



Faculty of Agriculture, Kasetsart University

Crop Eco-physiology Laboratory



Poonpipope Kasemsap, Ph.D. (Plant Physiology)
University of California at Davis, USA
Associate Professor e-mail: agrppk@ku.ac.th

International Administration:

Chairman, International Biology Olympiad (2008-16)
 International advisory board member, Horticulture CRSP (2010-13)

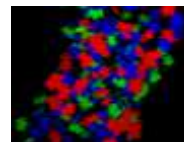
Kasetsart University Administration:

Vice president for international relations (2012-15)



Research Program

- : Effects of climate changes and air pollutants on eco-physiology of horticultural crops
- : Physiology of horticultural crop production
- : Carbondioxide and water fluxes of rubber plantation
- : Improving rubber productivity
- : Rice breeding (high temperature tolerance)



Selected Publications

- Thwe A., G. Vercambre, H. Gautier, L. Pagès, C. Jourdan, F. Gay, P. Kasemsap. 2013. Dynamic shoot and root growth at different developmental stages of tomato (*Solanum lycopersicum* Mill.) under acute ozone stress. *Scientia Horticulturae* 150:317–325.
- Then R., J.L. Siangliw, A. Vanavichit, P. Kasemsap, S. Fukai, and T. Toojinda. 2011. Effects of drought tolerant quantitative trait loci on flowering traits, panicle exertion rate, spikelet sterility and grain yield of rice under rainfed lowland conditions. *Kasetsart Journal - Natural Science* 45 (1): 101-109.
- Sriphadet S., P. Kasemsap, P. Srinives. 2010. Effect of leaflet size and number on agronomic and physiological traits of mungbean. *Journal of Agricultural Science* 148:353-361.
- Kositsup B., P. Kasemsap, S. Thanisawanyangkura, N. Chairungsee, D. Satakhun, K. Teerawatanasuk, T. Ameglio, and P. Thaler. 2010. Effect of leaf age and position on light-saturated CO₂ assimilation rate, photosynthetic capacity, and stomatal conductance in rubber trees. *Photosynthetica* 48 (1): 67-78, 2010.
- Sinoquet, H., S. Pincebourde, B. Adam, N. Donès, J. Phattaralerphong, D. Combes, S. Ploquin, K. Sangsing, P. Kasemsap, S. Thanisawanyangkura, G. Groussier-Bout, J. Casas. 2009. 3-D maps of tree canopy geometries at leaf scale. *Ecology* 90(1): 283-283.
- Chantuma, P., A. Lacoïnte, P. Kasemsap, S. Thanisawanyangkura, E. Gohet, A. Clerment A. Guilliot, T. Ameglio, and P. Thaler. 2009. Carbohydrate storage in wood and bark of rubber trees submitted to different level of C demand induced by latex tapping. *Tree Physiology* 29: 1021–1031.
- Mai, J., S. Herbet, M. Vandame, B. Kositsup, P. Kasemsap, E. Cavaloc, J. Julien, T. Ameglio and P. Roedel-Drevet. 2009. Effect of chilling on photosynthesis and antioxidant enzymes in *Hevea brasiliensis* Muell. *Arg. Trees –Structure and Function* 23:863-874.
- Kositsup B., P. Monpied, P. Kasemsap, P. Thaler, T. Ameglio and E. Dreyer. 2009. Photosynthetic capacity and temperature responses of photosynthesis of rubber trees (*Hevea brasiliensis* Müll. Arg.) acclimate to changes in ambient temperatures. *Trees - Structure and Function* 23(2): 357-365.
- Pakoktom, T., M. Aoki, P. Kasemsap, S. Boonyawat, and P. Attarod. 2009. CO₂ and H₂O Fluxes Ratio in Paddy Fields of Thailand and Japan. *Hydrological Research Letters* 3, 10-13.
- Silpi U., A. Lacoïnte, P. Kasemsap, S. Thanisawanyangkura, P. Chantuma, E. Gohet, N. Musigamart, A. Clément, T. Améglio and P. Thaler. 2007. Carbohydrate reserves as a competing sink: evidence from tapping the rubber tree. *Tree Physiology* 27:881-889.
- Silpi U., P. Thaler, P. Kasemsap, A. Lacoïnte, A. Chantuma, B. Adam, E. Gohet, S. Thanisawanyangkura and T. Améglio. 2006. Effect of tapping activity on radial growth of *Hevea brasiliensis* Muell. Arg. A dynamic study at seasonal scale. *Tree Physiol.* 26:1579-1587.
- Silpi U., P. Chantuma, P. Kasemsap, P. Thaler, S. Thanisawanyangkura, A. Lacoïnte, T. Améglio and E. Gohet 2006. Sucrose and Metabolism Distribution Patterns in the Latex of Three *Hevea brasiliensis* Clones: Effects of Tapping and Stimulation on a Trunk Scale. *J. Rubb. Res.* 9(2):115-131.
- Sangsing K., H. Cochard, P. Kasemsap, S. Thanisawanyangkura, K. Sangkhasila, E. Gohet, and P. Thaler. 2004. Is growth performance in rubber (*Hevea brasiliensis*) clones related to xylem hydraulic efficiency? *Canadian Journal of Botany.* 82:886-892.
- Sangsing K., P. Kasemsap, S. Thanisawanyangkura, K. Sangkhasila, E. Gohet, P. Thaler, and H. Cochard. 2004. Xylem embolism and stomatal regulation in two rubber clones (*Hevea brasiliensis* Muell. Arg.). *Trees : Structure and Function.* 18:109-114.
- Kowsurat, S., P. Srinives, P. Kasemsap, and S. Lamseejan. 1999. Effects of the multiple leaflet gene on agronomical and physiological characters of mungbean (*Vigna radiata*). *J. Agri. Sci., Cambridge* 133:321-324.
- Crozat, Y., V. Judais, and P. Kasemsap. 1999. Age-related abscission patterns of cotton fruiting forms: timing of the end of abscission susceptibility in relation to water content and growth of the boll. *Field Crop Res.* 64:261-272.
- Sinoquet H., S. Thanisawanyangkura, H. Mabrouk, and P. Kasemsap. 1998. Characterization of the light environment in canopies using 3D digitizing and image processing. *Annals of Botany* 82:203-212.