

FY2012

JSPS Core-to-Core Program
-Strategic Research Networks-
Research Report

Project No.	20004
Research Theme	Studies on ecological interaction networks that promote biodiversity –From gene to ecosystem
Duration of Project	1 April 2010 – 31 March 2013 (36 months)
Core Institution in Japan	Kyoto University

Implementing Organizations

Country	Japan
Core Institution	Kyoto University
Co-Chair (name and title)	Junji Takabayashi (Professor)
Number of Cooperating Institutions	4
Cooperating Institutions	Yamaguchi University, Tsukuba University, Kinki University, Nagoya University

Country	the Netherlands
Core Institution	University of Amsterdam
Co-Chair (name and title)	Maurice Sabelis (professor)
Number of Cooperating Institutions	0
Cooperating Institutions	0
Matching Fund	Royal Netherlands Academy of Arts Sciences (KNAW) • Communication in Multitrophic Systems

Country	Germany
Core Institution	Max-Planck Institute of Chemical Ecology
Co-Chair (name and title)	Wilhelm Boland (Professor)
Number of Cooperating Institutions	0
Cooperating Institutions	0
Matching Fund	Max Plank Institute for Chemical Ecology

Country	Germany
Core Institution	Free University of Berlin
Co-Chair (name and title)	Monika Hilker (professor)
Number of Cooperating Institutions	1
Cooperating Institutions	Technische Universitat Braunschweig
Matching Fund	German Academic Exchange Service

Country	Canada
Core Institution	University of Western Ontario
Co-Chair (name and title)	Jeremy McNeil (Professor)
Number of Cooperating Institutions	0
Cooperating Institutions	0
Matching Fund	University of Western Ontario • Chemical Ecology: Migration and Tritrophic Interactions

Country	The United States of America
Core Institution	University of Minnesota, Duluth
Co-Chair (name and title)	Timothy Craig (professor)
Number of Cooperating Institutions	1
Cooperating Institutions	University of California Davis
Matching Fund	National Science Foundation • Measuring local adaptation to test the geographic mosaic of coevolution theory in a three trophic level interaction: a fly, a galler, and a parasitoid

Country	The United Kingdom
Core Institution	Rothamsted Research
Co-Chair (name and title)	John Pickett (Professor)
Number of Cooperating Institutions	0
Cooperating Institutions	0
Matching Fund	Biotechnology and Biological Sciences Research Council • Chemical ecology of pest and beneficial arthropods: understanding and exploiting

Country	The United Kingdom
Core Institution	University of Southampton
Co-Chair (name and title)	Guy Poppy (Professor)
Number of Cooperating Institutions	0
Cooperating Institutions	0
Matching Fund	University of Southampton

Country	Switzerland
Core Institution	University of Neuchatel
Co-Chair (name and title)	Ted Turlings (professor)
Number of Cooperating Institutions	0
Cooperating Institutions	0
Matching Fund	University of Neuchatel • Plant antagonists and

Country	Italy
Core Institution	University of Turin
Co-Chair (name and title)	Massimo Maffei (professor)
Number of Cooperating Institutions	0
Cooperating Institutions	0
Matching Fund	University of Turin • AlgaeNRG

Result of Program Implementation

In the viewpoint of “Interaction-Information Networks”, this program supported (1) the collaboration of research projects, and (2) the study of young scientists (students and post-docs) in abroad in this fiscal year. We had two foreign students and two foreign researchers to study at Kyoto University. The third core-to-core symposium was organized by Kyoto University (Junji Takabayashi) and Max Plank Institute for Chemical Ecology (Wilhelm Boland) in Germany, and held at Max Plank Institute for Chemical Ecology in the third quarter.

Achievements in FY2012 (Self Review)

In the first quarter, the collaborations between (1) Free University of Berlin and Kyoto University, and (2) University of California Davis and Kyoto University were conducted. Atsushi Yamauchi presented his data at Japan-Korea-China Joint Meeting for Mathematical Biology held in Korea.

In the second quarter, the collaborations between (1) Max Plank Institute for Chemical Ecology and Yamaguchi University, (2) University of Amsterdam and Kyoto University, and (3) University of Minnesota, Duluth and Kyoto University were conducted. Kenji Matsui and Koichi Sugimoto presented their data at International Meeting of Lipid held in Spain. Yasuhiro Suzuki and Megumi Sakai presented their data at International Conference of Chemical Ecology held in Republic of Lithuania. Yoshitaka Tsubaki presented his data at International Conference of Ethology held at Sweden. Kyoto University Group presented their data at International conference of Entomology held in Korea.

In the third quarter, we organized the third Core-to-Core symposium at Plank Institute for Chemical Ecology in Germany. The collaborations among Free University of Berlin and Kyoto University, Tsukuba University were conducted.

In the fourth quarter, the collaborations between (1) Free University of Berlin and Kyoto University, and (2) University of Turin and Kyoto University were conducted.

Future Plan (Measures toward Achieving Research Objectives)

In FY 2013, we will try to get other funding to continue the core-to-core project. Professor John Pickett will try to get international award of BBSEC. Junji Takabayashi will try to get funding from JSPS Bilateral Programs (Joint Research Projects and Seminars). The future plan on this project will be discussed according to the funding availability. We are planning the publication of textbooks based on the results of core-to-core program.

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