

## LIST OF PUBLICATIONS:

1. Radhakrishnan, D., Shanmukhan, AP., Kareem, A., Aiyaz, M., Varapparambathu, V., Toms, A., Kerstens, M., Valsakumar, D., Landge, AN., Shaji, A., Mathew, MK., Sawchuk MG., Scarpella, E., Krizek, BA., Efroni, I., Mähönen, AP., Willemsen, V., Scheres, B., Prasad K\*. (2019) A coherent feed forward loop drives vascular regeneration in damaged aerial organs growing in normal developmental-context. *Development*. 147: dev185710. (Selected for the highlights of the issue and featured on cover) (\*Corresponding author)
2. Pallipurath, AS., Mathew, MM., Radhakrishnan, D., Prasad, K\*. (2019) Regrowing the damaged or lost body parts. *Current Opinion in Plant Biology*. 53:117- 127 doi:10.1016/j.pbi.201. (\*Corresponding author)
3. Durgaprasad, K., Roy, MV., Venugopal, MA., Kareem, A., Raj K., Willemsen, V., Mähönen, AP., Scheres, B., Prasad, K\*. (2019) Gradient Expression of Transcription Factor Imposes a Boundary on Organ Regeneration Potential in Plants. *Cell Reports*. 29(2): 453-463.e3. doi:10.1016/j.celrep.2019.08.099. (\*Corresponding author, Featured on Coverpage, Recommended by F1000)
4. Neogy, A., Garg, T., Kumar, A., Dwivedi, AK., Singh, H., Singh, U., Singh, Z., Prasad, K\*., Jain, M., Yadav, SR. (2019) Genome-Wide Transcript Profiling Reveals an Auxin-Responsive Transcription Factor, OsAP2/ERF-40, Promoting Rice Adventitious Root Development. *Plant Cell Physiology*. pii: pcz132. doi: 10.1093/pcp/pcz132.
5. Fonseca, S., Radhakrishnan, D., Prasad, K., Chini, A. (2018). Fungal production and manipulation of plant hormones. *Current Medicinal Chemistry*. 25(2):253-267.
6. Efroni I., Prasad, K\*. (2018) Insights into the art of recreation. *Developmental Biology*. 442(1):1-2. doi: 10.1016/j.ydbio.2018.08.007 (\*Corresponding author)
7. Radhakrishnan, D., Kareem, A., Durgaprasad, K., Sreeraj, E., Sugimoto, K., Prasad, K\*. (2018). Shoot regeneration:a journey from acquisition of competence to completion. *Current Opinion in Plant Biology*. 41, 23-31. doi: 10.1016/j.pbi.2017.08.001. (\*Corresponding author)
8. Liu, B., Zhang, J., Yang, Z., Matsui, A., Seki, M., Li, S., Yan, X., Kohnen, M.V., Gu, L., Prasad, K., Tuskan, G.A., Lu, M., Oka, Y. (2018) PtWOX11 acts as master regulator conducting the expression of key transcription factors to induce de novo shoot organogenesis in poplar. *Plant Molecular Biology*. 98(4-5):389-406.
9. Liu, J., Hu, X., Qin, P., Prasad, K., Hu, Y., Xu, L. (2018). The WOX11- LBD16 Pathway Promotes Pluripotency Acquisition in Callus Cells During De Novo Shoot Regeneration in Tissue Culture. *Plant Cell Physiology*. 59(4):734-743.

