

Publication list of T. Koike in English

Original paper:

>2010

- (1) Makoto, K., Tamai, Y., Kim, Y.S. and Koike, T. (2010) Buried charcoal layer and ectomycorrhizae cooperatively promote the growth of *Larix gmelinii* seedlings. *Plant and Soil*: 327: 143-152
- (2) Mori, A., Yamaji, K., Ishida, A., Prokushikin S.G., Masyagina O., Hagihara, A., Rafiqul Hoque, A.T.M., Suwa, R., Osawa, A., Nishizono, T., Ueda, T., Kinjo, M., Miyagi, T., Kajimoto, T., Koike, T., Matsuura, Y., Toma, T., Zyryanova, O.A., Abaimov, A.P., Awaya, Y., Araki, M.G., Kawakasaki, T., Chiba, Y., and Umari M. (2010) Mixed-power scaling of whole-plant respiration from seedlings to giant trees. *Proceedings of the National Academy of Sciences* 107: 1447-1451
- (3) Morimoto J., Kominami R. and Koike T. (2010) Distribution and characteristics of the soil seed bank of the black locust (*Robinia pseudoacacia*) in a headwater basin in northern Japan. *Landscape and Ecological Engineering*; DOI: 10.1007/s11355-009-0096-1.
- (4) Watanabe, M., Umemoto-Yamaguchi, M., Koike, T. and Izuta, T. (2010) Growth and photosynthetic response of *Fagus crenata* seedlings to ozone and/or elevated carbon dioxide. *Landscape and Ecological Engineering* 6:181-190.
- (5) Watanabe, Y., Satomura, T., Sasa, K., Funada, R. and Koike, T. (2010) Differential anatomical responses to elevated CO₂ in saplings of four hardwood species. *Plant & Cell Environment* 33:1101 – 1111
- (6) Hirano, A. Hongo I. and Koike, T. (2010) 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* 7: accept for publication
- (7) Suetsugu, N., Satoh, F. and Koike, T. (2010) An atlas of Collembola species in the Sapporo Experimental Forest of Hokkaido University in Northern Japan. *Eurasian Journal of Forest Research* 13: accept for publication after revision.
- (8) Kim, Y.S., Watanabe, M., Imori, M., Sasa, K., Takagi, K., Hatano, R. and Koike, T. (2010) Reduced atmospheric CH₄ consumption by two different forest soils in elevated CO₂ concentrations in a FACE system in cool-temperate northern Japan. *Japanese Journal of Atmospheric Environment* 45: accept for publication after revision.

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- (9) Koike, T. (2009) A trial of revegetation practices with larch species under changing environment. *Landscape and Ecological Engineering* 5: 97 - 98
- (10) 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*, DOI 10/1007/s-10584 -009-9601-7.
- (11) Ryu K, Watanabe M, Shibata H, Takagi K, Nomura M, Koike T. (2009) Ecophysiological responses of the larch species in northern Japan to environmental changes as a base of afforestation. *Landscape and Ecological Engineering* 5: 99 -106
- (12) Qu, L., Kitaoka, S., Kuromaru, M., Osaki, M., Sasa, K. and Koike, T. (2009)

Root-shoot communication of the seedlings of Japanese larch and its hybrid grown in different temperature regimes. *Landscape and Ecological Engineering* 5: 115 – 123.

