springer, Berlin, etc.

Original: Chiba, S., 2007. Morphological and ecological shifts in a land snail caused by the impact of an introduced predator. Ecol. Res., 22: 884-891.

Chinone, S. [Reminiscent animals I observed]. *Phagocata papillifera* (Ijima et Kaburaki, 1916) found in a well of Mr. Y. Ishizuka's residence in Toyo'oka-chô, Mitsukaidô City, Ibaraki Prefecture, Kantô Region, Honshû, Japan. Shizen Tomo-no-Kai (2/10), p. 3 . (Jap.)

Note. The former Mitsukaidô City is now called as Jôsô City (after 2006).

Conte, M., Deri, P., Isolani, Y. E., Mannini, L. & Batistoni, R. Characterization of hsp genes in planarian stem cells. Berg. Jour. Zool., 140 (Suppl.) : 137-143.

Note. *Dugesia japonica* (GI strain) is used.. http://scholar.google.co.jp/scholar?start=50&q =GI+strain+of+Dugesia+japonica&hl=ja&as_sdt=08as-vis=1

Fukushima, M., Osanai, K. & Ishida, S. Testosterone and androstenedione localize in the spermatozoa derived from the partner specimen after copulation in freshwater planarian. Abstracts of the 81st Ann. Meet. of the Zool. Soc. of Japan held in Tôkyô, on September 23-25, 2010, p. 83. (Jap.)

Hayashi, T., Shibata, N., Okumura, R., Kudome, T., Nishimura, O., Tarui, H. & Agata, K. Single-cell gene profiling of planarian stem cells using fluorsent activated cell sorting and its "index sorting" function for stem cell research. Dev. Growth. Differ., 52: 1131-144 .

Hikosaka, T., Koike, K., Yamashita, H., Hikosaka, A. & Koike, K. Artificial rearing and oviposition of *Waminoa* sp. (Acoela, Acoelomorph). Abstracts of the 81st Ann. Meet. of the Zool. Soc. of Japan held in Tôkyô, on September 23-25, 2010, p. 150. (Jap.)

Iwai, N., Sugiura, S. & Chiba, S. Predation impacts of the invasive flatworm *Platydemus manokwari* on eggs and hatchings of land snails. Jour. Mollusc. Stud., 76: 275-278. Doi:10.1093/mollus/eyq007 .

Iwai, N., Sugiura, S. & Chiba, S. Prey-tracking behavior in the invasive terrestrial planarian *Platydemus manokwari* (Platyhelminthes, Tricladida). Naturwissenschaften (2010), 97: 997-1002. Doi: 10.1007/s00114-010-0717-4 .

Kawakatsu, M. Entry in the Revised Red List - The Other Invertebrates (Archnida, Crustacea, etc,). CR + EN: *Bdellocephala annandalei* Ijima et Kaburaki, 1016. In: Ministry of the Environment, Japan (ed.), "The Revised Red List and the Explanatory Data: The Other Invertebrates (Arachnida, Crustacea, etc.)", pp. 2, 12, 14. The Japan Wild Life Research Center, Tôkyô. See 'Entries of Planarians in the Japanese Red Data Books, etc.' printed at the end of ARTICLE I in the present web article.

Kawakatsu, M., Froehlich, E. M. & Jones, H. D. Miscellaneous papers on "Turbellarians". ARTICLE II. Additions and corrections of the previous land planarian indices of the world (Platyhelminthes, Seriata, Tricladida, Continenticola, Geoplanoidea). Additions and corrections of the previous land planarian indices of the world-18.

Kawakatu's Web Library on Planarians: Sept. 15, 2010. http://victoriver.com . Left button: Miscellaneous 10. Pp. 11-29.

Kawakatsu, M., Froehlich, E. M., Jones, H. D., Kawakatsu, M-y. & Kawakatsu, T. Miscellaneous papers on "Turbellarians". Kawakatsu's Web Library on Planarians. Sept. 15, 2010. http://victoriver.com . Left Button: Miscellaneous 10. Pp. 1-29.

Note. This web article consists of 2 web articles: ARTICLE I (by Kawakatsu, M., Kawakatsu, M-y. & Kawakatsu, T.) and ARTICLE II (by Kawakatsu, M., Froehlich, E. M. & Jones, H. D.). See each web article according to the alphabetical order of the authors' names.

Kawakatsu, M., Kawakatsu, M-y. & Kawakatsu, T. Miscellaneous papers on "Turbellarians". ARTICLE I. A list of publications on Japanese "Turbellarians" (2009) ... Including titles of publications on foreign "Turbellarians" written by the Japanese authors. Kawakatsu's Web Library on Planarians: Sept. 15, 2010. http://victoriver.com . Left button: Miscellaneous 10. Pp. 1-10.

Kawakatsu, M. & Murayama, H. Introduction of our latest web article: A new list of Japanese freshwater planarians based upon a new higher classification on planarian flatworms proposed by Sluys, Kawakatsu, Riutort & Baguñá (2009). Shibukitsubo (Niigata Shell Club), (31): 43-44. (Jap. with Eng. title.)

Kawakatsu, M., Sluys, R., Faubel, A., Jones, H. D. & Yamamoto, K. Philipp Franz Balthasar von Siebold, the author of Fauna Japonica (1833-1850) and Flora Japonica (1835-1870), a cousin of Carl Theodor Ernst von Siebold, a famoun German zoologist who founded in 1848 the journal Zeitschrift für wissenschaftliche Zoologie. ---With notes on four Western naturalists (W. Stimpson, P. B. W. Heine, F. M. Hilgendorf and H. N. Moseley) who visited Japan in the Nineteenth Century---. Kawakatsu's Web Library on Planarians: October 31, 2010. http://victoriver.com . Left button: Von Siebold. Pp. 1-38 + pls I-XVI.

Kubota, S. & Kawakatsu, M. Second distribution record of a single bipaliid species (Plathelminthes, Tricladida, Continenticola) in Wakayama Prefecture, Honshû, Japan, with an explanatory note of a new higher classification of the Tricladida. Nanki-Seibutsu (The Nanki Biol. Soc.), 52 (2): 97-101. (Jap. with Eng. title and explanation of figures.)

