CURRICULUM VITAE

Personal Information

Name	Kenichi Tsuda	Gender	Male
Position Title		Professor	
Working Department		Plant Pathology College of Plant Science and Technology	
Email	tsuda@mail.hzau.edu.cn		

Research Interest

Details can be found in https://publons.com/researcher/1425356/kenichi-tsuda/ or https://www.mpipz.mpg.de/tsuda

- Plant immunity and abiotic stress
- Phytohormones (salicylic acid, jasmonate, ethylene, abscisic acid)
- Plant microbiota
- Plant evolution

Professional Memberships

- International Society for Molecular Plant-Microbe Interactions (ISMPMI)
- International Plant Growth Substances Association (IPGSA)
- The Japanese Society of Plant Physiologists (JSPP)
- The Phytopathological Society of Japan (PSJ)

Other Roles

- Research Group Leader at Max Planck Institute for Plant Breeding Research, Cologne, Germany
- The Advisory Board of Review Commons
- Editorial board members of Journal of Plant Research
- Associate Editor of Frontiers in Microbiology
- Associate Editor of Frontiers in Plant Science
- Guest Editor of eLife
- Scientific Advisory Board for DynaMo Center of Excellence at University of Copenhagen
- Reviewers for international journals including *Nature*, *PNAS*, *Curr Biol*, *EMBO J*, *Nature Plants*, *PLoS Biol*, *Nature Comm*, *eLife*, *Plant Cell*, *EMBO Rep*, *Nucl Acids Res*, *Curr Opin Plant Biol*, *Plant J*, *Plant Physiol*, *New Phytol*, *Mol Plant*

Education & Working Experience

- 2019/09~ **Professor**, College of Plant Science and Technology, HZAU, China
- 2011/12~ **Group Leader**, Max Planck Institute for Plant Breeding Research, Germany
- 2005/04-2011/11 **Postdoc**, University of Minnesota, USA
- 2001/04-2004/09 **Ph.D.**, Hokkaido University, Japan
- 1999/04-2001/03 **M.S.**, Hokkaido University, Japan
- 1995/04-1999/03 **B.S.**, Hokkaido University, Japan

Publications

61. Wang Y, Garrido-Oter R, Wu J, Winkelmuller TM, Agler M, Colby T, Nobori T, Kemen E, **Tsuda K**: Site-specific cleavage of bacterial MucD by secreted proteases mediates antibacterial resistance in Arabidopsis. ***Nature Communications***, 10: 2853 (2019)

60. Nobori T, **Tsuda K**: The plant immune system in heterogeneous environments. ***Curr Opin Plant Biol***, 50: 58-66 (2019)

59. Adachi H, **Tsuda K**: Convergence of cell-surface and intracellular immune receptor signalling. ***New Phytol***, 221: 1676-1678 (2019)

58. Uemura T, Nakano RT, Takagi J, Wang Y, Kramer K, Finkemeier I, Nakagami H, **Tsuda K**, Ueda T, Schulze-Lefert P, Nakano A: A Golgi-released subpopulation of the *trans*-Golgi network mediates constitutive and pathogen-inducible protein secretion in Arabidopsis. ***Plant Physiol***, 179: 519-532 (2019)

57. Berens ML, Wolinska KW, Spaepen S, Ziegler J, Nobori T, Nair A, Krüler V, Winkelmüller TM, Wang Y, Mine A, Becker D, Garido-Oter R, Schulze-Lefert P, **Tsuda K**: Balancing trade-offs between biotic and abiotic stress responses through leaf age-dependent variation in stress hormone crosstalk. ***PNAS***, 116: 2364-2373 (2019)

56. Wang Y, Schuck S, Wu J, Yang P, Döring AC, Zeier J, **Tsuda K**: A MPK3/6-WRKY33-ALD1-Pipecolic acid Regulatory Loop Contributes to Systemic Acquired Resistance. ***Plant Cell***, 10: 2480-2494 (2018)

