

Publication list of T. Koike in English

Original paper:

>2014

- (1) Watanabe, M., Hoshika, Y. and Koike, T. (2014) Photosynthetic responses of Monarch birch seedlings to different timing of free air ozone fumigation. *Journal of Plant Research*, 127:339–345, DOI 10.1007/s10265-013-0622-y
- (2) Watanabe, Y., Karaki, T., Kondo, T. and Koike, T. (2014) Seed development of the black locust and physical dormancy in northern Japan. *Phyton*. (in press)
- (3) Watanabe, M., Kitaoka, S., Eguchi, N., Watanabe, Y., Satomura, T., Takagi, K., Satoh, F. and Koike, T. (in press) Photosynthetic traits and growth of *Quercus mongolica* var. *crispula* sprouts attacked by powdery mildew under free air CO₂ enrichment. *European Journal of Forest Research*. DOI: 10.1007/s10342-013-0744-8
- (4) Korteniemi, A-T., Chan, T., Shimizu, Y. and Koike (2014) A role of forest aesthetics in white birch stands with changing environment of production. *Studia i Materialy Osrodka Kultury Lesnej* 13 (in press)
- (5) Cao D, Shi FC, Koike T, Lu Z and Sun J (accepted) Halophyte plant communities affecting enzyme activity and microbes in saline soils of the Yellow River Delta in China. *Journal of Clean- Soil Air Water*, DOI: 10.1002/clen.201300007
- (6) Watanabe, M., Hoshika, Y., Inada, N. and Koike, T. (2014) Canopy carbon budget of Siebold's beech (*Fagus crenata*) saplings exposed to ozone. *Environmental Pollution*. 184: 682-689.
- (7) Mao QZ, Watanabe M, Makoto K, Kita K and Koike T (2014) High nitrogen deposition may enhance growth of the new hybrid larch F₁ growing at two phosphorus levels. *Landscape and Ecological Engineering* 10:1-8, DOI10.1007/s11355-0212-0207-2

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- (8) Watanabe, M., Mao, Q., Novriyanti, E., Kita, K., Takagi, K., Satoh, F. and Koike, T. (2013) Elevated CO₂ enhances the growth of hybrid larch F₁ (*Larix gmelinii* var. *japonica* × *L. kaempferi*) seedlings and changes its biomass allocation. *Trees*. DOI: 10.1007/s00468-013-0912-y
- (9) Fukuzawa, K., Shibata, H., Takagi, K., Satoh, F., Koike, T. and Sasa, K. (2013) Temporal variation in fine-root biomass, production and mortality in a cool temperate forest covered with dense understory vegetation in northern Japan. *Forest Ecology and Management* 310: 700-710.
- (10) Hoshika, Y., Watanabe, M., Inada, N., Mao, QZ. and Koike, T. (2013) Model analysis of avoidance of ozone stress via stomatal closure for Siebold's beech (*Fagus crenata*). *Annals of Botany* 112: 1149-1158. Doi: 10.1093/aob/mct166.
- (11) Watanabe, M., Hoshika, Y., Inada, N., Wang XN, Mao, QZ. and Koike, T. (2013) Photosynthetic traits of Siebold's beech and oak saplings grown under free air ozone exposure in northern Japan. *Environmental Pollution*. 174: 50-56
- (12) Hoshika, Y., Tatsuta, S., Watanabe, M., Wang XN, Watanabe, Y., Saito, H., and Koike, T. (2013) Effect of ambient ozone at the somma of Lake Mashu on growth and leaf gas exchange in *Betula ermanii* and *B. platyphylla* var. *japonica*. *Environmental and Experimental Botany* 90: 12–16 (DOI:10.1016/j.envexpbot.2012.11.003)

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- (13) Hoshika, Y., Watanabe, M., Inada, N., and Koike, T. (2012) Growth and leaf gas exchange in three birch species exposed to elevated ozone and CO₂ in summer. *Water, Air, and Soil Pollution*, 223: 5017-5025, DOI: 10.1007/s11270-012-1253-y
- (14) Kim, YS, Yi, MJ, Lee YY, Son YH and Koike T. (2012) Characteristics of soil CO₂ efflux in even-aged alder compared to Korean pine plantation in central Korea. *Journal of Forest Science* 28: 232-241.
- (15) Mao, QZ, Watanabe, M., Imori, M., Kim, Y.S. Kita, K. and Koike, T. (2012) Photosynthesis and nitrogen allocation in needles in the sun and shade crowns of hybrid larch. *Photosynthetica* 50: 422-428.
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- (17) 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* 50: 273-281.
- (18) 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* doi:10.1111/j.1399-3054.2012.01651.x
- (19) 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* 6:196-205
- (20) Kitao, M., Tobita, H., Utsugi, H., Komatsu, M., Kitaoka, S., Maruyama, Y. and Koike, T. (2012) Photosynthetic traits around budbreak in pre-existing needles of Sakhalin spruce (*Picea glehnii*) seedlings grown under elevated CO₂ concentration assessed by chlorophyll fluorescence measurements. *Tree Physiology*. 32: 998-1007.
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- (22) 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* 6:104-110.
- (23) 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* 83, 73-81.
- (24) 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.
- (25) Koike, T.² (2012) Forest history of Japan with changing environment. *Studia i Materialy Osrodka Kultury Lesnej* 11: 109-130.

- (26) Hoshika, Y., Watanabe, M., Inada, N. And Koike, T. (2012) Ozone-induced stomatal sluggishness develops progressively in Siebold beech (*Fagus crenata*). *Environmental Pollution* 166: 152-156. DOI:10.1016/j.envpol.2012.03.013
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- (30) 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
- (31) Karaki, T., Watanabe, Y., Kondo, T. and Koike, T. (2012) Strophiole of seeds of the black locust acts as a water gap. *Plant Species Biology* 27 : 226-232. DOI: 10.1111/j.1442-1984.2011.00343.x
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- (35) 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.
- (36) 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)
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- (40) 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
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