Maezawa, T., Tanaka, H., Ono, M., Aoki, M., Horiike, K., Matsumoto, M. & Kobayashi, K. Functional analysis of D-amino acid oxidase in the ovarian development of the planarian *Dugesia ryukyuensis*. Abstracts of the 81st Ann. Meet. of the Zool. Soc. of Japan held in Tôkyô, on September 23-25, 2010, p. 94. (Jap.)

Note. *Dugesia ryukyuensis* (OH strain) is used. http://scholar.google.co.jp/scholar?start=10&q =OH+Strain+of+ Dugesia+ryukyuensis_-Google_Scholar_3.mht .

Matsui, S., Akatani, K., Matsuo, T. & Sugiura, S. Invasion of the snail-eating flatworm *Platydemus manokwari* on Minami-daito Island. Jap. Jour. Appl. Entomol. Zool. , 54 (3): 1113-1116. (Jap. with Eng. summary.)

Nagasawa, R., Ogura, S., Takahashi, M. & Ishida, S. Karyotype analysis of 7 species in Polyclads. Information (Tôkyô), 13 (3) A: 759-766.

Nakano, H. Phylogeny and evolution of *Xenoturbella bocki*. Abstracts of the 81st Ann. Meet. of the Zool. Soc. of Japan held in Tôkyô, on September 23-25, 2010, p. 72. (Jap.)

Nishimura, K., Kitamura, Y., Taniguchi, T. & Agata, K. Analysis of motor function modulated by cholinergic neurons in planarian *Dugesia japonica*. Neuroscience, 168 (1): 18-30.

Nodono, H., Kobayashi, K. & Matsumoto, M. Pluripotent stem cell transplantation in planarian: relationship between X-ray dose and the ratio of donor-derived cells in recipient. Abstracts of the 81st Ann. Meet. of the Zool. Soc. of Japan held in Tôkyô, on September 23-25, 2010, p. 100. (Jap.)

Ohbayashi, T., Okochi, I., Sato, H., Ono, T. & Chiba, S. Rapid decline of endemic snails in the Ogasawara Islands, Western Pacific Ocean. In: Kawakami, K. & Okochi, I., eds.: Restoring the Oceanic Island Ecosystem. Impact and Management of Invasive Alien Species in the Bonin Islands. Pp. 7-33. Springer, Springer, Berlin, etc.

Original: Ohbayashi, T., Okochi, I., Sato, H., Ono, T. & Chiba, S., 2007. Rapid decline of endemic snails in the Ogasawara Islands, Western Pacific Ocean. Appl. Entomol. Zool., 42 (3): 479-485.

Ohbayashi, T., Okochi, I., Sato, H. & Ono, T. Food habit of *Platydemus manokwari* De Beauchamp, 1962 (Tricladida: Terricola: Rhynchodemidae), known as a predatory flatworm of land snails in the Ogasawara (Bonin) Islands, Japan. In: Kawakami, K. & Okochi, I., eds.: Restoring the Oceanic Island Ecosystem. Impact and Management of Invasive Alien Species in the Bonin Islands. Pp. 35-40. Springer, Berlin, etc.

Original: Ohbayashi, T., Okochi, I., Sato, H. & Ono, T., 2005. Food habit of *Platydemus manokwari* De Beauchamp, 1962 (Tricladida: Terricola: Rhynchodemidae), known as a predatory flatworm of land snails in the Ogasawara (Bonin) Islands, Japan. Appl. Entomol. Zool., 40 (4): 609-614.

Ohtaka, A. [The river ecosystem is supported by deep forests]. In: Shirakami-gaku Nyûmon, pp. 21-25. The Shirakami-Sanchi Institute of Natural Environment, Hirosaki University, Hirosaki, Japan. (Jap.)

Okochi, I., Sato, H. & Ohbayashi, T. The cause of mollusk decline on the Ogasawara Islands. In: Kawakami, K. & Okochi, I., eds.: Restoring the Oceanic Island Ecosystem. Impact and Management of Invasive Alien Species in the Bonin Islands. Pp. 15-25.

Original: Okochi, I., Sato, H. & Ohbayashi, T., 2010. The cause of Mollusk decline on the Ogasawara Islands. Biodiv.and Conservat., 13: 1465-175.

Orii, H. Planarian regeneration in the absence of a blastema. Belg. Jour. Zool., 140 (Suppl.): 1115-1118.

Orii, H. & Watanabe, K. Expression of DjVLG-A protein in the planarian *Dugesia japonica*. Abstracts of the 81st Ann. Meet. of the Zool. Soc. of Japan held in Tôkyô, on September 23-25, 2010, p. 97. (Jap.)

Rouhana, L., Shibata, N., Nishimura, O. & Agata, K. Different requirements for conserved post-transcriptional regulators in planarian regeneration and stem cell maintenance. Dev. Biol., 34 (2) : 429-443.

Sakai, M. & Sakaizumi, M. Geographic diversity of *Dugesia japonica* in Japan. Abstracts of the 81st Ann. Meet. of the Zool. Soc. of Japan held in Tôkyô, on September 23-25, 2010, p. 70. (Jap.)

Sanyô Shinbun. [Occurrence of a planarian *Dugesia japonica* with supernumerary eyes observed by the Science Club students of Tamano High School]. The Sanyô Shinbun (Newspaper), February 4, 2010 (Thursday).

Shibata, N., Rouhana, L. & Agata, K. Cellular and molecular dissection of pluripotent adult somatic stem cells in planarians. Develop. Growth Differ., 52: 27-41.

Shirasawa, Y., Oota, K., Shinoda, S. & Seo, N. Regeneration of the small pieces in the land planarian *Bipalium nobile*. Abstracts of the 81st Ann. Meet, of the Zool. Soc. of Japan held in Tôkyô, on September 23-25, 2010, p. 134. (Jap.)