55. Nobori T and **Tsuda K**: *In planta* Transcriptome Analysis of *Pseudomonas syringae*. ***Bio-protocol***, 8: 2987 (2018)

54. Mine A, Seyfferth C, Kracher B, Berens ML, Becker D, **Tsuda K**: The Defense Phytohormone Signaling Network Enables Rapid, High-amplitude Transcriptional Reprogramming During Effector-Triggered Immunity. ***Plant Cell***, 30: 1199-1219 (2018)

53. Nobori T, Mine A, **Tsuda K**: Molecular networks in plant-pathogen holobiont. ***FEBS Lett***, 592: 1937-1953 (2018)

52. Nobori T, Velásquez AC, Wu J, Kvitko BH, Kremer JM, Wang Y, He SY, **Tsuda K**: Transcriptome landscape of a bacterial pathogen under plant immunity. ***PNAS***,115: E3055-E3064 (2018)

51. Jacob F, Kracher B, Mine A, Seyfferth C, Blanvillain-Baufume S, Parker JE, **Tsuda K**, Schulze-Lefert P, Maekawa T: A dominant-interfering *camta3* mutation compromises primary transcriptional outputs mediated by both cell surface and intracellular immune receptors in *Arabidopsis thaliana*. ***New Phytol***, 217: 1667-1680 (2018)

50. **Tsuda K**: Division of Tasks: Defense by the Spatial Separation of Antagonistic Hormone Activities. ***Plant Cell Physiol***, 59: 3-4 (2018)

49. Huot B, Castroverde CDM, Velásquez AC, Hubbard E, Pulman JA, Yao J, Childs KL, **Tsuda K**, Montgomery BL, He SY: Dual impact of elevated temperature on plant defence and bacterial virulence in Arabidopsis. ***Nature Comm***, 8: 1808 (2017)

48. Berens ML, Berry HM, Mine A, Argueso CT, **Tsuda K**: Evolution of Hormone Signaling Networks in Plant Defense. ***Annu Rev Phytopathol***, 55: 401-425 (2017)

47. Mine A, Berens ML, Nobori T, Anver S, Fukumoto K, Winkelmüller TM, Takeda A, Becker D, **Tsuda K**:

Pathogen exploitation of an abscisic acid- and jasmonate-inducible MAPK phosphatase and its interception by *Arabidopsis* immunity. ***PNAS***, 114: 7456-7461 (2017)

46. Shigenaga AM, Berens ML, **Tsuda K**, Argueso CT: Towards Engineering of Hormonal Crosstalk in Plant Immunity. ***Curr Opin Plant Biol***, 38: 164-172 (2017)

45. Hillmer R, **Tsuda K**, Rallapalli G, Asai S, Truman W, Papke MD, Sakakibara H, Jone JDG, Myers CL, Katagiri F: The Highly Buffered Arabidopsis Immune Signaling Network Conceals the Functions of its Components. ***PLoS Genet***, 13: e1006639 (2017)

44. Mine A, Nobori T†, Salazar-Rondon MC†, Winkelmüller TM, Anver S, Becker D, **Tsuda K**: An incoherent feed-forward loop mediates robustness and tunability in a plant immune network. ***EMBO Rep***, 18: 464-476 (2017)

43. Yamada K, Yamaguchi K, Shirakawa T, Nakagami H, Mine A, Ishikawa K, Fujiwara M, Narusaka M, Narusaka Y, Ichimura K, Kobayashi Y, Matsui H, Nomura Y, Nomoto M, Tada Y, Fukao Y, Fukamizo T, **Tsuda K**, Shirasu K, Shibuya N, Kawasaki T: The CERK1-associated kinase PBL27 mediates chitin-triggered MAPK activation in *Arabidopsis*. ***EMBO J***, 35: 2468-2483 (2016)

