

Publication list of T. Koike in English

Original paper:

>2015

- (1) Agathokleous, E., Koike, T., Saitanis, C.J., Watanabe, M., Satoh, F. and Hoshika, Y. (2015) Ethylenediurea (EDU) as a protectant of plants against O₃. Eurasian J. Forest Research (in press)
- (2) Kayama, M., Qu, L.Y. and Koike T. (2015) Elements and ectomycorrhizal symbiosis affecting the growth of Japanese larch seedlings regenerated on slopes of an active volcano in northern Japan. Trees (in press).
- (3) Wang, XN., S. Fujita, T. Nakaji, M. Watanabe, F Satoh and T. Koike (2015) Fine root turnover of Japanese white birch (*Betula platyphylla* var. *japonica*) grown under elevated CO₂ in northern Japan. Trees (in press)
- (4) Kam D-G., M. Watanabe, C. Shi, K. Kita, F. Satoh and Koike, T. (2015) Growth of the seedlings of Japanese larch and its hybrid grown under a free-air O₃ fumigation - an initial assessment for effects of adequate and excessive nitrogen-. Journal of Agricultural Meteorology 71 (in press)
- (5) Hoshika, Y., Watanabe, M., Inada, N. and Koike, T. (2015) The effect of ozone-induced stomatal closure on ozone uptake and its changes due to leaf age in sun and shade leaves of Siebold's beech. Journal of Agricultural Meteorology 71 (in press)
- (6) Watanabe, M., Hoshika, Y., Inada, N. and Koike, T. (2015) Difference in photosynthetic responses to free air ozone fumigation between upper and lower canopy leaves of Japanese oak (*Quercus mongolica* var. *crispula*) saplings. Journal of Agricultural Meteorology 71 (in press)
- (7) Pretzsch, H., P. Biber, E. Uhl, J. Dahlhausen, T. Rötzer, J. Caldentey, T. Koike, T. van Con, A. Chavanne, T. Seifert, B. du Toit, C. Farnden, S. Pauleit (2015) Crown size and growing space requirement of common tree species in urban centres, parks, and forests. Urban Forestry & Urban Greening 04/2015; DOI:10.1016/j.ufug.2015.04.006 .
- (8) Hoshika, Y., Katata, G., Deushi, M., Watanabe, M., Koike, T. and Paoletti, E. (2015) Ozone-induced stomatal sluggishness changes carbon and water balance of temperate deciduous forests, Scientific Report 04/2015; 5:9871. DOI:10.1038/srep09871
- (9) Fukuzawa, K., H. Shibata, K. Takagi, F. Satoh, T. Koike and K. Sasa (2015) Roles of dominant understory Sasa bamboo in carbon and nitrogen dynamics following canopy tree removal in a cool-temperate forest in northern Japan: Role of Understory Sasa in Forest. Plant Species Biology 04/2015; 30(2). DOI:10.1111/1442-1984.12086
- (10) Kayama, M. and Koike, T. (2015) Differences in growth characteristics and dynamics of elements in seedlings of two birch species grown in serpentine soil in northern Japan. Trees-structure and function 29:171-184. DOI: 10.1007/s00468-014-1102-2
- (11) Agathokleous, E., Koike, T., Watanabe, M., Hoshika, Y., and Saitanis, C.J. (2015). Ethylene-di-urea (EDU), the most effective phytoprotectant against O₃ deleterious effects and a valuable research tool: a mystery of decades. Journal of

Agricultural Meteorology (in press)

- (12) Kitao, M., K. Yazaki, S. Kitaoka, E. Fukatsu, H. Tobita, M. Komatsu, Y. Maruyama and T. Koike (2015) Mesophyll conductance in leaves of Japanese white birch (*Betula platyphylla* var. *japonica*) seedlings grown under elevated CO₂ concentration and low N availability. *Physiologia Plantarum* 02/2015; DOI:10.1111/ppl.12335.
- (13) Koike, T., Watanabe, M., Watanabe, Y., Agathokleous, E., Mao, QZ., Eguchi, N., Takagi, K., Satoh, F., Kitaoka, S., and Funada, R. (2015). Ecophysiology of deciduous trees native to Northeast Asia grown under FACE (Free Air CO₂ Enrichment), *Journal of Agricultural Meteorology* 71 (in press)
- (14) Agathokleous, E., Saitanis, C.J., and Koike, T. (2015) Tropospheric O₃, the nightmare of wild plants –A review study. *Journal of Agricultural Meteorology* 71: 142-152.
- (15) Wang, XN, L Qu, Q Mao, M Watanabe, Y Hoshika, A Koyama, K Kawaguchi, Y Tamai and T Koike (2015) Ectomycorrhizal colonization and growth of the hybrid larch F₁ under elevated CO₂ and O₃. *Environmental Pollution* 197: 116-126
- (16) Hoshika, Y., Watanabe, M., Kitao, M., Haberle, K-H., Grams, T.E.E., Koike, T. and Matyssek, R. Ozone induces stomatal narrowing in European and Siebold's beeches: a comparison between two experiments of free-air ozone exposure. *Environmental Pollution* 196: 527-533, DOI: 10.1016/j.envpol.2014.07.034.
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- (17) Kortenienmi, 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: 241-256.
- (18) Watanabe, Y., Karaki, T., Kondo, T. and Koike, T. (2014) Seed development of the black locust and physical dormancy in northern Japan. *Phyton* 54: 305-320
- (19) 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
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- (21) 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
- (22) 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.
- (23) 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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- (24) Watanabe, M., Mao, Q., Novriyanti, E., Kita, K., Takagi, K., Satoh, F. and

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- (25) 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.
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- (72) Zu, Y., Wang, W., Wang, H., Liu W, Cui S. and Koike, T (2009) Soil CO₂ efflux, carbon dynamics, and change in thermal conditions from contrasting clear-cut sites during natural restoration and uncut larch forests in northeast China. Climate Change 96:137–159, DOI 10/1007/s-10584 -009-9601-7.
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