Sluys, R., Kawakatsu, M. & Yamamoto, K. Exotic freshwater planarians currently known from Japan. Berg. Jour. Zool., 140 (Suppl.), 103-109.

Sluys, R., Smolders, I., Kawakatsu, M. & Kuranishi, R. Japanese abstract of the following paper: Freshwater planarians (Platyhelminthes, Tricladida, Planariidae) from the Kuril Islands and Kamchatka (in Species Diversity, 14 (4): 307-322). Taxa (Proc. Jap. Soc. Syst. Zool.), (28): 65. (Jap.)

Sugiura, S. Prey preference and gregarious attacks by the invasive flatworm *Platydemus manokwari*. Biol. Invarsions, 12: 1499-1507.

Sugiura, S. Hot water tolerance of soil animals: Utility of hot water immersion in preventing invasions of alien animals. In: Kawakami, K. & Okochi, I., eds.: Restoring the Oceanic Island Ecosystem. Impact and Management of Invasive Alien Species in the Bonin Islands. Pp. 127-132.

Original: Sugiura, S., 2008. Hot water tolerance of soil animals: utility of hot water immersion in preventing inversions of alien soil animals. Appl. Entomol. Zool., 43 (2): 207-212.

Sugiura, S., Okochi, I. & Tamada, H. High predation pressure by an introduced flatworm on land snails on the Oceanic Ogasawara Islands. In: Kawakami, K. & Okochi, I., eds.: Restoring the Oceanic Island Ecosystem. Impact and Management of Invasive

Alien Species in the Bonin Islands. Pp. 41-44. Springer, Berlin, etc.

Original: Sugiura, S. & Okochi, I., 2006. High predation pressure by introduced flatworm on land snails on the Oceanic Ogasawara Islands. Biotropica, 38 (5): 700-703.

Sugiura, S. & Yamaura, Y. Potential impacts of the invasive flatworm *Platydemus manokwari* on Arboreal snails. In: Kawakami, K. & Okochi, I., eds.: Restoring the Oceanic Island Ecosystem. Impact and Management of Invasive Alien Species in the Bonin Islands. Pp. 45-50. Springer, Berlin, etc.

Original: Sugiura, S. & Yamaura, Y., 2009. Potential impacts of the invasive flatworm *Platydemus manokwari* on arboreal snails. Biol. Inversions, 11: 737-742.

Suzuki, T., Yoshida, W. & Ishida, S. Studies on the chromosomal polymorphism of Japanese freshwater planarian, *Seidlia auriculata*. Information (Tôkyô), 13 (3):A: 767-773. http://www.information-iii.org/info/main_j.html .

Takeda, H., Nishimura, K. & Agata, K., 2009. Planarians maintain a constant ratio of different cell types during changes in body size by using the stem cell system. Zool. Sci. (Tôkyô), 26: 805-813. The Zoological Society of Japan: Outlet Express Message, June 6, 2010.

Uchiyama, R. [Nami-uzumushi, a natural scavenger (*Dugesia japonica*)]. In: Uchiyama, R.: "Notes on Japanese Aquatic Animals", pp. 117 (a photo) and 119 (text). Basirico Co., Tôkyô. (Jap.)

Van Steenkiste, N., Davison, P. & Artois, T. *Bryoplana xerophila* n. g. n. sp., a new limnoterrestrial microturbellarian (Platyhelminthes, Typhloplanidae, Protoplanellinae) from epilithic mosses, with notes on its ecology. Zool. Sci. (Tôkyô), 285-291.

Volonterio, O. Two new species of *Temnocephala* (Platyhelminthes, Temnocephalida) from the South American snake-necked turtle *Hydromedusa tectifera* (Testudines, Chelidae). Zool. Sci. (Tôkyô), 27: 965-970.

The Zoological Society of Japan. The Zoological Society of Japan made the Zoological Science Award (2010) to the 8 papers. One of it is as follows:

Takeda, H., Nishimura, K. & Agata, K., 2009. Planarians maintain a constant ratio of different cell types during changes in body size by using the stem cell system. Zool. Sci. (Tôkyô), 26: 805-813.

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Dr. Timoshkin's Bulky Russian Book: 2010-2011

Index of Animal Species Inhabiting Lake Baikal and Its Catchment Area. Volume II. Basins and Channels in the South of East Siberia and North Mongolia. Book 2.

Editor-in-Chief: Dr. Oleg A. Timoshkin. Russian Academy of Sciences, Siberian Division, Limnological Institute. 2010-2011. NAUKA, Novosibirsk.

According to selected pdf files of the articles on planarians in the Book received from Dr. Timoshkin, the Book consists of the Appendices 1-5 (pp. 995-1664) with over 30 articles. The official publication date seems to be February 28, 2011.

The Appendix 3 of the Book contains 3 important articles on organisms inhabiting in Lake Biwa located in central Japan, one of Ancient Lakes in the world. Their titles are given bellow with short notes.

1. Timoshkin, O. A., 2011. Short history of our biodiversity research on Lake Biwa. Pp. 1435-1438.

2. Timoshkin, O. A., Grygier, M. J., Wada, E., Nakai, K., Nishino, M., Genkai, S. J., Biserov, V. I., Gagarin, V. G., Semernoy, V. P., Jankowsky, A. W., Stepanjants, S. D., Tsalolikhim, S. Ya., Starobogatov, Ya. I., Alexeev, V. R., Tuzovskij, P. V., Okneva, G. L., Sheveleva, N. G., Pomazkova, G. I.. Arov, I. V., Nazepova, G. F., Jang, H., Obolkina, L. A., Chernyshev, A. V., Morino, H., Matsuda, M., Ohtsuka, T., Kawakatsu, M., Maehata, M., Masuda, Y., Faubel, A., Yahiro, K., Hirasawa, R., Tuji, A., Kusuoka, Y., Kameda, K., Ishida, T., Itoh, T., Ichise, S., Wakabayashi, T., Okubo, I., Seki, Sh., Nagasawa, K., Ogawa, K., Masunaga, K. & Gamo, J., 2011. Biodiversity of Lake Biwa: New discoveries and future potential. Pp. 1439-1513 + pls. 1-27 (mainly in color).

