

Publication list of T. Koike in English

Original paper:

>2014

- (1) 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.
- (2) 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* DOI: 10.1007/s10265-013-0622-y
- (3) Watanabe, Y., Karaki, T., Kondo, T. and Koike, T. (2014) Seed development of the black locust and physical dormancy in northern Japan. *Phyton* (accept for publication).

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- (4) 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* (in press)
- (5) Watanabe, M., Kitaoka, S., Eguchi, N., Watanabe, Y., Satomura, T., Takagi, K., Satoh, F. and Koike, T. (2013) Photosynthetic traits and growth of *Quercus mongolica* var. *crispula* sprouts attacked by powdery mildew under free air CO₂ enrichment. *European Journal of Forest Research*. (accept for publication).
- (6) Watanabe, M., Mao, QZ, 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* 27: 1647-1655.
- (7) Hoshika, Y., Watanabe, M., Inada, N. and Koike, T. (2013) Model-based analysis of avoidance of ozone stress by stomatal closure in Siebold's beech (*Fagus crenata*). *Annals of Botany* 112: 1149-1158
- (8) 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
- (9) 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)
- (10) Mao QZ, Watanabe M, Makoto K, Kita K and Koike T (2013) High nitrogen deposition may enhance growth of the new hybrid larch F₁ growing at two phosphorus levels. *Landscape and Ecological Engineering* DOI10.1007/s11355-0212-0207-2

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- (11) 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
- (12) Wang, W., Wang H., Z Y., Li X and Koike, T (2012) Characteristics of the

- temperature coefficient, Q_{10} , for the respiration of non-photosynthetic organs and soils of forest ecosystems. *Frontiers of Forestry in China* 04/2012; 1(2):125-135.
- (13) 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.
 - (14) 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.
 - (15) 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* 170: 124-130
 - (16) 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.
 - (17) 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
 - (18) 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
 - (19) 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.
 - (20) 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*. 146: 192-204.
 - (21) 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.
 - (22) 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.
 - (23) 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.
 - (24) Koike, T.² (2012) Forest history of Japan with changing environment. *Studia i Materialy Osrodka Kultury Lesnej* 11: 109-130.
 - (25) Hoshika, Y., Watanabe, M., Inada, N. And Koike, T. (2012) Ozone-induced stomatal sluggishness develops progressively in Siebold beech (*Fagus crenata*).

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- (30) 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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- (37) 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, :

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