Million Tadege, Assistant Professor, Plant Functional Genomics
Department of Plant and Soil Sciences, 368 Agricultural Hall, Stillwater, OK 74078-6028
Phone: 405-744-6193; Fax: 405-744-0354, Email: million.tadege@okstate.edu

Research Expertise
Plant molecular genetics/functional genomics, control of flowering time, leaf development, genetic regulatory network in plant biomass development, retrotransposon tagging, metabolic signaling, alcoholic fermentation in plants.

Education
Ph.D. 1997, Plant Molecular Biology, University of Bern, Switzerland.
M.Sc. 1994, Biotechnology, Wageningen Agricultural University, The Netherlands.
B.Sc. 1987, Biology, Asmara University, Eritrea.

Appointments
9/09 – present Assistant Professor, Oklahoma State University, OK
9/03 – 8/09 Postdoctoral Research Fellow, Samuel Roberts Noble Foundation, OK.
9/99 – 8/03 Postdoctoral Research Fellow, CSIRO, Plant Industry, Canberra, Australia.
1/98 – 8/99 Postdoctoral Research Fellow, University of Bern, IPS, Bern, Switzerland.
9/94 – 12/97 Graduate Research Assistant, University of Bern, IPS, Bern, Switzerland.
7/91 – 8/92 Lecturer, Alemaya University of Agriculture, Alemaya, Ethiopia.
8/88 – 6/91 Assistant Lecturer, Alemaya University of Agriculture, Alemaya, Ethiopia.
8/87 – 7/88 Graduate Assistant, Alemaya University of Agriculture, Alemaya, Ethiopia.

Honors and Awards:
- 1999 - Swiss National Science Foundation Perspective Scientist Postdoctoral Award.
- 1997 – Excellence, Ph.D. in Plant Molecular Biology, University of Bern.
- 1996 - The Roche Research Foundation Student Research Award.
- 1992-94 - Wageningen Agricultural University Fellowship.
- 1987 - Great Distinction, B.Sc. in Biology, Asmara University.

Professional Activities:
- 2010- DOE-USDA grant review panel for biomass feedstock genomics.
- 2005-2008, organizer of *Medicago truncatula Tnt1* mutant screening public annual workshop.
- Reviewed papers for various scientific journals.
- Member, American Society of Plant Biologists.

Lab startup support – NSF-EPSCoR – Plant biomass functional genomics.
Grant support – OCAST, basic plant science 2011 – The molecular basis of leaf lamina development in *Medicago truncatula*.

Publications – Referred journal articles

Tadege M, Lin H, Bedair M, Berbel A, Wen J, Rojas CM, Niu L, Tang Y, Sumner L[1], Ratet P, McHale NA, Madueño F, and S. Mysore KS (2011) *STENOFOLIA* Regulates Blade Outgrowth and Leaf Vascular Patterning in *Medicago truncatula* and *Nicotiana sylvestris.* Plant Cell doi/10.1105/tpc.111.085340.

Zhou C, Han L, Hou C, Metelli A, Qi L, **Tadege M**, Mysore KS and Wang ZY (2011) Developmental Analyses of a *Medicago truncatula* Mutant *smooth leaf margin1* Reveal Distinct Ontogenies among Plant Organs. Plant Cell doi/10.1105/tpc.111.085464.

Laurie RE, Diwadkar P, Jaudal M, Zhang L, Hecht V, Wen J, **Tadege M**, Mysore KS, Putterill J, Weller JL and Richard C. Macknight RC (2011) The *Medicago truncatula FLOWERING LOCUS T* homologue, *MtFTa1,* is a key regulator of flowering time. Plant Physiology DOI:10.1104/pp.111.180182 .

Horváth B, Yeun LH, Domonkos A, Halász G, Gobbato E, Ayaydin F, Míró K, Hirsch S, Sun J, **Tadege M**, Ratet P, Mysore K, Ané J-M, Oldroyd GED and Kaló P (2011) *Medicago truncatula IPD3* is a member of the common symbiotic signaling pathway required for rhizobial and mycorrhizal symbioses. Molecular Plant-Microbe Interaction DOI: 10.1094/MPMI-01-11-0015.

Murray JD, Muni RR, Torres-Jerez I, Tang Y, Allen S, Andriankaja M, Li G, Laxmi A, Cheng X, Wen J, Vaughan D, Schultze M, Sun J, Charpentier M, Oldroyd G, **Tadege M**, Ratet P, Mysore KS, Chen R, Udvardi MK (2011) Vapyrin, a gene essential for intracellular progression of arbuscular mycorrhizal symbiosis, is also essential for infection by rhizobia in the nodule symbiosis of *Medicago truncatula*. Plant Journal **65**(2): 244-52.

Cheng X, Wen JQ, **Tadege M,** Ratet P, Mysore K S (2011) Reverse genetics in *Medicago truncatula* using Tnt1 insertion mutants. Methods in Molecular Biology, **678:** 179-90.

Chen J, Yu J, Ge L, Wang H, Berbel A, Liu Y, Chen Y, Li G, **Tadege M**, Wen J, Cosson V, Mysore KS, Ratet P, Madueño F, Bai G, Chen R (2010) Control of dissected leaf morphology by a Cys(2)His(2) zinc finger transcription factor in the model legume *Medicago truncatula*. Proc Natl Acad Sci U S A. **107:** 10754-10759.