Note 1. The Section 'Turbellaria' (free-living PLATHELMINTHES) (by Timoshkin, Grygier, Kawakatsu, Faubel & Gamo) is a large article in the Book (pp. 1445-1454, pls 5-22).

Note 2. This article is an amplified and revised edition of the previous abstract printed in the Berliner paläologische Abhandlungen, 9 : 61 (Abstracts of the International Symposium- Speciation in Ancient Lakes SIAL IV, Berlin, September 4-8, 2006). Authors and the title of that Abstract are as follows:

Timoshkin, O. A., Grygier, M. J., Nishino, M., Wada, E., Genkai, S. I., Biserov, V. I., Gagarin, V. G., Sememoy, V. P., Jankowski, A. W., Stepanjants, S. D., Tsalolikhim, S. Y., Sheveleva, N. G., Pomazkova, G. I., Azov, I. V., Mazepova, G. F., Janz, H., Obolkina, L. A., Chernyshev, A. V., Morino, H., Nakai, K., Matsuda, M., Ohtsuka, T., Kawakatsu, M., Maehata, M., Masuda, Y., Takemon, Y., Tanida, K., Kusuoka, Y., Yahiro, K., Hirasawa, R., Tuji, A., Kusuoka, Y., Kameda, K., Ishida, T., Itoh, T., Ichise, S., Wakabayashi, T., Okubo, I., Seki, S., Nagasawa, K., Ogawa, K. & Masunaga, K., 2006. Biodiversity of Lake Biwa: New discoveries and future potential.

3. Timoshkin, O. A., 2011. The new genus *Morimiurella* (Neorhabdocoela, Kalyptorhynchia), established for deep water microturbellarians from Lake Biwa (Japan) with preliminary reconsideration of the taxonomic contents of the genus *Koinocystis* Meixner, 1924. Pp. 1514-1617 + pls. 1-8 (in color).

Faubelus neupommerensis (Faubel, 1983) in the Family Faubelidae Özdikmen, 2010 (Polycladida, Acotylea, Leptoplaniidae); *Novomitchellia sarawakana* (Kawakatsu et Chapman, 1983) (Tricladida, Maricola, Cavernicola, Dimarcusiidae Mitchell et Kawakatsu, 1972)

Özdikmen (2010: 115-116) described a new replacement genus name (a nomen novum) *Faubelus* Özdikmen, 2010 for the genus *Notocirrus* Faubel, 1983. Then, *Faubelus neupommerensis* (Faubel, 1983) was placed in the new family Faubelidae Özdikmen, 2010.

Özdikmen (2010: 116-117) pointed out that the triclad genus *Mitchellia* Kawakatsu et Chapman, 1983 is preoccupied by the fossil gastropod genus *Mitchellia* Koninck, 1877. Thus, *Novomitchellia* Özdikmen, 2010 was proposed for the former. The triclad species cited above should be shown by a replaced name *Novomitchellia sarawakana* (Kawakatsu et Chapman, 1983).

Additionally, the genus '*Mitchellia* Kawakatsu et Chapman, 1983' (Suborder Cavernicola Sluys, 1990, Family Dimarcusidae Mitchell et Kawakatsu, 1972) in a paper by Sluys, Kawakatsu, Riutort & Baguñà (2009: 1769) should replaced with *Novomitchellia* Özdikmen, 2010.

Note 1. Although Özdikmen's (2010) opinions mentioned above are correct he offend the spirit of the International Code of Zoological Nomenclature (4th Ed., 1999, Appendix A, Code of Ethics, 3). Both Dr. Faubel and Kawakatsu are researchers on the active service.

References (Comments on Özdikmen's article)

Faubel, A., 1983. The Polycladida, Turbellaria. Proposal and establishment of a new system. Part I. The Acotylea. Mitt. Hamb. Zool. Mus. Inst., 80: 17-121.

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Sluys, R., Kawakatsu, M., Riutort, M. & Baguñà, J., 2009. A new higher classification of planarian flatworms (Platyhelminthes, Tricladida). Jour. Nat. Hist., 43 (29-30): 1763-1777.

Dr. Sachiko Ishida's Four Publications on Freshwater Planarians From Northern Japan

1. **Ishida, S., 2000. Fresh-water planarians distributed in Rishiri Island, Hokkaido, Japan (Report for a grant from Rishiri Town Museum, 1998).** Rishiri Studies, (10): 45-49. (In Japanese, with English abstract.) http://homepage.mac.com/rishiri/RS/1908.pdf

A total of 6 species of freshwater triclad planarians was recorded from Rishiri Island, Hokkaidô (fig. I on page 47). See Note 1 by Kawakatsu.

Dr. Ishida emphasized that "Our 18S rRNA gene sequence data showed that *Dendrocoelopsis ichikawai* should be classed with the genus *Bdellocephala*". See Note 2 by Kawakatsu.

Note 1. Her color photos of freshwater planarians from Rishiri Island (Ishida, 2000, p. 47, fig. 1A-F) are as follows: A: *Bdellocephala borealis* Kawakatsu, 1978; B: *Dendrocoelopsis ichikawai* Kawakatsu, 1977; C: *Phagocata* sp.; D: *Seidlia schmidti* (Zabusov, 1916); E: *Polycelis sapporo* (Ijima et Kaburaki, 1916); F: Probably *Polycelis sapporo*.

Note 2. Dr. Ishida did not understand the taxonomic definitions of both the genera *Bdellocephala* De Man, 1875 and *Dendrocoelopsis* Kenk, 1930. See the Section 'On the status of *Dendrocoelopsis ichikawai* ' in the paper by Kawakatsu, Sluys, Timoshkin, Naumova, Nishino & Takai (2001: 210).

