

Publication list of T. Koike in English

Original paper:

>2012

- (1) Novriyanti, E., Watanabe, M., Makoto, K., Takeda, T., Hashidoko, Y. And Koike, T. (2012) Photosynthetic nitrogen and water use efficiency of acacia and eucalypt seedlings as afforestation species. *Photosynthetica* (in press)
- (2) Komatsu, M., Tobita, H., Watanabe, M., Yazaki, K., Koike, T., and Kitao, M. (2012) Photosynthetic down-regulation in leaves of the Japanese white birch grown under elevated CO₂ concentration does not change their temperature-dependent susceptibility to photoinhibition. *Physiologia Plantarum* (accepted)
- (3) Kawaguchi, K., Watanabe, M., Hoshika, Y. and Koike, T. (2012) Ecophysiological responses of Northern Birch Forests to changing atmospheric environment, *Asian Journal of Atmospheric Environment* (accepted)
- (4) Novriyanti, E., Watanabe M., Kitao, M., Utsugi, H., Uemura, A., and Koike, T. (2012) High nitrogen and elevated [CO₂] effects on the growth, defense and photosynthetic performance of two eucalypt species. *Environmental Pollution* (accepted)
- (5) Kitao, M., Kitaoka, S., Komatsu, M., Utsugi, H., Tobita, H., Koike, T. and Maruyama, Y. (2012) Leaves of Japanese oak (*Quercus mongolica* var. *crispula*) mitigate photoinhibition by adjusting electron transport capacities and thermal energy dissipation along the intra-canopy light gradient, *Physiologia Plantarum* (in press)
- (6) Koike, T., Mao, QZ., Inada, N., Kawaguchi, K., Hoshika, Y., Kita, K. and Watanabe, M. (2012) Growth and photosynthetic responses of cuttings of a hybrid larch (*Larix gmelinii* var. *japonica* x *L. kaempferi*) to elevated ozone and/or carbon dioxide. *Asian Journal of Atmospheric Environment* (accepted)
- (7) Watanabe, M., Ryu, K., Kita, K., Takagi, K. and Koike, T. (2012) Effects of nitrogen load on the growth and photosynthesis of hybrid larch F₁ (*Larix gmelinii* var. *japonica* x *L. kaempferi*) seedlings grown on serpentine soil. *Environmental and Experimental Botany* (accept)
- (8) Mao, QZ, Watanabe, M., Imori, M., Kim, Y.S. Kita, K. and Koike, T. (2012) Photosynthesis and nitrogen allocation in needles of the sun and shade crowns of hybrid larch saplings: effect of nitrogen loading. *Photosynthetica* (accepted)
- (9) Watanabe, M., Watanabe, Y., Kim Y.S. and Koike, T. (2012) Dark aerobic methane emission associated to leaf factors of two *Acacia* and five *Eucalyptus* species. *Atmospheric Environment* **54**, 277–281.
- (10) Koike, T.² (2012) Forest history of Japan with changing environment. *Studia i Materialy Osrodka Kultury Lesnej* 11 (in press)
- (11) Hoshika, Y., Watanabe, M., Inada, N. And Koike, T. (2012) Ozone-induced stomatal sluggishness develops progressively in Siebold beech (*Fagus crenata*). *Environmental Pollution* DOI:10.1016/j.envpol.2012.03.013
- (12) Hoshika, Y., Watanabe, M., Inada, N. And Koike, T. (2012) Modeling of stomatal conductance for estimating ozone uptake of *Fagus crenata* under experimentally enhanced free-air ozone exposure. *Water, Air and Soil Pollution* DOI 10.1007/s11270-012-1158-9

