[Abstract of 2009 Grant – in – Aid for Scientific Research on Innovative Areas (Research in a proposed research area)]

Title of project	Comprehensive studies of plant responses to high CO ₂ world by an innovative consortium of
	ecologists and molecular biologists
Head Investigator	TERASHIMA Ichiro, The University of Tokyo, Graduate School of Science, Department of
Name	Biological Sciences, , Professor
Abstract of	For accurately predicting ecosystem functions and food production in the high CO ₂ world, it is
Research Project	prerequisite to know how plants respond to high CO ₂ . In this project, we form a consortium of
	ecologists and molecular biologists and closely cooperate to clarify plant CO ₂ responses from
	molecular to ecological levels. Analyzing selected model plants, crops and plants representing
	several ecosystems grown under the same conditions, we will try to obtain comprehensive data.
Term of	These data will be solid fundamentals not only for predicting ecosystem functions in the high
Project: 2009-2013	CO ₂ era but for creating and/or selecting CO ₂ -philic crops and trees.