Tadege M, Wang TL, Wen J, Ratet P, and Mysore KS (2009) Mutagenesis and Beyond! Tools for understanding legume biology. Plant Physiology **151:** 978-984.

Pang Y, Wenger JP, Saathoff K, Peel GJ, Wen J, Huhman D, Allen SN, Tang Y, Cheng X, **Tadege M**, Ratet P, Mysore KS, Sumner LW, Marks MD, Dixon RA (2009) A WD40 repeat protein from Medicago truncatula is necessary for tissue-specific anthocyanin and proanthocyanidin biosynthesis, but not for trichome development**.** Plant Physiology **151:** 1114-1129.

Tadege M, Wen J, He J, Tu H, Kwak Y, Tu H, Eschstruth A, Endre G, Zhao P, Chabaud M, Ratet P, Mysore KS (2008) Large scale insertional mutagenesis using the Tnt1 retrotransposon in the model legume Medicago truncatula. Plant Journal **54:** 335-347.

Wang H, Chen J, Wen J, **Tadege M**, Li G, Yu L, Mysore KS, Ratet, P, Chen R (2008) Control of compound leaf development by *Medicago truncatula* FLO/LFY ortholog Single Leaflet1 (SGL1). Plant Physiology **146:**1759-1772.

Trevaskis B, **Tadege M**, Hemming M, Peacock WJ, Dennis ES, Sheldon C (2007) SVP-like MADS-box genes inhibit floral meristem identity in barley. Plant Physiology **143:** 225-235.

Tadege M, Ratet P, Mysore KS (2005) Insertional mutagenesis: a Swiss Army knife for functional genomics of Medicago truncatula. Trends in Plant Science **10:** 229-235.

Tadege M, Sheldon CC, Helliwell CA, Updaha N, Dennis ES, Peacock WJ (2003) Reciprocal control of flowering time by OsSOC1 in transgenic Arabidopsis and by FLC in transgenic rice. Plant Biotechnology Journal **1:**361-369.

Mellema S, Eichenberger W, Rawyler A, Suter M, **Tadege M**, Kuhlemeier C (2002) The ethanolic fermentation pathway supports respiration and lipid biosynthesis in tobacco pollen. Plant Journal **30:** 329-336.

Tadege M, Sheldon CC, Helliwell CA, Stoutjesdijk P, Dennis ES, Peacock WJ (2001) Control of flowering time by FLC orthologues in Brassica napus. Plant Journal **28:** 545-553 (cover).

Sheldon CC, Finnegan EJ, Rouse D, **Tadege M**, Bagnall D, Helliwell CA, Peacock WJ, Dennis ES (2000) The control of flowering by vernalization. Curr Opin Plant Biol **3:**418-422.

Tadege M, Dupuis I, Kuhlemeier C (1999) Ethanolic fermentation: new functions for an old pathway. Trends in Plant Science **4:** 320-325.
Tadege M, Bucher M, Stahili W, Suter M, Dupuis I, Kuhlemeier C (1998) Activation of plant defense responses and sugar efflux by expression of bacterial pyruvate decarboxylase in potato leaves. Plant Journal **16:** 661-671.
Tadege M, Braendle R, Kuhlemeier C (1998) Anoxia tolerance in tobacco roots: effect of overexpression of pyruvate decarboxylase. Plant Journal **14:** 327-335.
Tadege M, Kuhlemeier C (1997) Aerobic fermentation during tobacco pollen development. Plant Molecular Biology **35:** 343-354.

Book chapters and other publications

Ratet P, Wen J, Cosson V, **Tadege M,** and Mysore K S (2010). *Tnt1* induced mutations in *Medicago*: Characterisation and Applications. In *The Handbook of Plant Mutation Screening*. G. Kahl and K. Meksem (eds), WILEY-VCH Verlag GmbH & Co. KGaA, Weinheim, pp 83-100.
Ratet P, Porcedu A, **Tadege M,** Mysore KS (2006) Insertional mutagenesis in *M. truncatula* using *Tnt1* retrotransposon. In ***Medicago truncatula handbook.*** Ulrike Mathesius ed., http://www.noble.org/medicagohandbook/index.html.
Finnegan EJ, Bagnall D, Helliwell C, Rouse D, Sheldon C, **Tadege M,** Peacock WJ, Dennis E (2006) Vernalization Encyclopedia of Life Sciences.
Tadege M, and Mysore KS (2006) Insertional mutagenesis for plant functional genomics. In ***Floriculture, Ornamental and Plant Biotechnology: advances and topical issues*** (J.A. Teixeira da Silva, ed). Global Science Books, Isleworth, UK, pp 608-618.
Dennis ES, Bagnall D, Finnegan EJ, Helliwell CA, King R, Macmillan C, Rouse D, Sheldon CC, **Tadege M,** Peacock WJ (2000) Flowering time, vernalization, demethylation and gibberrelins. Flowering Newsl 29: 5-13.

PATENT

Kuhlemeier C, **Tadege M**, Dupuis I, Bucher M (1999) WO/1999/043833A1. DISEASE RESISTANT TRANSGENIC PLANTS.
Tadege M, Mysore S Kirankumar (2010) US 2010/0146670 A1. METHODS AND COMPOSITIONS FOR ALTERING PLANT BIOMASS.