

## Title of Ph.D. dissertation and Mater course (1998~)

### Ph.D.

(C: Doctoral course work, S: Submitted Doctoral Thesis)

### 2007

**Eguchi, Norikazu** (c) Study on the changes in CO<sub>2</sub> fixation and storage capacity of deciduous tree species native to cool temperate zone with increasing ambient CO<sub>2</sub> concentration (in Japanese)

**Ji, DongHun** (c) Study on the physiological ecology of Korean pine in early stage of regeneration (in Japanese)

### 2005

**Kitahashi, Yoshinori** (c) Physiological ecology of water relations and leaf surface structure of broadleaved trees (in Japanese)

**Uemura, Akira** (S) Ecophysiology of environmental adjustment in photosynthesis and water relations of mature trees of Siebold's beech and Japanese beech (in Japanese)

**Yasaka, Michiyasu** (S) Conservation ecology of the reproduction of forest plants (in Japanese)

### 2004

**Choi, DongSu** (C) Ecophysiological study on growth of the ectomycorrhizal conifer species in Korea treated with soil acidification and elevated CO<sub>2</sub>

**Noguchi, Mahoko** (C) Studies on forest dynamics and vegetation changes in mixed conifer-broadleaved forests in Hokkaido under disturbance regimes (supervisor: Dr. Yoshida, Toshiya) (in Japanese)

**Wang, Wenjie** (S) Physiological ecology of respiratory consumption of a larch (*Larix gmelinii*) forest in Northeast China

### 2003

**Qu, Laiye** (C): Ecophysiological study on the natural regeneration in the two larch species with special references to soil environment in northern Japan

**Kitaoka, Satoshi**(C): Ecophysiological study on the environmental acclimation capacity of deciduous broadleaved tree seedlings invading to unmanaged larch plantations (in Japanese)

**Matsuki, Sawako**(C) :Species biology of plant defense in deciduous broadleaved trees with special references to Betulaceae (in Japanese)

## 2002

**Yamashita, Naoko**(S)Physiological ecology of *Bischofia javanica* Bl. invading to the Bonin Islands and its application for environmental conservation (in Japanese)

## 2001

**Kayama, Masazumi** (C) Study on the environmental adaptation of spruces species on serpentine soil and its application for forest rehabilitation practices (in Japanese)

**Nakamura, Takatoshi** (C) Ecological gradients of north Japanese mires on the basis of hydrochemical features and nitrogen use traits of *Carex* species.(supervisor: Dr. Uemura, Shigeru)

## Master Thesis

## 2008

**Matsunami, Shiro**: Ecophysiological survey on the dispersal capacity of root sucker of Black locust and its application for the management

**Kanetoshi, Masaharu**: Photosynthetic nitrogen use efficiency of Black locust, an invasive species with special references to nitrogen allocation in leaves grown under different light and CO<sub>2</sub> regimes

## 2007

**Matsui, Katsuhiko**: Effects of elevated CO<sub>2</sub> on the decomposition rate of leaf litter through grazing of wood louse (*Porcellio scaber*/ (Isopoda; Oniscidae) ) with special reference to its growth and consumption rate

**Agari, Tokihisa**: Effect of elevated CO<sub>2</sub> and nutrients on the defense of alder species (in Japanese)

## 2006

**Otsuka, Yuka:** The localization of defense chemicals in leaves of beech and oak.

**Makoto, Kobayashi:** Effects of nitrogen supply on the growth and photosynthetic responses of seedlings of *Pinus koraiensis* grown under different light conditions

**Morii, Noriko:** Water relations in deciduous broadleaved tree saplings grown under a free air CO<sub>2</sub> enrichment (FACE).

**Hida, Takeshi:** Change in the light compensation point of deciduous broad-leaved tree saplings grown under elevated CO<sub>2</sub>

**Karatsu, Kazuki:** Photosynthetic acclimation of deciduous broadleaved tree saplings grown under a free air CO<sub>2</sub> enrichment (FACE). (in Japanese)

## 2005

**Sakuma, Yuko:** Anatomical structure and physiological traits of heterophyllous needles of Japanese larch (*Larix kaempferi*) trees

**Endo, Ikuko:** Growth and survival of three species of Betulaceae seedlings in the large disturbed area.

**Shibata, Takanori:** Defense characteristics of deciduous broadleaved tree seedlings raised under different CO<sub>2</sub> and nitrogen levels (in Japanese).

## 2004年

**Eguchi, Norikazu:**

Change of photosynthetic capacity of *Alnus hirsuta* with increasing of atmospheric CO<sub>2</sub> concentration: comparing the proximate *Betula* spp. Without symbiotic N<sub>2</sub> fixing micro-organism

## 2002年

**Kitahashi, Yoshinori:** Physiological and morphological adaptation of broad-leaved trees with two different height positions of the same sunny crown

## 2001年

**Ooishi, Machiko:** Photosynthesis and nutrient dynamics of *Picea glehnii* seedlings grown under immature volcanic ash soil with special references to the activities of ectomycorrhiza (in Japanese)

**Noguchi, Mahoko:** Effects of partial logging on tree regeneration and forest floor vegetation in conifer–hardwood mixed forests in northern Hokkaido (supervisor: Dr. Yoshida, Toshiya)

## 2000年

**Kitaoka, Satoshi:** Seasonal changes of light utilization capacity in deciduous broad-leaved trees seedlings invaded into a larch plantation.

**Yanagihara, Yuko:** The effects of soil type and vegetation change on soil respiration rate in larch forests

## 1999年

**Shimizu, Kensuke:** Seasonal gas exchange and characteristics of leaves in relation to successional traits in deciduous broad-leaved forest canopy (supervisor: Dr. Hiura, Tsutomu)

## Bachelor research

(on leave from Department of Bio-Engineering, Hokkaido Campus, Tokai University)

**Abe, Tomohiro:** Study on defense trait in Betulaceae seedlings (in Japanese)

**Shibutani, Takuma:** Nitrogen allocation and photosynthesis of deciduous broadleaved tree seedlings (in Japanese)

**Shibata, Takanori:** Growth and survival of Erisan (*Samia risiri*) larvae fed with leaves of deciduous broadleaved tree seedlings grown at elevated CO<sub>2</sub> (in Japanese)

**Karatsu, Kazuki:** Changes in photosynthetic activities of deciduous broadleaved tree seedlings at FACE system with special reference to the amount of Rubisco (in Japanese)

**Agari, Tokihisa:** Effect of elevated CO<sub>2</sub> and nitrogen levels on the nitrogen fixation of symbiotic micro-organisms in three alder species.(in Japanese) (supervisor: Dr. Tobita, Hiroyuki)

**Kato, Kohta:** Photosynthetic characteristics of deciduous broadleaved tree saplings grown under elevated CO<sub>2</sub> with a FACE (in Japanese).

Yamaguchi,