10. Kareem, A., Radhakrishnan, D., Sondhi, Y., Aiyaz, M., Roy, M. V., Sugimoto, K., Prasad, K\*. (2016). De novo assembly of plant body plan: a step ahead of Dead pool. *Regeneration (Oxf)*. 3(4), 182-197. doi: 10.1002/reg2.68 (\*Corresponding author, Featured on Coverpage)
11. Kareem, A., Radhakrishnan, D., Wang, X., Bagavathiappan, S., Trivedi, Z.B., Sugimoto, K., Xu, J., Mähönen, A.P., Prasad, K\*. (2016). A method to study the direct reprogramming of lateral root primordia to fertile shoots. *BMC Plant Methods*. 12:1-14. doi: 10.1186/s13007-016-0127-5. (\*Corresponding author)
12. Santuari L, Sanchez-Perez, G.F., Luijten, M., Rutjens, B., Terpstra, I., Berke, L., Gorte, M., Prasad, K., Bao, J.L., Timmermans-Hereijgers, K., Maeo, K., Nakamura, A., Shimotohno, A., Pencik, O., Novak, K., Ljung, S., van Heesch, E., de Bruijn, E., Cuppen, V., Willemsen, A.P., Mähönen, W., Lukowitz, B., Snel B.D., de Ridder, B., Scheres, R., Heidstra. (2016). The PLETHORA Gene Regulatory Network Guides Growth and Cell Differentiation in Arabidopsis Roots. *Plant Cell*. 28(12), 2937-2951. (Featured on cover page article).
13. Siligato, R., Wang, X., Yadav, SR., Lehesranta, S., Ma, G., Ursache, R., Sevilem, I., Zhang, J., Gorte, M., Prasad, K., Wrzaczek, M., Heidstra, R., Murphy, A., Scheres, B., Mahonen, A.P. (2016) MultiSite Gateway-Compatible Cell Type-Specific Gene-Inducible System for Plants. *Plant physiology*. 1702:627-641.
14. Kareem, A., Durgaprasad, K., Sugimoto. K., Du, Y, Pulianmackal, AJ., Trivedi, ZB., Abhayadev, PV., Pinon, V., Meyerowitz, EM., Scheres, B., Prasad, K\*. (2015) PLETHORA genes control regeneration by a two-step mechanism. *Current Biology*. 25: 1017-1030. (\*Corresponding author, Featured on Coverpage)
15. Hofhuis, H., Laskowski, M., Du, Y., Prasad, K., Grigg, S., Pinon V, Scheres B. (2013) Phyllotaxis and Rhizotaxis in Arabidopsis Are Modified by Three PLETHORA Transcription Factors. *Current Biology*, 23: 956-962.
16. Mähönen, AP., Tusscher, KT., Siligato, R., Smetana, O., Díaz-Triviño, S., Salojärvi, J., Wachsman, G., Prasad, K., Heidstra, R., Scheres, B. (2014) PLETHORA gradient formation mechanism separates auxin responses. *Nature*. 515:125-129
17. Pinon, V., Prasad, K., Grigg, SP., Sanchez-Perez, GF., Scheres, B. (2013) Local auxin biosynthesis regulation by PLETHORA transcription factors controls phyllotaxis in Arabidopsis. *Proceedings of National Academy of Sciences USA*. 110: 1107– 1112.
18. Beleyur, T., Kareem, VK., Shaji, A., Prasad, K\* (2013) A mathematical basis for plant patterning derived from physico-chemical phenomena. *BioEssays*. 35:366-376.
19. Prasad, K., Grigg, SP., Barkoulas, M., Yadav, RK., Sanchez-Perez, GF., Pinon, V.,