42. Stuttmann J, Peine N, Garcia AV, Wagner C, Choudhury SR, Wang Y, James GV, Griebel T, Alcazar R, **Tsuda K**, Schneeberger K, Parker JE: *Arabidopsis thaliana DM2h (R8)* within the *Landsberg RPP1-like Resistance* Locus Underlies Three Different Cases of EDS1-Conditioned Autoimmunity. ***PLoS Genet***, 12: e1005990 (2016)

41. Wang Y, Wu J, Kim SG, **Tsuda K**, Gupta R, Park SY, Kim ST, Kang KY: *Magnaporthe oryzae*-Secreted Protein MSP1 Induces Cell Death and Elicits Defense Responses in Rice. ***MPMI***, 29: 299-312 (2016)

40. Yamada K, Yamashita-Yamada M, Hirase T, Fujiwara T, **Tsuda K**, Hiruma K, Saijo Y: Danger peptide receptor signaling in plants ensures basal immunity upon pathogen-induced depletion of BAK1. ***EMBO J***, 35: 46-61 (2016)

39. Sreekanta S, Bethke G, Hatsugai N, **Tsuda K**, Thao A, Wang L, Katagiri F, Glazebrook J: The Receptor-Like Cytoplasmic Kinase PCRK1 Contributes to Pattern-Triggered Immunity against Pseudomonas syringae in Arabidopsis thaliana. ***New Phytol***, 207: 78-90 (2015)

38. Cui H, **Tsuda K**, Parker JE: Effector-Triggered Immunity: From Pathogen Perception to Robust Defense. ***Annu Rev Plant Biol***, 66: 487-511 (2015)

37. Mateos JL, Madrigal P, **Tsuda K**, Richter R, Rawat V, Romera-Branchat M, Fornara F, Schneeberger K, Krajewski P, Coupland G: Decoded combinatorial activities of SHORT VEGETATIVE PHASE and FLOWERING LOCUS C define distinct modes of flowering regulation in Arabidopsis. ***Genome Biol***, 16: 31 (2015)

36. **Tsuda K** and Somssich IE: Transcriptional networks in plant immunity. ***New Phytol***, 206: 932-947 (2015)

35. Anver S and **Tsuda K**: Ethylene and Plant Immunity. In Ethylene in Plants. Ed.: Chi-Kuang Wen. ***Springer Science+Business Media,*** Dordrecht Heidelberg New York London, 205-221 (2015)

34. Seyfferth C and **Tsuda K**: Salicylic acid signal transduction: the initiation of biosynthesis, perception and transcriptional reprogramming. ***Front Plant Sci***, 5: 697 (2014)

33. Mine A, Sato M, **Tsuda K**: Toward a systems understanding of plant--microbe interactions. ***Front Plant Sci***, 5: 423 (2014)

32. Kim Y, **Tsuda K**, Igarashi D, Hillmer RA, Sakakibara H, Myers CL, Katagiri F: Mechanisms underlying

robustness and tunability in a plant immune signaling network. ***Cell Host & Microbe***, 15: 84-94 (2014)

31. Ross A, Yamada K, Hiruma K, Yamashita-Yamada M, Lu Xunli, Takano Y, **Tsuda K**, Saijo Y: The Arabidopsis PEPR pathway couples local and systemic plant immunity. ***EMBO J***, 33: 62-75 (2014)

30. **Tsuda K**, Mine A, Bethke G, Igarashi D, Botanga CJ, Tsuda Y, Glazebrook J, Sato M, Katagiri F: Dual regulation of gene expression mediated by extended MAPK activation and salicylic acid contributes to robust innate immunity in *Arabidopsis thaliana*. ***PLoS Genet***, 9: e1004015 (2013)

29. Truman W, Sreekanta S, Lu Y, Bethke G, **Tsuda K**, Katagiri F, Glazebrook J: The Calmodulin Binding Protein 60 Family Includes Both Negative and Positive Regulators of Plant Immunity. ***Plant Physiol***, 163: 1741-1751 (2013)

