

ANTARCTIC RECORD Vol. 45 CONTENTS

No. 1 (March 2001)

Scientific Papers

- Solar ultraviolet irradiance in the ozone hole region in Antarctica (in Japanese)
..... *Shu Takeshita, Hiroshi Miyaoka, Masaki Ejiri and Masako Sasaki*..... 1
Behaviour of the Antarctic fish *Ophthalmostomus amboensis* (Zoarcidae) on gravel and
muddy bottom
..... *Edith Fanta, Flávia Sant'Anna Rios and Ana Aparecida Meyer*..... 13
Chemical and visual sensory systems in feeding behaviour of the Antarctic fish
Ophthalmostomus amboensis (Zoarcidae)
..... *Edith Fanta, Flávia Sant'Anna Rios, Ana Aparecida Meyer,
Sonia Regina Grötzner and Tania Zaleski*..... 27

Scientific Note

- Magnetic survey in Ongul Strait, Lützow-Holm Bay, East Antarctica
..... *Sadanori Wakino, Minoru Funaki and Yoshifumi Nogi*..... 43

Reports

- Activities of the Summer Party of the 40th Japanese Antarctic Research Expedition in
1998-1999 (in Japanese) *Kazuyuki Shiraishi*..... 50
Report on the helicopter operation in Western Enderby Land, 1998-1999 (JARE-40)
..... *Yasuhiro Ohashi, Ken-ichi Maki, Shinji Harigai, Tadaaki Takei,
Yoichi Motoyoshi, Hajime Yamauchi and Hideki Miura*..... 71
A seismic refraction experiment in 2000 on the Mizuho Plateau, East Antarctica (JARE-
41) —Outline of observations— (in Japanese)
..... *Hiroki Miyamachi, Hiroshi Murakami, Tomoki Tsutsui, Shigeru Toda,
Toshiaki Minta and Morio Yanagisawa*..... 101

Symposium/ Meeting Report

- Report on Workshop “Planning of Future Science in the Polar Ocean Study with
Cooperation among Study Groups” (in Japanese)
..... *Mitsuo Fukuchi and Tsuneo Odate*..... 148

No. 2 (July 2001)

Scientific Paper

- Breeding season and early developmental stage of a urchin, *Sterechinus neumayeri*
(Meissner), at Syowa Station, Antarctica (in Japanese)
..... *Yasutaka Tsuchiya, Sakae Kudoh, Katsufumi Sato and Mitsuo Fukuchi*..... 157

Scientific Note

- Improvement on the processing method for ice core (in Japanese)
..... *Kokichi Kamiyama, Yoshinori Iizuka and Bernhard Stauffer*..... 171

Reports

Outline of the activities by the 39th Japanese Antarctic Research Expedition (JARE-39) wintering party, 1998–1999 (in Japanese).....	Kazuo Shibuya.....	185
Activities of the summer party of the 41st Japanese Antarctic Research Expedition in 1999–2000 (in Japanese).....	Masaru Ayukawa.....	229
Aerological and aerosol observations in the lower atmosphere using aircraft by the 41st Japanese Antarctic Research Expedition, 2000–2001 (in Japanese)	Makoto Wada, Satoshi Ihara and Haruya Shiba.....	257

No. 3 (November 2001)

Scientific Papers

Surface biomass of net-zooplankton in the Indian Ocean sector of the Southern Ocean during the icebreaker <i>Shirase</i> cruises of JARE-39, -40 (in Japanese)	Sakae Kudoh, Chie Ikura, Akinori Takahashi, Jun Nishikawa, Akira Ishikawa, Naoki Washiyama, Tohru Hirawake, Tsuneo Odate, Kentaro Watanabe and Mitsuo Fukuchi.....	279
Ultrastructure of photo-sensory cells and pigment epithelium in the retina of the Antarctic fish <i>Notothenia neglecta</i> Nybelin (Nototheniidae)	Lucélia Donatti and Edith Fanta.....	297

Scientific Notes

Microbiological study of the circulating bath system at Syowa Station (in Japanese)	Güichirou Ohno, Takahiro Miyata, Kazutaka Yoshida, Shinji Ohtani, Hiromitu Kusagaya and Hiroyuki Yamamoto.....	311
----------------------------------------------------------------------------------------------	-------------------------------------------------------------------------------------------------------------------	-----

Bryophyte propagule bank in the Yukidori Valley, Langhovde, Antarctica (in Japanese)	Eri Ayukawa, Satoshi Imura and Hiroshi Kanda.....	320
-----------------------------------------------------------------------------------------------	---------------------------------------------------	-----

Review

Climate characteristics of Svalbard based on circumpolar climate comparison (in Japanese)	Takashi Yamanouchi.....	329
----------------------------------------------------------------------------------------------------	-------------------------	-----

Report

Development of a tool to read out HRPT data of NOAA polar orbiter received at Syowa Station (in Japanese).....	Makoto Kuji and Nobuyuki Kikuchi.....	353
-------------------------------------------------------------------------------------------------------------------	---------------------------------------	-----

Symposium/ Meeting Report

Report on Workshop “Planning of Future Science in the Antarctic Ocean Study with Cooperation among Study Groups” (in Japanese)	Tsuneo Odate, Sakae Kudoh and Mitsuo Fukuchi.....	362
--------------------------------------------------------------------------------------------------------------------------------------------	---------------------------------------------------	-----

Contents of Antarctic Record Vol. 45 (Nos. 1–3)

Author index of Antarctic Record Vol. 45 (Nos. 1–3)