- Blilou, I., Hofhuis, HF., Dhonukshe, P., Galinha, C., Mähönen, AP., Muller, WH., Raman, S., Verkleij, AJ., Snel, B., Reddy, GV., Tsiantis, M., Scheres, B. (2011) Arabidopsis PLETHORA transcription factors control phyllotaxis. *Current Biology*. 21:1123-1128 (*Recommended by F1000*). Highlighted in - Phyllotaxis: in search of the golden angle. Palauqui JC, Laufs P. *Current Biology*. 2011 Jul 12;21(13):R502-4.
20. Dhonukshe, P, Huang F, Galvan-Ampudia, CS., Mähönen, AP., Kleine-Vehn, J., Xu, J., Quint, A., Prasad, K, Friml, J., Scheres, B., Offringa, R. (2010) Plasma membrane-bound AGC3 kinases phosphorylate PIN auxin carriers at TPRXS(N/S) motifs to direct apical PIN recycling. *Development*. 137:3245-3255.
21. Prasad, K, Ambrose BA. (2010). Shaping up the fruit: Control of fruit size by an Arabidopsis B-sister MADS-box gene. *Plant Signaling & Behavior*. 15:5-7.
22. Prasad, K, Zhang X, Tobón E, Ambrose BA. (2010) The Arabidopsis B-sister MADS-box protein, GORDITA, represses fruit growth and contributes to integument development. *Plant Journal*. 62:203-214
23. Rao, NN., Prasad, K, Vijayraghavan, U., (2008). The making of a bushy grass with a branched flowering stem: Key rice plant architecture traits regulated by *RFL* the rice *LFY* homolog. *Plant Signaling & Behavior*. 3:12, 1-3.
24. Rao, NN., Prasad, K, Kumar, PR., Vijayraghavan, U. (2008). Distinct regulatory role for *RFL*, the rice *LFY* homolog, in determining flowering time and plant architecture. *Proceedings of National Academy of Sciences USA*. 105:3646-3651.
25. Yadav, SR<sup>#</sup>., Prasad, K<sup>#</sup>., Vijayraghavan, U. (2007). Divergent regulatory *OsMADS2* functions control size, shape and differentiation of the highly derived rice floret second-whorl organ. *Genetics*. 176:283-94. (# Joint first authors)
26. Prasad, K., Sriram, P., Vijayraghavan, U. (2005). *OsMADS1*, a rice MADS-box factor, controls differentiation of specific cell types in the lemma and palea and is an early-acting regulator of inner floral organs. *Plant Journal*. 43: 915-928.
27. Vijayraghavan, U., Prasad, K., Meyerowitz, EM (2005). Specification and maintenance of the floral meristem: interactions between positively-acting promoters of flowering and negative regulators. *Current Science*. 89: 1835-1843
28. Prasad, K., and Vijayraghavan, U. (2004). Genetic regulation of flowering: specification of the floral meristem and patterning of floral organs. *Proceedings of Indian National Academy Sciences (PINSAB)*. 70: 413-435.
29. Ambrose, BA., and Prasad, K. (2004). MADS about plant development. *NZ BioScience*. 13: 8-13.
30. Prasad, K., and Vijayraghavan, U. (2003) Double-stranded RNA interference of a rice *PI/GLO* paralog, *OsMADS2*, uncovers its second whorl-specific function in floral organ

patterning. *Genetics*. 165: 2301-2305.

31. Prasad, K., Kushalappa, K. and Vijayraghavan, U. (2003) Mechanism underlying regulated expression of *RFL*, a conserved transcription factor, in the developing rice inflorescence. *Mechanisms of Development*. 120: 491-502. (Coverpage Article).
32. Prasad, K., Kushalappa, K. and Vijayraghavan, U. (2003). Genomic structure of *RFL* /*OSL*, a rice *LFY* homolog, and the regulated repression of its expression in the vegetative tissues. *Journal of Plant Physiology*. (Special issue): 439-446.
33. Prasad, K., Sriram, P., Kumar, C. S., Kushalappa, K. and Vijayraghavan, U. (2001) Ectopic expression of rice *OsMADS1* reveals a role in specifying the lemma and palea, grass floral organs analogous to sepals. *Development Genes Evolution*. 211: 281-290.
34. Prasad, K., Vijayraghavan, U. (2001). Regulation of *OSL*, a *LEAFY* homolog, during rice panicle and spikelet development. *Developmental Biology*. 235: 260.
35. Nandi, A.K., Kushalappa, K., Prasad, K., Vijayraghavan, U. (2000) A conserved function for *Arabidopsis SUPERMAN* in regulating floral-whorl cell proliferation in rice, a monocotyledonous plant. *Current Biology*. 10: 215-218.

**b) Book chapters:**

1. Prasad K\*, Dhonukshe P (2013) Polar auxin transport: Cell polarity to patterning. Polar Auxin Transport, Signaling and Communication in Plants 17, DOI 10.1007/978-3-642-35299-7\_2, Springer-Verlag Berlin Heidelberg (\*Corresponding author)