2. **Ishida, S., Nishitani, S., Yoshida, W., Kuznedelov, K. D. & Satô, M., 2011. First description of two species of the genus *Phagocata* planarians in Rishiri Island, Hokkaido, Japan -Identification, karyotype analysis, comparison of the partial 18S rDNA sequence-.** Rishiri Studies, (30): 75-82. (In Japanese, with English abstract.) http://homepage.mac.com/rishiri/RS/3012.pdf .

Additionally, two *Phagocata* species were recorded from Rishiri Island. They are: *Phagocata iwamai* Ichikawa et Kawakatsu, 1962 (cf. Ishida, 2000: 47, fig. 1C, *Phagocata* sp.). Another species is *Phagocata albata* Ichikawa et Kawakatsu, 1962. Their chromosome numbers are also clarified. *Ph. iwamai* (2n = 16, n=8); *Ph. albata* (2n=24, n=12). Cf. Nishitani, Yoshida & Ishida (2006).

Note 3. Dr. Ishida and her team members considered that *Phagocata kawakatsui* Okugawa, 1956 can be separable into two subspecies. Kawakatsu considered as a taxonomist that the subspecies separation of *Ph. kawakatsui* is unnecessary. See the Section of "Note added in proof" in the taxonomic paper of *Phagocata kawakatsui* by Kawakatsu, Oki & Tamura (1986: 119).

3. **Ishida, S., 2008. [Freshwater Planarians Found in the Shirakami-Sanchi, Aomori and Akita Prefecture, Tôhoku Region, Honshû, Japan].** In: Shirakami-Sanchi no Miryoku, pp. 24-26, 61. Hirosaki-Daigaku Shuppan-kai, Hirosaki. Ed. 1 (October 30, 2008); Ed. 2 (January 22, 2009). (In Japanese.)

A total of 4 species of freshwater planarians was recorded from the 'Kumagera-no-Mori' Forest, the Shirakami-Sanchi (mountains). Color photos of living specimens of those planarians are shown in 'photos 1' on page 24. Photomicrographs of chromosomes and idiogram of *Seidlia auriculata* are shown in 'photos 2' on page 25.

Note 4. Dr. Ishida's color photos of freshwater planarians (photos 1, living specimens) are as follows: A and B, *Seidlia auriculata* (Ijima et Kaburaki, 1916) (A, sexual specimen; B, asexual specimen); C: *Dugesia japonica* Ichikawa et Kawakatsu, 1964; D: *Phagocata vivida* (Ijima et Kaburaki, 1916); E: *Polycelis sapporo* (Ijima et Kaburaki, 1916).

4. **Ishida, S., 2011. [Freshwater planarians found in the Shirakami-Sanchi (UNESCO World Heritage Site in Aomori and Akita Prefectures, Northern Honshû, Japan)].** In: Shirakami-Gaku Nyûmon (Revised Edition), pp. 31-35. (In Japanese.) Published by the Shirakami-Sanchi Institute of Natural Environment, Hirosaki University, Hirosaki, Japan. Published: March 23, 2011.

Note 5. English explanations of Figures 1-7 of Dr. Ishida's Japanese article (2011) are given by Kawakatsu as follows:

Fig. 1 (on p. 31, middle). [Color photographs of living specimens of 5 freshwater planarian species found in the Shirakami-Sanchi (A-E) and the other planariid species from Rishiri Island, Hokkaidô (F)]. For the photos A-F, see Note 5 in the previous Section 3. The remained species (F) is *Seidlia schmidti* (Zabusov, 1916) from Rishiri Island.

Fig. 2 (on p. 32, top-left). [Karyograms of neoblasts of *Seidlia auriculata* from various localities in Japan]. For the detailed English explanation, see Teshirogi, Ni-imura & Ishida (1991: 153, fig. 6). See also Ishida, Yoshida, Nishitani & Teshirogi (2004).

Fig. 3 (on p. 32, top-right). [Geographical distribution of karyotypes of *Seidlia auriculata* in Japan]. For the detailed English explanation, see Teshirogi, Ni-mura & Ishida (1991: 148-149, fig. 1). See also Ishida, Yoshida, Nishitani & Teshirogi (2004).

Fig. 4 (on p. 32, bottom). [Karyogram (A) and idiogram (B) of *Seidlia auriculata* from the 'Kumagera-no-Mori' Forest, the Shirakami-Sanchi]. See the following literature. Ishida (2008: 25, photos 2). See also Ishida, Yoshida, Nishitani & Teshirogi (2004).

Fig. 5 (on p. 33, middle). The assumed migration routes of the five species of freshwater planarians in the Japanese Islands (after Kawakatsu, 1965; partly modified by Ishida, 2011). In the original figure by Kawakatsu (1965: 378, fig. 11), the arrows indicate the direction of the migration routes of each species. J (broken line): *Dugesia japonica*; V (solid line): *Phagocata vivida*; A (thin-broken line): *Seidlia auriculata*; S (dotted line): *Polycelis sapporo*; C: (double thin-broken line): *Seidlia schmidti*. See also Kawakatsu (1967: 125, fig. 5).

Dr. Ishida added a partial continuation of the Kawakatsu's (1965) three assumed migration routes of the three species in Hokkaidô and the northern half area of Honshû. They are: *Seidlia auriculata* (purple line); *Polycelis sapporo* (green line); *Seidlia schmidti* (red line).

For the future citation of Fig. 5 in Ishida (2011), the following formality is necessary.

After Kawakatsu (1965); partly modified by Ishida (2011).

Note 6. P. 35, References 8). **Should read as follows:**

Kawakatsu, M., 1967. On the ecology and distribution of freshwater planarians in the Japanese Islands, with special reference to their vertical distribution **(Revised Edition)**. Bull. Fuji Women's College, (5): 117-177.

Note 7. The freshwater planarian species those were already known to occur in Kamchatka and Hokkaidô in northern Japan have also colonized the Kuril Islands. Possible scenarios for dispersal into the Kuril Islands from two mainland source areas during the last Glacial Maximum were discussed by Sluys, Smolders, Kawakatsu, Pietsch & Kuranishi (2009: 318-319, figs 8 and 9).

