

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) Agathokleous, E., Saitanis, C.J., Satoh, F. and Koike, T. (2015) Wild plant species as subjects in O₃ research. *Eurasian J. Forest Research* (in press)
- (3) Agathokleous E, Watanabe M, Nakaji T, Wang XN, Satoh F, and Koike T. (2015) Impact of elevated CO₂ on root traits of a sapling community of three birches and an oak: A free-air-CO₂ enrichment (FACE) in northern Japan. *Trees* DOI: 10.1007/s00468-015-1272-6
- (4) Quentin, AG., Pinkard, EA., Ryan, MG., Tissue, DT., Baggett, LS., Adams, HD., Maillard, P., Marchand, J., Landhäusser, SM., Lacoite, A., Gibon, Y., Anderegg, WRL., Asao, S., Atkin, OK., Bonhomme, M., Claye, C., Chow, PS., Clément-Vidal, A., Davies, NW., Dickman, LT., Dumbur, R., Ellsworth, DS. Falk, K., Galiano, L., Grünzweig, JM., Hartmann, H., Hoch, G., Hood, S., Jones, JE., Koike, T., Kuhlmann, I., Lloret, F., Maestro, M., Mansfield, SD., Martínez-Vilalta, J., Maucourt, M., McDowell, NG., Moing, A., Muller, B., Nebauer, SG., Niinemets, Ü., Palacio, S., Piper, F., Raveh, E., Richter, A., Rolland, G., Rosas, T., Saint-Joanis, B., Sala, A., Smith, RA., Sterck, F., Stinziano, JR., Tobias, M., Unda, F., Watanabe, M., Way, DA., Weerasinghe, LK., Wild, B., Wiley, E., and Woodruff, DR.: Non-structural carbohydrates in woody plants compared among laboratories. *Tree Physiology*. (in press)
- (5) Kitao, M., Hida, T., Eguchi, N., Tobita, H., Utsugi, H., Uemura, A., Kitaoka, S. and Koike, T. (2015) Light compensation point in shade-grown seedlings of deciduous broadleaf tree species with different successional traits raised under elevated CO₂ *Plant Biology* (accepted)
- (6) Kam D-G, Shi, C., Watanabe, M., Kita, K., Satoh, F. and Koike, T. (2015) Growth of Japanese and hybrid larch seedlings grown under free-air O₃ fumigation—an initial assessment of the effects of adequate and excessive nitrogen. *Journal of Agricultural Meteorology* 71: 239-244
- (7) 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).
- (8) 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* (accepted)
- (9) 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)
- (10) 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*

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- (11) 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 .
 - (12) 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
 - (13) 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
 - (14) 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
 - (15) 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)
 - (16) 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.
 - (17) 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)
 - (18) 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.
 - (19) 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
 - (20) 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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- (26) 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.
- (27) 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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- (45) 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.
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