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

Ph.D.

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

2012

Mao, QiaoZhi (c): Ecophysiological study on the growth responses of larch species to changing environments –Effects of elevated CO_2, O_3 and high nitrogen loading–
(Lecture, College of Resources & Environment, Southeast University, China)

Novriyanti Eka（c）：Chemo-ecophysiological study on growth and defense responses of the afforestation species eucalypt and acacias under a changing environment
(Senior researcher, Research Institute on Fiber Technology of Forest Plants, FORDA Indonesia)

2010

Kim, YongSuk（c）：Soil-atmospheric exchange of greenhouse gases in forest ecosystems under various environmental changes
(Senior researcher, Korea Forest Research Institute)

2009

Makoto, Kobayashi (c) Effects of charcoal production after fires on the traits of soil and regeneration in mixed conifer-broadleaved forests of Far East Russia (in Japanese)
(Assistant Professor, Field Science Center for Northern Biosphere, Hokkaido University)

Ohno, Yasuyuki (s) Study on the factors affecting the growth and declining of mature Monarch birch in broadleaved forests (in Japanese)
(Chief, Hokkaido Forest Research Institute, HRO)

2007

Eguchi, Norikazu (c) Study on the changes in CO_2 fixation and storage capacity of deciduous tree species native to cool temperate zone with increasing ambient CO_2 concentration (in Japanese)
(Senior researcher, Aichi Prefectural Forestry Research Institute)

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

(Senior research, Korea Forestry Promotion Institute)

2005

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

(Senior researcher, Forest Products Research Institute, HRO)

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

(Senior researcher, Hokkaido Research Center, Forestry & Forest Products Research Institute)

Yasaka, Michiyasu (S) Conservation ecology of the reproduction of forest plants (in Japanese)
(Director, Donan Branch, Forestry Research Institute, HRO)

2004

Choi, DongSu (C)Ecophysiological study on growth of the ectomycorrhizal conifer species in Korea treated with soil acidification and elevated CO_2
(Associate Professor, Tokyo University of Agriculture and Technology)

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)
(Senior researcher, Forestry & Forest Products Research Institute)

Wang, Wenjie (S) Physiological ecology of respiratory consumption of a larch (*Larix gmelinii*) forest in Northeast China
(Professor, Key Laboratory of Forest Plant Ecology, Northeast Forestry University, 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
(Associate Professor, State Key Laboratory of Urban & Regional Ecology, Research Center for Eco-Environmental Sciences, CAS)

Kitaoka, Satoshi(C): Ecophysiological study on the environmental acclimation capacity of deciduous broadleaved tree seedlings invading to unmanaged larch plantations (in Japanese)
(Post-doctor fellow, Forestry & Forest Products Research Institute)

Matsuki, Sawako(C) :Species biology of plant defense in deciduous broadleaved trees with special reference to Betulaceae (in Japanese)
(Lecture, Faculty of Agriculture, Iwate-University)

2002

Yamashita, Naoko(S)Physiological ecology of *Bischofia javanica* Bl. invading to the Bonin Islands and its application for environmental conservation (in Japanese)
(Senior researcher, Kansai Research Center, Forestry & Forest Products Research Institute)

2001

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

(Senior researcher, Tropical Agriculture Research center)

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)

(Lecturer, Institute of Bio-industry, Tokyo University of Agriculture)

Master Thesis

2013

Oikawa, Monta: Patterns of grazing by insect herbivore and defense traits in 3 kinds of birch saplings grown under elevated CO_2, FACE (in Japanese)
Sakuma, Akira: Relations between nutrient and/or water stress and decline phenomenon of mountain birch (*Betula ermanii*) in Lake Mashu somma – Prediction of future forest physiognomy–
Yuko, Hara: Time course of Leaf Area Index of three birches grown under Free Air CO_2 Enrichment (FACE) system

2012

Tatsuda, Shinpei: Seasonal changes of photosynthetic rate of Japanese mountain birch (*Betula ermanii*) grown at Lake Mashu somma under O_3 polluted condition (in Japanese)

Ito, Hirotaka: Fine root dynamics of Japanese white birch (*Betula platyphylla* var. *japonica*) grown under brown forest soil and immature volcanic ash soil at elevated CO_2 condition at FACE (Free Air CO_2 Enrichment) (in Japanese)

Inada, Naoki: Effects of elevated ozone (O_3) on photosynthetic rates of different crown position of deciduous broadleaved tree sapling with free air O_3 fumigation system – Oak, Beech and birch– (in Japanese)

Kawaguchi, Korin: Combination effects of elevated O_3 and CO_2 on hybrid larch F_1 (*Larix gmelinii* var. *japonica* x *L. kaempferi*) saplings with open top chambers (in Japanese)

2011

Sato, Kaori：Combination effects of ground vegetation and canopy gap on the regeneration

of deciduous broadleaved trees after surface forest fire (in Japanese)

Suetsugu, Naoki: Effects of long-term fertilization on organic matter and meso-scale animal of a Monarch birch (*Betula maximowicziana*) stand (in Japanese)

2010

Aoyama, Chiho: Time courses of the induced defense in Siebold beech and oak saplings

Imori, Masakazu: Effects of nitrogen application on the photosynthesis and growth of hybrid larch F_1 for 3 years (in Japanese)

2009

Karaki, Takayuki: Development of water impermeability of seed coat and requirements for the seed germination in black locust (*Robinia pseudoacacia* L.)-A consideration focused on the anatomical feature-

Hinata, Kiyomi: Study on the localization of defense chemicals in leaves of deciduous broad-leaved tree seedlings under changing environment

Ryu, Koharu: The effects of nitrogen deposition on the growth of the hybrid larch grown on the serpentine soil

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_2 regimes

2007

Matsui, Katsuhiko: Effects of elevated CO_2 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_2 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_2 enrichment (FACE).

Hida, Takeshi: Change in the light compensation point of deciduous broad-leaved tree saplings grown under elevated CO_2

Karatsu, Kazuki: Photosynthetic acclimation of deciduous broadleaved tree saplings grown under a free air CO_2 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_2 and nitrogen levels (in Japanese).

2004年

Eguchi, Norikazu:
Change of photosynthetic capacity of *Alnus hirsuta* with increasing of atmospheric CO_2 concentration: comparing the proximate *Betula* spp. Without symbiotic N_2 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, Tsutom)

Bachelor research

（on leave from Lab. Of Prof. Y. Takeuchi, Department of Bio–Engineering, Hokkaido Campus, Tokai University）

Kanie, Sanako:

Tonooka, Mai: Effects of elevated CO_2 and O_3 on growth of Japanese, Dahurian and their hybrid larch F_1 with OTC system (in Japanese)

Yamakawa,: Study on the elevated CO_2 on the growth and development of deciduous broadleaved trees (in Japanese)

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_2 (in Japanese)

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

Agari, Tokihisa: Effect of elevated CO_2 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_2 with a FACE (in Japanese).