Biocontrol Science

The *Biocontrol Science* is published quarterly (March, June, September and December) by the Society for Antibacterial and Antifungal Agents, Japan.

Editor-in-Chief

Yoshikazu SAKAGAMI, Department of Environmental Management, Faculty of Agriculture, Kinki University, Nakamachi 3327-204, Nara-city, Nara 631-8505, Japan.

Tel. (+81) 742-43-7154, Fax (+81) 742-43-1593,

E-mail sakagami (a) nara. kindai.ac.jp

Editorial Board

Hiroshi FUJIKAWA, Tokyo University of Agriculture and Technology

Satoshi FUKUZAKI, Mie University

Katsunori FURUHATA, Azabu University

Masakazu FURUTA, Osaka Prefecture University

Kei-ichiro HIYAMA, Bio-system Research Institute

Eiji ISHII, Former Kinki University

Hidemi IZUMI, Kinki University

Hidehisa KAWAHARA, Kansai University

Hiroto MAEDA, Kagoshima University

Takuya MAEDA, Hyogo University of Health Sciences

Yoshinobu MATSUMURA, Kansai University

Hideaki MATSUOKA, Tokyo University of Agriculture and Technology

Shin-ichi MIYOSHI, Okayama University

Takahisa MIYAMOTO, Kyushu University

Miho MORI, Kinki University

Jun SAWAI, Kanagawa Institute of Technology

Hideharu SHINTANI, Former National Institute of Health Sciences

Jyun SATO, Toyo University

Kosuke TAKATORI, Tokyo University of Agriculture

Shigeko UEDA, Kagawa Nutrition University

Advisory Editors

Renata LEUSCHNER, European Food Safety Authority, Italy Kazuhito WATABE, Professor emeritus, Setsunan University

Editorial Official

Takeshi KONDO, The Society for Antibacterial and Antifungal Agents, Japan, Nishi-honmachi 1-13-38, Shin-kosan Bldg., Nishi-ku, Osaka 550-0005, Japan. Tel. (+81) 6-6538-2166, Fax (+81) 6-6538-2169, e-mail:boukin(a)nifty.com

The Society for Antibacterial and Antifungal Agents, Japan [Founded 1973]

President Yoshikazu SAKAGAMI

Vice-presidents Hiroto MAEDA and Susumu SAKAGUCHI

Chairman Kazuhito WATABE Secretary General Kazuyoshi ARAI Fiscal Official Kazumi JINNO

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system or transmitted in any form or by any means, electronic, mechanical, photocopying, recording or otherwise without the prior written permission of the Society for Antibacterial and Antifungal Agents, Japan.