Fig. 6 (on p. 33, bottom). [Explanatory chromosomal figures of the formation of the special set (2n=10) of *Seidlia auriculata* from the 'Kumagera-no-Mori' Forest]. Cf. Nishitani, Yoshida & Ishida (2005: 19, fig. 10). See also Ishida, Yoshida, Nishitani & Teshirogi (2004).

Fig. 7 (on p. 34, bottom). [Neighbour-joining tree of several Japanese *Polycelis* and *Seidlia* species using 18S rDNA sequences with foreign *Phagocata* species as the outgroup. Bootstrap percentage (n=1000)]. Cf. Yoshida, Nishitani & Ishida (2005: 25, fig 2A).

Japanese Dendrocoelid species. Genus *Bdellocephala* De Man, 1875.
B. brunnea: *Bdellocephala brunnea* Ijima et Kaburaki, 1916.

Japanese Planariid species. Genus *Seidlia* Zabusov, 1911.
S. schmidti: *Seidlia schmidti* (Zabusov, 1911); *S. auriculata*: *Seidlia auriculata* (Ijima et Kaburaki, 1916); *S. auriculata* Apoi: *Seidlia auriculata* from Mt. Apoi. Hidaka, Hokkaidô.

Japanese planariid species. Genus *Polycelis* Ehrenberg, 1831.
P. sapporo a: *Polycelis sapporo* (Ijima et Kaburaki, 1916) from Rebun and Rishiri Islands, Hokkaidô; *P. sapporo* b: *Polycelis sapporo* from Rishiri Island and Sapporo, Hokkaidô; *P. sapporo* c: *Polycelis sapporo* from Rebun Island, Hokkaidô; *P. sapporo* d: *Polycelis sapporo* from Rishiri Island, Hokkaidô; *P. sapporo* e: *Polycelis sapporo* from Wakkanai and Sapporo, Hokkaidô; Tashirotai Moor, Mt. Hakkôda, Aomori Pref., Honshû; *P. sapporo* f: *Polycelis sapporo* from Sapporo, Hokkaidô; *P. sapporo* g: *Polycelis sapporo* from Tashirotai Moor, Mt. Hakkôda, Aomori Pref., Honshû.

Four planariid species from foreign countries. Genus *Phagocata* Leidy, 1847.
Ph. sibirica: *Phagocata sibirica* (Zabusov, 1903) from East Siberia in Russia; *Ph. ullala*: *Phagocata ullala* Sluys, 1995 from Spain.

Two planariid species from foreign countries. Genus *Polycelis* Ehrenberg, 1831.
P. nigra: *Polycelis nigra* (Müller, 1774) from Europe and West Siberia in Russia; *P. tenuis*: *Polycelis tenuis* Ijima, 1884 from Europe and Siberia in Russia.

Note 8. Explanation of the Shirakami-Sanchi (UNESCO World World Heritage Site), see the following Websites. http://enwikipedia.orgwiki/Shirakami-Sanchi . (In English.)
http://ja.wikipedia.org/wiki/%E7%99%BD%E7%A5%9E%E5%B1%B1%B1%E5%9C%BO . (In Japanese.)

References (Comments on Dr. Ishida's Four Publications)

Taxonomic papers for the original descriptions of taxa cited are not listed here.

Ishida, S., 2000. Fresh-water planarians distributed in Rishiri Island, Hokkaido, Japan (Report for a grant from Rishiri Town Museum, 1998). Rishiri Studies, (10): 45-49. (In Japanese, with English abstract.)

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Ishida, S., 2011. [Freshwater planarians found in the Shirakami-Sanchi (UNESCO World Heritage Site in Aomori and Akita Prefectures, Northern Honshû, Japan]. In: Shirakami-Gaku Nyûmon (Revised Edition), pp. 31-35. The Shirakami-Sanchi Institute of the Natural Environment, Hirosaki Univ., Hirosaki, pp. 31-35. (In Japanese.)

Ishida, S., Nishitani, S., Yoshida, W., Kuznedelov, K. D. & Satô, M., 2011. First description of two species of the genus *Phagocata* planarians in Rishiri Island, Hokkaido, Japan - Identification, karyotype analysis, comparison of the partial 18S rDNA sequence-. Rishiri Studies, (30): 75-82. (In Japanese, with English abstract.)

Kawakatsu, M., 1965. On the ecology and distribution of freshwater planarians in the Japanese Islands, with special reference to their vertical distribution. Hydrobiologia, 26: 349-408.

Kawakatsu, M., 1967. On the ecology and distribution of freshwater planarians in the Japanese Islands, with special reference to their vertical distribution (Revised Edition). Bull. Fuji Women's College, (5): 117-177.

Kawakatsu, M., Oki, I. & Tamura, S., 1986. Redescription of *Phagocata kawakatsui* Okugawa, 1956, with special reference to local variation of its copulatory apparatus (Turbellaria, Tricladida, Paludicola). Bull. Fuji Women's College, (24), II: 95-120.

Kawakatsu, M., Sluys, R., Timoshkin, O. A., Naumova, T. V., Nishino, M. & Takai, M., 2001. Redescription of Japanese *Bdellocephala annandalei* from Lake Biwa-ko with comparative redescription of the Far Eastern and Kamchatkan *Bdellocephala* species (Tricladida, Paludicola). Belg. Jour. Zool., 131 (Suppl. 1): 205-211.

Nishitani, S-i., Yoshida, W. & Ishida, S., 2005. Freshwater planarians in Shirakami Mountains. II. Chromosomal variations of *Seidlia auriculata* in Kumagera-no-Mori Forest and its adjacent area. Shirakami Kenkyû, (2): 16-21. (In Japanese, with English abstract.)

Nishitani, S-i., Yoshida, W. & Ishida, S., 2006. Karyological studies of a freshwater planarian, *Phagocata albata*. (Abstract of the 55th Ann. Meet. of the Soc. of Chromosomal Res.) Chromosome Science, 9 (1): 27.

