

JSPS Core-to-Core Program
FY2012 Implementation Plan (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 (Co-Chair) Kyoto University, Center for Ecological Research
(Prof. Junji TAKABAYASHI)

Implementing Organizations

○ **Japan**

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

○ **Partner Countries**

	Core Institution	University of Amsterdam	
	Co-Chair (name and title)	Maurice SABELIS(Professor)	
	Cooperating Institutions		Number of Cooperating Institutions 0

	Core Institution	University of Western Ontario	
	Co-Chair (name and title)	Jeremy MCNEIL(Professor)	
	Cooperating Institutions		Number of Cooperating Institutions 0

	Core Institution	Max-Plank Institute for Chemical Ecology	
	Co-Chair (name and title)	Wilhelm BOLAND(Professor)	
	Cooperating Institutions		Number of Cooperating Institutions
			0

	Core Institution	Free University of Berlin	
	Co-Chair (name and title)	Monika HILKER(Professor)	
	Cooperating Institutions	Technische Universitat Braunschweig	Number of Cooperating Institutions
			1

	Core Institution	University of Minnesota Duluth	
	Co-Chair (name and title)	Timothy CRAIG (Professor)	
	Cooperating Institutions	University of California Davis	Number of Cooperating Institutions
			1

	Core Institution	University of Turin	
	Co-Chair (name and title)	Massimo MAFFEI (Professor)	
	Cooperating Institutions		Number of Cooperating Institutions
			0

	Core Institution	University of Neuchatel	
	Co-Chair (name and title)	Ted TURINGS (Professor)	
	Cooperating Institutions		Number of Cooperating Institutions
			0

	Core Institution	Rothamsted Research	
	Co-Chair (name and title)	John PICKETT (Professor)	
	Cooperating Institutions		Number of Cooperating Institutions
0			

	Core Institution	University of Southampton	
	Co-Chair (name and title)	Guy POPPY (Professor)	
	Cooperating Institutions		Number of Cooperating Institutions
0			

Objectives of Research Exchange (including the five years after the project finishes)

Earth's fruitful biodiversity is a great gift from nature. One of the important environmental issues is to conserve biodiversity. To do so, clarifying mechanisms involved in the maintenance and promotion of biodiversity is highly important. The objectives of research of this program are to unravel the above issue from the viewpoints of ecological interaction-information networks. The program will support the Japanese scientists (mostly young scientists) to study in foreign research institutes involved in this program, and have the joint seminar in each year. We will discuss the international research networks that will last after the end of this project.

Results to the present

In FY 2008 and 2009, we conducted Type B (Integrated action initiatives) program with five foreign institutes (the Netherlands, Germany, USA and Canada) and with two Japanese institutes. We had the first meeting in the Netherlands (University of Amsterdam). In FY 2010, we started Type A (Strategic Research networks) in which Italy, England and Switzerland are newly involved. We had the second get-together meeting in Kyoto. In 2011, the second meeting was held in Neuchâtel, Switzerland. At each meeting, we exchanged the research results and future perspectives.

Summary of FY 2012 Exchange Plan

Joint Research

We will study ecological interaction-information networks in the following three viewpoints.

- (1) Interaction networks mediated by traits of interactants. We will focus on traits of plants and herbivores.
- (2) Interaction networks mediated by plant odor. We will focus on herbivore-induced plant volatiles.
- (3) Information networks mediated by plant odor. Plant-plant signaling was the major subject.

Seminar

We will have a two-day seminar in Max Planck Institute for Chemical Ecology in Jena, Germany in October 15-16. Most of the co-chairs of joining institutes will present their study.

Researcher Exchanges

This year, like 2001 and 2011, the program will support the Japanese scientists (mostly young scientists) to study at foreign research institutes involved in this program. One graduate student of Max Planck Institute for Chemical Ecology, one professor and one researcher of University of Amsterdam will come to Center for Ecological Research, Kyoto University to do some joint research and discussion.