28. Heidrich K, **Tsuda K**, Blanvillain-Baufumé S, Wirthmueller L, Bautor J, Parker JE: *Arabidopsis* TNL-WRKY domain receptor RRS1 contributes to temperature-conditioned RPS4 auto-immunity. ***Front Plant Sci***, 4: 403 (2013)

27. Tintor N, Ross A, Kanehara K, Yamada K, Fan L, Kemmerling B, Nurnberger T, **Tsuda K**, Saijo Y: Layered pattern receptor signaling via ethylene and endogenous elicitor peptides during *Arabidopsis* immunity to bacterial infection. ***PNAS***, 110: 6211-6216 (2013)

26. Igarashi D, Bethke G, Xu Y, **Tsuda K**, Glazebrook J, Katagiri F: Pattern-Triggered Immunity Suppresses Programmed Cell Death Triggered by Fumonisin B1. ***PLoS One***, 8: e60769 (2013)

25. Igarashi D, **Tsuda K**, Katagiri F: The Peptide Growth Factor, Phytosulfokine, Attenuates Pattern-Triggered Immunity. ***Plant J***, 71: 194-204 (2012)

24. Di Mauro MF, Iglesias MJ, Arce DP, Valle EM, Arnold RB, **Tsuda K**, Yamazaki K, Casalongue CA and Godoy AV: MBF1s regulate ABA-dependent germination of Arabidopsis seeds. ***Plant Sig Behav***, 7: 188-192 (2012)

23. Bethke G, Pecher P, Eschen-Lippold L, **Tsuda K**, Katagiri F, Glazebrook J, Scheel D, Lee J: Activation of the *Arabidopsis thaliana* mitogen-activated protein kinase MPK11 by the flagellin-derived elicitor peptide, flg22. ***MPMI***, 25: 471-480 (2012)

22. **Tsuda K**, Qi Y, Nguyen LV, Bethke G, Tsuda Y, Glazebrook J, Katagiri F: An efficient Agrobacterium-mediated transient transformation of Arabidopsis. ***Plant J***, 69: 713-719 (2012)

21. Willmann R, Lajunena HM, Erbsb G, Newman M, Kolb D, **Tsuda K**, Katagiri F, Fliegmann J, Bono J, Cullimore JV, Jehle AK, Gotz F, Kulikh A, Molinaroi A, Lipka V, Gust AA, Nurnberger T: The Arabidopsis LYM1 LYM3 CERK1 pattern recognition system mediates bacterial peptidoglycan sensing and immunity to bacterial infection. ***PNAS***, 108: 19824-19829 (2011)

20. Qi Y, **Tsuda K**, Nguyen LV, Wang X, Lin J, Murphy AS, Glazebrook J, Thordal-Christensen H, Katagiri F: Physical association of Arabidopsis hypersensitive induced reaction proteins (HIRs) with the immune receptor RPS2. ***J Biol Chem***, 286: 31297-31307 (2011)

19. Wang L, **Tsuda K**, Truman W, Sato M, Nguyen LV, Katagiri F, Glazebrook J: CBP60g and SARD1 play partially redundant, critical roles in salicylic acid signaling. ***Plant J***, 67: 1029-1041 (2011)

18. Qi Y, **Tsuda K**, Glazebrook J, Katagiri F: Physical association of PTI and ETI immune receptors in Arabidopsis. ***Mol Plant Pathol***, 12: 702-708 (2011)

17. Wen Y, Wang W, Feng J, Luo MC, **Tsuda K**, Katagiri F, Bauchan G, Xiao S: Identification and utilization of a

sow thistle powdery mildew as a nonhost pathogen to dissect post-invasion resistance mechanisms in Arabidopsis. ***J Exp Bot***, 62: 2117-2129 (2011)