- (13) Saito, K., Watanabe, Y., Shirakawa, M., Matsushita, Y., Imai, T., Koike, T., Sano, Y., Funada, R., Fukazawa, K. and Fukushima, K. (2012) Direct mapping of morphological distribution of syringyl and guaiacyl lignin in the xylem of maple by time-of-flight secondary ion mass spectrometry. *The Plant Journal* 69: 542–552.
- (14) Makoto, K., Shibata, H., Kim, Y.S., Satomura, T., Takagi, K., Nomura, M., Satoh, F., Koike, T. (2012) Contribution of charcoal to short-term nutrient dynamics after surface fire in the humus layer of a dwarf bamboo-dominated forest. *Biology and Fertility of Soils*. DOI: 10.1007/s00374-011-0657-y.
- (15) Kim, Y.S., Imori, M., Watanabe, M., Hatano, R., Yi, M.J, and Koike, T (2012) Simulated nitrogen inputs influence methane and nitrous oxide fluxes from a young larch plantation in northern Japan. *Atmospheric Environment* 46:36-44
- (16) Makoto, K., Kamata, N., Kamibayashi, N., Koike, T., Tani, H. (2012) Bark-beetle-attacked trees produced more charcoal than unattacked trees during a forest fire on the Kenai Peninsula, Southern Alaska. *Scandinavian Journal of Forest Research*. 27: 30-35.
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- (17) Makoto, K., Hirobe, M., DeLuca, T.H., Bryanin, S.V., Procopchuk, V.F., Koike, T. (2011) Effects of fire-derived charcoal on soil properties and seedling regeneration in a recently burned *Larix gmelinii*/*Pinus sylvestris* forest. *Journal of Soils and Sediments*. 11:1317-1322.
- (18) Watanabe, M., Yamaguchi, M., Matsumura, H., Kohno, Y. Koike, T. and Izuta, T. (2011) A case study of risk assessment of ozone impact on forest tree species in Japan. *Asian Journal of Atmospheric Environment*, 5: 205-215.
- (19) Watanabe, M., Watanabe, Y., Kitaoka, S., Utsugi, H., Kita, K. and Koike, T. (2011) Growth and photosynthetic traits of hybrid larch F₁ under elevated CO₂ concentration under low nutrient availability. *Tree Physiology* 31: 965-975.
- (20) Kim YS*, Makoto, K.*, Takakai, F., Shibata, H., Satomura, T., Takagi K, Hatano R, Koike T (2011) Greenhouse gas emissions after a prescribed fire in white birch-dwarf bamboo stands in northern Japan, focusing on the role of charcoal. *European Journal of Forest Research* 130:1031-1044, *: equally contributed to this study (“Both” are the top author)
- (21) Kim, Y.S., Watanabe, M., Imori, M., Sasa, K., Takagi, K., Hatano, R. and Koike, T. (2011) Reduced atmospheric CH₄ consumption by two forest soils under elevated CO₂ concentration in a FACE system in northern Japan. *Japanese Journal of Atmospheric Environment* 46:30–36.
- (22) Hirano, A. Hongo I. and Koike, T. (2011) Morphological and physiological response of Siebold’s beech (*Fagus crenata*) seedlings grown under CO₂ concentration ranging from pre-industrial to expected future levels. *Landscape and Ecological Engineering* 8:59–67, :
- (23) Karaki, T., Watanabe, Y., Kondo, T. and Koike, T. (2011) Strophiole of seeds of the black locust acts as a water gap. *Plant Species Biology* (in press)
- (24) Koike, T., Shimizu, Y. and Ito, S. (2011) Development and application of Forest Aesthetics in Japan in relation to the ideas of H. von Salisch. *Studia i Materialy Osrodka Kultury Lesnej* 10: 47-62.
- (25) Kayama, M., Satoh, F. and Koike, T. (2011) Photosynthetic rate, needle longevity, and nutrient contents in *Picea glehnii* growing on strongly acidic volcanic ash soil in northern Japan. *Photosynthetica* 49: 239-245

(26) Makoto, K., Choi, D.S., Hashidoko, Y. and Koike, T. (2011) The growth of *Larix gmelinii* seedlings as affected by charcoal produced at two different temperatures. *Biology and Fertility of Soils* 46: 47: 467-472.

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- (41) Kayama, M. Makoto, K. Nomura, M, Satoh, F. and Koike, T. (2009) Dynamics of elements in larch seedlings (*Larix kaempferi*) regenerated on serpentine soil in northern Japan. *Landscape and Ecological Engineering* 5: 125 – 135.
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- (43) Kayama, M., Makoto, K., Nomura, M., Sasa, K. and Koike, T. (2009) Growth characteristics of Sakhalin spruce (*Picea glehnii*) planted on the northern Japanese hillsides exposed to strong winds. *Trees - Structure and Function* 23: 145-157
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- (46) Eguchi, N., Karatsu, K., Ueda, T., Funada, R., Takagi, K., Hiura, T., Sasa, K. and Koike, T. (2008) Photosynthetic responses of birch and alder saplings grown in a free air CO₂ enrichment system in northern Japan. *Trees - Structure and Function* 22: 437-447.
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Contribution to Book Chapter:

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