Sluys, R., Smolders, I., Kawakatsu, M., Pietsch, T. W. & Kuranishi, R. B., 2009. Freshwater planarians (Platyhelminthes: Tricladida: Planariidae) from the Kuril Islands and Kamchatka. Species Diversity (Tôkyô), 14 (4): 307-322.

Teshirogi, W., Ni-imura, F. & Ishida, S., 1991. Further study of chromosomal polymorphism in the freshwater planarian *Polycelis auriculata*. Hydrobiologia, 227: 147-156.

Yoshida, W., Nishitani, S-i. & Ishida, S., 2005. Freshwater planarians in Shirakami Mountains. III. The molecular phylogenetic relationship in 3 species (Planariidae: *Seidlia*, *Polycelis*) inferred from the partial 18S rDNA sequences. Shirakami Kenkyû, (2): 22-27. (In Japanese, with English abstract.)

Entries of Planarians in the Japanese Red Data Books (1989, 1991, 2006) and the Red Data Lists (2000, 2007, 2010); 'A List of Japanese Wild Species of Plants and Animals: Invertebrates III' (1998)

During from the years 1988 to 2008, Kawakatsu was one of the Committee Members of the Japanese Red Data Books of Endangered Species - Invertebrates III - Organized by the Ministry of the Environment of Japan (formerly the Environmental Agency of the Prime Ministers' Office). Since the titles and publication dates of these publications

(including Public Announcements) were rather complicated, their intelligible list should be necessary.

Kawakatsu prepared two series of digital copies, i.e., the Complete Version and the Concise Version.

I. Complete Version (full copies mainly in Japanese)

This Version consists of the following 7 articles.

Environmental Agency of the Prime Minister's Office, 1989-2000.

1989. The Japanese Red Data Book of Endangered Species - Temporary Ed. The Other Invertebrates III. Section of planarians only.

1991. The Japanese Red Data Book of Endangered Species. Temporary Edition. Section of planarians only. (Kawakatsu, 1991).

1998. A List of Japanese Wild Species of Plants and Animals: Invertebrates III. Chapters 42 and 43. (Kawakatsu, 1998).

2000. Public Announcement (April, 2000). The Red List. Section of Planarians only.

Ministry of the Environment of Japan, 2006-2010.

2006. The Threatened Wildlife of Japan - Red Data Book 2nd Ed. The Other Invertebrates. Section of Planarians only. (Kawakatsu, 2006).

2006. Public Announcement (December, 2006). Section of planarians only.

2007. Public Announcement (October, 2007). Section of planarians only.

2010. The Revised Red List - The Other Invertebrates. Planaria *(Bdellocephala annandalei)* only. (Kawakatsu, 2010).

II. Concise Version (explanatory notes mainly in English)

This Version consists of Kawakatsu's English explanations of 7 articles listed in the Complete Version. Summaries of them are as follows:

1). Kawakatsu, M., 1989. Entry in the Japanese Red Data Book of Endangered Species - Temporary Ed. - The Other Invertebrates III (from Freshwater Polifera to Chilopoda) (1989). For the planarian species listed are as follows:

Rare (R): *Ectoplana limuli* (Ijima et Kaburaki, 1916); *Dugesia izuensis* Katô, 1943; *Phagocata papillifera* (Ijima et Kaburaki, 1916); *Dendrocoelopsis kishidai* Kawakatsu, 1978.

In: Environmental Agency of the Prime Minister's Office (ed.), "Japanese Red Data Book of Endangered Species, Temporary Ed.", p. 31. Four planarian species are listed (Kawakatsu is responsible). (In Japanese.)

Published: Department of the Wildlife Office of the Natural Protection, Environmental Agency of the Prime Minister's Office, Japan. Tôkyô. December 20, 1989.

2). Kawakatsu, M., 1991. Entry in the Japanese Red Data Book of Endangered Species: *Ectoplana limuli* (Ijima et Kaburaki, 1916); *Dugesia izuensis* Katô, 1943; *Phagocata papillifera* (Ijima et Kaburaki, 1916); *Dendrocoelopsis kishidai* Kawakatsu, 1978.

In: Environmental Agency of the Prime Minister's Office (ed.), "The Japanese Endangered Species, Invertebrates Other than Insects", pp. 233, 241 , 249, 259. (In Japanese.)

Published: The Japan Wild Life Research Center, Tôkyô. August, 1991.

3). Kawakatsu, M., 1998. Platyhelminthes: Turbellaria. / Nemertinea: Enopla: Hoplonemertea: Monostylifera: Prosorhochmidae.

In: Environmental Agency of the Prime Minister's Office (ed.), "A List of Japanese Wild Species of Plants and Animals: Invertebrate III", Chapters 42 and 43 (Other than Marine Species). Pp. 19-24. (In Japanese.)

Published: The Research Center of Natural Environment, Tôkyô. December 2L1, 1998.

Note 1. This publication is one of the basic data for the Japanese Red Data Book of Endangered Species: The Invertebrates (First Ed., 1991; Revised Ed., 2006). In the Section 'Turbellaria', 96 species (including several subspecies) are listed. In the Section Nemertea', one freshwater species is listed.

Sixty new Japanese names were given for various groups of taxa (35 families, 10 subfamilies and 15 species). Cf. For the Japanese names of plants and animals, see Grygier (1993).

4). Public Announcement has been made by the Environmental Agency of the Prime Minister's Office. 00.0.2000 (April, 2000). (In Japanese.)

Reexamination of the Red List of the Invertebrates II (Insecta, Mollusca, Arachnida, Myriapoda, etc.) and III (Crustacea, etc.).

Seven planarian species and a helmet crab are listed in the Accompanying Data 3-3 (3 pages) (Kawakatsu is responsible). They are as follows:

CR+EN: *Ectoplana limuli* (Ijima et Kaburaki, 1916); *Dugesia izuensis* Katô, 1943;

Phagocata papillifera (Ijima et Kaburaki, 1916); *Dendrocoelopsis kishidai* Kawakatsu, 1978. *Tachypleus tridentatus* (Leach, 1819). This helmet crab is a host of *Ectoplana limuli*.