16. Katagiri F, **Tsuda K**: Understanding the plant immune system. ***MPMI***, 23: 1531-1536 (2010)

15. Qi Y, **Tsuda K**, Joe A, Sato M, Nguyen LV, Glazebrook J, Alfano JR, Cohen JD, Katagiri F: A putative RNA-binding protein positively regulates salicylic acid-mediated immunity in Arabidopsis. ***MPMI***, 23: 1573-1583 (2010)

14. **Tsuda K**, Katagiri F: Comparing signaling mechanisms engaged in pattern-triggered and effector-triggered immunity. ***Curr Opin Plant Biol***, 13: 459-465 (2010)

13. Sato M, **Tsuda K**, Wang L, Coller J, Watanabe Y, Glazebrook J, Katagiri F: Network modeling reveals prevalent negative regulatory relationships between signaling sectors in Arabidopsis immune signaling. ***PLoS Pathogens***, 6: e1001011 (2010)

12. Ace DP, Godoy AV, **Tsuda K**, Yamazaki K, Valle EM, Mauro MFD, Iglesias MJ, Casalongue CN: The analysis of an *Arabidopsis* triple knock-down mutant reveals functions for MBF1 genes under oxidative stress conditions. ***J Plant Physiol*** 167: 194-200 (2010)

11. **Tsuda K**, Sato M, Stoddard T, Glazebrook J, Katagiri F: Network properties of robust immunity in plants. ***PLoS Genet***, 5: e1000772 (2009)

10. Wang L, **Tsuda K**, Sato M, Cohen JD, Katagiri F, Glazebrook J: Arabidopsis CaM binding protein CBP60g contributes to MAMP-induced SA accumulation and is involved in disease resistance against *Pseudomonas syringae*. ***PLoS Pathogens***, 5: e1000301 (2009)

9. Tojo T, **Tsuda K**, Yoshizumi T, Ikeda A, Yamaguchi J, Matsui M, Yamazaki K: Arabidopsis MBF1s control leaf cell cycle and its expansion. ***Plant Cell Physiol***, 50: 254-264 (2009)

8. **Tsuda K**, Glazebrook J, Katagiri F: The interplay between MAMP and SA signaling. ***Plant Sig Behav***, 3: 359-361 (2008)

7. **Tsuda K**, Sato M, Glazebrook J, Cohen JD, Katagiri F: Interplay between MAMP-triggered and SA-mediated defense responses. ***Plant J***, 53: 763-775 (2008)

6. Tojo T, **Tsuda K**, Wada T, Yamazaki K: A simple and extremely sensitive system for detecting estrogenic activity using transgenic *Arabidopsis thaliana*. ***Ecotoxicol Environ Safety***, 64: 106-114 (2006)

5. Sugikawa Y, Ebihara S, **Tsuda K**, Niwa Y, Yamazaki K: Transcriptional coactivator MBF1s from *Arabidopsis* predominantly localize in nucleolus. ***J Plant Res***, 118: 431-437 (2005)

4. Tojo T, **Tsuda K**, Wada T, Yamazaki K: Development of a system for monitoring estrogenic activity using transgenic *Arabidopsis thaliana*. ***J Environ Biotechnol***, 5: 31-36 (2005)

3. Tojo T, **Tsuda K**, Wada T, Yamazaki K: A transgenic plant that detects estrogenic activity. ***Waste Manag Res***, 15: 247-253 (2004)

2. **Tsuda K**, Yamazaki K: Structure and expression analysis of three subtypes of *Arabidopsis* MBF1 genes. ***BBA-Gene Regulatory Mechanisms***, 1680: 1-10 (2004)

1. **Tsuda K**, Tsuji T, Hirose S, Yamazaki K: Three *Arabidopsis* MBF1 homologs with distinct expression profiles play roles as transcriptional co-activators. ***Plant Cell Physiol***, 45: 225-231 (2004)