- (13) 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.
 - (14) Kitaoka, S., Watanabe, Y. and Koike, T. (2009) The effects of clear cutting of overstory trees and nitrogen supply on the gas exchange traits in four seral deciduous broad-leaved tree seedlings growing in larch plantations *Tree Physiology* 29:1503-1511
 - (15) 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
 - (16) Takagi,K., Fukuzawa,K., Liang,N., Kayama,M., Nomura,M., Hojyo,H., Sugata,S., Shibata,H., Fukazawa,T., Takahashi,Y., Nakaji,T., Oguma,H., Mano,M., Akibayashi,Y., Murayama,T., Koike,T., Sasa,K. and Fujinuma,Y. (2009) Change in the CO₂ balance under a series of forestry activities in a cool-temperate mixed 2 forest with dense undergrowth. *Global Change Biology* 14: DOI:10.1111/j.1365-2486.2008.01975.x
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- (17) Choi, D.S., Jin, H.O., Chung, D. J. Sasa, K. and Koike, T. (2008) Growth and physiological activity in *Larix kaempferi* seedlings inoculated with ectomycorrhizae affected by soil acidification. *Trees - Structure and Function* 22:729-735
 - (18) 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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 - (20) Watanabe, Y, Tobita, H, Kitao, M, Maruyama, Y, Choi, D.S., Sasa, K, Funada, R. and Koike, T. (2008) Effects of elevated CO₂ and nitrogen on wood structure related to water transport in seedlings of two deciduous broad-leaved tree species. *Trees - Structure and Function* 22: 403–411.
 - (21) Kitahashi, Y., Ichie, T., Maruyama, Y., Kenzo, T., Kitaoka, S., Matsuki, S. Nakashizuka, T. and Koike, T. (2008) Photosynthetic water use efficiency in tree crowns of tropical emergent species in Sarawak, Malaysia. *Photosynthetica* 46: 151-155.
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- (22) Ishii, H., Kitaoka, S., Fujisaki, T., Maruyama, Y. and Koike, T. (2007) Plasticity of shoot and needle morphology and photosynthesis of two *Picea* species with different site preferences in northern Japan. *Tree Physiology* 27: 1595–1605.
 - (23) Kitaoka, S., Sakata, T., Koike, T., Tobita, H., Uemura, A., Kitao, M., Maruyama, Y., Sasa, K. and Utsugi, H. (2007) Methane emission from leaves of larch, birch and oak saplings grown under elevated CO₂ in northern Japan –A preliminary study- *Journal of Agriculture Meteorology* 63: 201-206.
 - (24) Kayama, M., Kitaoka, S., Choi, D.S. Wang, W. and Koike, T. (2007) Needle

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- (30) Makoto, K., Nemilostiv, Y.P., Zyryanova, O.A., Kajimoto, T., Matsuura, Y., Yoshida, T., Satoh, F., Sasa, K. and Koike, T. (2007) Regeneration after forest fires in mixed conifer broadleaved forests of the Amur region in Far Eastern Russia: the relationship between species specific traits against fire and recent fire regimes. *Eurasian Journal of Forest Research* 10: 51-58.
- (31) Koike, T., Kitaoka, S., Masyagina, O.V., Watanabe, Y., Ji, D.H., Maruyama, Y. and Sasa, K. (2007) Nitrogen dynamics in leaves of deciduous broad-leaved tree seedlings grown in a unmanaged larch plantation in northern Japan. *Eurasian Journal of Forest Research* 10: 115-119
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- (33) Kujansuu, J., Yasue, K., Koike, T., Abaimov, A.P., Kajimoto, T., Takeda, T., Tokumoto, M. and Matsuura, Y. (2007) Responses of ring widths and maximum densities of *Larix gmelinii* to climate in contrasting north- and south-facing slopes in central Siberia. *Ecological Research* DOI10.1007/s11284-006-0062-4
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- (35) Koike, T., Matsuki, S., Choi, D.S., Matsumoto, T. Watanabe, Y. and Maruyama, Y. (2006) Photosynthesis, leaf longevity and defense characteristics in trees of Betulaceae planted in Northern Japan. *Eurasian Journal of Forest Research* 9: 69-78.
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- (42) Masyagina O.V., Hirano T., Ji D.H., Choi D.S., Qu L., Fujinuma Y., Sasa K., Matsuura Y., Prokushkin S.G., and Koike T. (2006) Effect of spatial variation of soil respiration rates following disturbance by timber harvesting in a larch plantation in northern Japan. *Forest Science and Technology* 2: 80-91. Kujansuu, J., Yasue, K., Koike, T., Abaimov, A.P., Kajimoto, T., Takeda, T., Tokumoto, M. and Matsuura, Y. (2006) Climatic responses of tree-ring widths of *Larix gmelinii* growing on the contrasting north-facing and south-facing slopes in central Siberia. *Journal of Wood Science* DOI10.1007/s10086-006-0837-9.
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- (49) Kayama, M., Choi, D.S., Tobita, H., Utsugi, H., Kitao, M., Maruyama, Y., Nomura, M. and Koike, T. (2006) Comparison of growth characteristics and tolerance to serpentine soil of three ectomycorrhizal spruce seedlings in northern Japan. *Trees Structure and function* 20: 430-440

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