VU: *Phagocata albata* Ichikawa et Kawakatsu, 1962; *Phagocata suginoi* Kawakatsu, 1974; *Phagocata tenella* Ichikawa et Kawakatsu, 1963.

5). Public Announcement has been made by the Ministry of the Environment. Government of Japan. December 22, 2006. See the Article 4 (pp. 4-5). (In Japanese.)

Revised Red List of the Invertebrates (except Insecta and Mollusca) (pp. 4-5).

The Accompanying Data 4 (4 pages) and 5 (1 page) contain 8 planarian species and a helmet crab (Kawakatsu is responsible). They are as follows:

CR+EN: *Ectoplana limuli* (Ijima et Kaburaki, 1916); *Dugesia izuensis* Katô, 1943; *Phagocata papillifera* (Ijima et Kaburaki, 1916); *Dendrocoelopsis kishidai* Kawakatsu, 1978; *Bdellocephala annandalei* Ijima et Kaburaki, 1916. *Tachypleus tridentatus* (Leach, 1819).

VU: *Phagocata albata* Ichikawa et Kawakatsu, 1962; *Phagocata suginoi* Kawakatsu, 1974; *Phagocata tenella* Ichikawa et Kawakatsu, 1963.

6). Public Announcement has been made by the Ministry of the Environment. Government of Japan. October 5, 2007. See the Articles [1] and [2] (p. 2). (In Japanese.)

Revised Red List of the Invertebrates (except Insecta and Mollusca) (p. 2).

The Accompanying Revised Data 4 (4 pages) contains 8 planarian species and a helmet crab (Kawakatsu is responsible). They are as follows:

CR+EN: *Ectoplana limuli* (Ijima et Kaburaki, 1916); *Dugesia izuensis* Katô, 1943; *Phagocata papillifera* (Ijima et Kaburaki, 1916); *Dendrocoelopsis kishidai* Kawakatsu, 1978; *Bdellocephala annandalei* Ijima et Kaburaki, 1916. Ta*chypleus tridentatus* (Leach, 1819).

VU: *Phagocata albata* Ichikawa et Kawakatsu, 1962; *Phagocata suginoi* Kawakatsu, 1974; *Phagocata tenella* Ichikawa et Kawakatsu, 1963.

7) . Kawakatsu, M., 2010. Entry in the Revised Red List - The Other Invertebrates (Arachnida, Crustacea, etc.). March (31), 2010.

CR + EN: *Bdellocephala annandalei* Ijima et Kaburaki, 1916.

In: Ministry of the Environment, Japan (ed.), "The Revised Red List and the Explanatory Data: The Other Invertebrates (Arachnida, Crustacea, etc.)", p. 2 (Literature Cited on p. 12; Index on p. 14). http://www.biodic.go.jp/rdb/explanatory_pdf/spider_crustacean.pdf

Published: The Japan Wild Life Research Center, Tôkyô. March, 2010.

Note 2. Kawakatsu's Ms. of this Japanese article was written in the beginning of 2007. Thus, the higher classification system of the Genus *Bdellocephala* should be correct: Phylum Platyhelminthes / Order Tricladida / Suborder Continenticola / Superfamily Planarioidea / Family Dendrocoelidae / Genus *Bdellocephala*. Cf. Sluys, Kawakatsu, Riutort & Baguñà (2009).

English explanation of this Japanese article. *Bdellocephala annandalei* ljima & Kaburaki, 1916. CR + EN (Threatened 1). New Entry.

This species is an endemic planarian of Lake Biwa-ko in Central Japan (Shiga Prefecture, Kinki region, Honshû). This lake-dwelling species inhabits the muddy bottom of the northern basin of the Lake (20-103 meters in depth). This species is characterized by its large size (ca. 50 mm in length and 7 mm in width), uniformly light-brown coloration, two small eyes, and a subterminal, ventral adhesive organ on the frontal end. Mouth and genital pore open on the ventral side. The limnobiological survey made after the 1950's confirmed the presence of *Bd. annandalei* from various areas of the northern basin. However, in the beginning of the 1990's, its population diminished remarkably. The decrease of the quantity of dissolved oxygen in the profundal region due to an organic pollution of lake water in recent years may be one of the principal factors to the fluctuation of population density of macrobentic animals in Lake Biwa-ko.

References (Entries of Planarians in the Japanese Red Data Books, etc.)

Taxonomic papers for the original descriptions of taxa cited are not listed here.

Grygier, M. J., 1993. Japanese Zoological Nomenclature. Amer. Ass. Zool. Nomenc., Sept. 1993, pp. 5-8.

Sluys, R., Kawakatsu, M., Riutort, M. & Baguñà, 2009. A new higher classification of planarian flatworms (Platyhelminthes, Tricladida). Jour. Nat. Hist., 43 (29-30): 1763-1777.

The following 2 web articles include related section (with photos and distribution maps) on *Bdellocephala annandalei*.

Kawakatsu, M., Murayama, T., Kawakatsu, M-y. & Kawakatsu, T., 2009. A new list of Japanese freshwater planarians based upon a new higher classification of planarian flatworms proposed by Sluys, Kawakatsu, Riutort & Baguñà. (2009). Kawakatsu's Web Library on Planarians, Dec. 25, 2009. http://victoriver.com . Left button: NewList FPs JAPAN, Pp. 1-40 + pls I-XV.

Kawakatsu, M. & Ohtaka, A., 2008. Record of a freshwater planarian, *Dendrocoelopsis ezensis* Ichikawa et Okugawa, 1958, from the bottom of Lake Kussharo-ko in Hokkaidô, Japan, with a corrective overview of the previous records of Japanese lake-dwelling

planarians. Kawakatsu's Web Library on Planarians, Dec. 10, 2008. http://victoriver.com . Left button: Lake Planarians. Pp. 1-26 + pls. I-V.

Kawakatsu's Final Note .

For various articles and explanations mentioned in the comments at the end of ARTICLE I, more detailed pdf versions are available at Kawakatsu's private collection.

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