Additional Information

Invited talk

2019 Nov	**Shanghai Center for Plant Stress Biology, Chinese Academy of Sciences**, Shanghai, China
2019 Oct	**Huazhong Agricultural University**, Wuhan, China
2019 July	**Satellite symposium** (Gram-Positive Plant-Associated Bacteria) at IS-MPMI, Glasgow, UK
2019 July	**2019 International Molecular Plant Microbe Interactions (IS-MPMI)**, Glasgow, UK
2019 Jun	**The 23rd International Plant Growth Substances Association (IPGSA)**, Paris, France
2019 Jun	**University of Münster**, Münster, Germany
2018 Dec	**Huazhong Agricultural University**, Wuhan, China
2018 Nov	**University of Bonn**, Bonn, Germany
2018 Oct	**Linnaean Centre for Plant Science research**, Uppsala, Sweden
2018 Sep	**Sino-German Symposium on Microbiomics and Plant Health**, Wuhan, China
2018 Sep	**B-DEBATE: When development meets stress: Understanding developmental reprogramming upon pathogenesis in plants**, Barcelona, Spain
2018 July	**The 43rd FEBS Congress**, Prague, Czech Republic
2018 Jun	**Molecular mechanisms of biological robustness in plants**, Potsdam, Germany
2018 Jan	**Helmholtz Zentrum München**, Munich, Germany
2018 Jan	**Technical University of Munich**, Munich, Germany
2017 Apr	**University of Göttingen**, Göttingen, Germany
2017 Mar	**The 58th Japanese Society of Plant Physiologists**, Kagoshima, Japan
2017 Feb	**University of Bonn**, Bonn, Germany
2017 Jan	**Leibniz University of Hannover**, Hannover, Germany
2016 Mar	**Nara Institute of Science and Technology**, Nara, Japan
2015 Oct	**CNRS/University of Paris**, Paris, France
2015 June	**University of Minnesota**, St.Paul, MN, USA
2015 Jun	**Phytobiomes 2015: Designing a New Paradigm for Crop Improvement**, Washington DC, USA
2015 Mar	**The 56th Japanese Society of Plant Physiologists**, Tokyo, Japan
2014 Nov	**The 5th NIBB-MPIPZ-TLL Symposium**, Cologne, Germany
2014 July	**2014 International Molecular Plant Microbe Interactions (IS-MPMI)**, Rhodes, Greece
2014 July	**University of Göttingen**, Göttingen, Germany
2014 June	**University of Heidelberg**, Heidelberg, Germany
2014 Mar	**University of Tübingen**, Tübingen, Germany
2013 Jun	**The 21st International Conference on Plant Growth Substances**, Shanghai, China
2013 Mar	**RIKEN Institute**, Yokohama, Japan
2013 Mar	**Ajinomoto Co. Inc.**, Kawasaki, Japan
2013 Jan	**2013 International Conference at POSTECH on Plant Science**, Pohang, Korea
2012 Nov	**The 4th NIBB-MPIPZ-TLL Symposium**, Cologne, Germany
2012 Sep	**Next generation Plant Science Symposium 2012**, Cologne, Germany
2012 Aug	**National Institute for Basic Biology**, Okazaki, Japan
2012 Aug	**Tokyo University of Science**, Noda, Japan
2012 Aug	**Hokkaido University**, Sapporo, Japan
2012 Mar	**University of Edinburgh**, Edinburgh, UK
2011 July	**MPI for Plant Breeding Research**, Cologne, Germany
2011 Jun	**The 22nd International Conference on Arabidopsis Research**, Madison, USA
2011 Mar	**The Sainsbury Laboratory**, Norwich, UK
2011 Feb	**University of Minnesota**, St. Paul, MN, USA
2010 June	**Hokkaido University**, Sapporo Japan

2009 April	**Hokkaido University**, Sapporo Japan
2009 Feb	**University of Minnesota**, St. Paul, MN, USA