

References

- Antunes, P., Novais, C., Peixe, L., (2020). Food-to-Humans Bacterial Transmission. *Microbiol Spectrum*.
doi: 10.1128/microbiolspec.MTBP-0019-2016. PMID: 31950894.
- Banda, J., Bellande, K., von Wangenheim, D., Goh, T., Guyomarc'h, S., Laplaze, L., Bennett, J. (2019). Lateral Root Formation in Arabidopsis: A Well-Ordered L-Rexit. *Trends in Plant Science*, S1360138519301621-. doi:10.1016/j.tplants.2019.06.015.
- Barberon, M. & Geldner, N. (2014). Radial transport of nutrients: the plant root as a polarized epithelium. *Plant Physiology*, 166:528-537.
- Casimiro, I., Beeckman, T., Graham, N., Bhalerao, R., Zhang, H., Casero, P., ... Bennett, M. J. (2003). Dissecting Arabidopsis lateral root development. *Trends in Plant Science*, 8(4), 165–171. doi:10.1016/s1360-1385(03)00051-7.
- Crossen-Fassoni, A., Bazzolli, D. M., Brommonschenkel, S. H., Fernandes de Araújo, E., de Queiroz, M. V. (2013). The pectate lyase encoded by the pecCl1 gene is an important determinant for the aggressiveness of *Colletotrichum lindemuthianum*. *Journal of Microbiology*. Aug;51(4):461-70. doi: 10.1007/s12275-013-3078-9. Epub Aug 30. PMID: 23990297.
- Ditengou, F. A., Teale, W. D., Kochersperger, P., Flittner, K. A., Kneuper, I., van der Graaff, E., Nziengui, H., Pinosa, F., Li, X., Nitschke, R., Laux, T., Palme, K. (2008). Mechanical induction of lateral root initiation in *Arabidopsis thaliana*. *Proceedings of the National Academy of Sciences*, 105(48), 18818–18823. doi:10.1073/pnas.0807814105.

- De Rybel, B., Audenaert, D., Xuan, W. *et al* (2012). A role for the root cap in root branching revealed by the non-auxin probe naxillin. *Natural Chemistry Biology* 8, 798–805. <https://doi.org/10.1038/nchembio.1044>.
- Dey, A., Bokka, V., and Sen, S. (2020). Dependence of bacterial growth rate on dynamic temperature changes. *Institution of Engineering and Technology Systems Biology*. Apr;14(2):68-74. doi: 10.1049/iet-syb.2018.5125. PMID: 32196465; PMCID: PMC8687403.
- Du, Y. & Scheres, B. (2017) PLETHORA transcription factors orchestrate de novo organ patterning during *Arabidopsis* lateral root outgrowth. *Proceedings of the National Academy*. Sci. U. S. A. 114, 11709–11714.
- Karmakar, K., Nath, U., Nataraja, K. N., Chakravortty, D. (2018). Root mediated uptake of Salmonella is different from phyto-pathogen and associated with the colonization of edible organs. *BMC Plant Biology*, 18(1), 344–. doi:10.1186/s12870-018-1578-9.
- Laskowski, M., Grieneisen, V. A., Hofhuis, H., Hove, C. A. ten Hogeweg, P., Marée, A. F. M., & Scheres, B. (2008). Root System Architecture from Coupling Cell Shape to Auxin Transport. *PLoS Biology*, 6(12), e307. doi:10.1371/journal.pbio.0060307.
- Lee, Y., Rubio, M. C., Alassimone, J., Geldner, N. (2013) A mechanism for localized lignin deposition in the endodermis. *Cell*, 153:402-412.
- Leschevin, M., Ismael, M., Quero, A., San Clemente, H., Roulard, R., Bassard, S., Marcelo, P., Pageau, K., Jamet, E., Rayon, C. (2021). Physiological and Biochemical Traits of Two Major *Arabidopsis*

- Accessions, Col-0 and Ws, Under Salinity. *Frontier Plant Science*. Jun 21;12:639154. doi: 10.3389/fpls.2021.639154. PMID: 34234793; PMCID: PMC8256802.
- Marhavy', P., Vanstraelen, M., De Rybel, B., Zhaojun, D., Bennett, M. J., Beeckman, T., Benkova E. (2013). Auxin reflux between the endodermis and pericycle promotes lateral root initiation. *EMBO Journal*, 32:149-158.
- Maurel, C., Verdoucq, L., Luu, D. T., Santoni, V. (2008). Plant Aquaporins: membrane channels with multiple integrated functions. *Annual Review Plant Biology*, 59:595-624.
- Micheli, F. (2001). Pectin methylesterases: cell wall enzymes with important roles in plant physiology. *Trends Plant Science*. Sep;6(9):414-9. doi: 10.1016/s1360-1385(01)02045-3. PMID: 11544130.
- Naseer, S., Lee, Y., Lapierre, C., Franke, R., Nawrath, C., Geldner, N. (2012). Casparian strip diffusion barrier in Arabidopsis is made of a lignin polymer without suberin. *Proceedings of the National Academy Sci U S A*, 109:10101-10106.
- Pe'ret, B., Middleton, A. M., French, A. P., Larrieu, A., Bishopp, A., Njo M., Wells, D. M., Porco, S., Mellor, N., Band, L. R. *et al.* (2013). Sequential induction of auxin efflux and influx carriers regulates lateral root emergence. *Molecular Systems Biology*, 9:699.
- Richter, G. L., Monshausen, G. B., Krol, A., Gilroy, S. (2009). Mechanical stimuli modulate lateral root organogenesis. *Plant Physiology*, 151:1855-186.
- Scheres, B. and Krizek, B. A. (2018) Coordination of growth in root and shoot apices by AIL/PLT transcription factors. *Current Opinion on Plant Biology*. 41, 95–101.

- Velazquez-Gonzalez, R. S., Garcia-Garcia, A. L., Ventura-Zapata, E., Barceinas-Sanchez, J. D. O., & Sosa-Savedra, J. C. (2022). A Review on Hydroponics and the Technologies Associated for Medium- and Small-Scale Operations. *Agriculture*, 12(5), 646. <https://doi.org/10.3390/agriculture12050646>
- Vermeer, J. E. M, Wangenheim, von D., Barberon, M., Lee, Y., Stelzer, E. H. K., Maizel, A., Geldner, N. (2014) A spatial accommodation by neighboring cells is required for organ initiation in *Arabidopsis*. *Science*, 343:178-183.
- Vernoux, T., Brunoud, G., Farcot, E., Morin, V., Van den Daele, H., Legrand, J., Oliva, M., Das, P., Larrieu, A., Wells, D., Guedon, Y., Armitage, L., Picard, F., Guyomarc'h, S., Cellier, C., Parry, G., Koumproglou, R., Doonan, J. H., Estelle, M., Godin, C., Kepinski, S., Bennett, M., De Veylder, L., Traas, J. (2014). The auxin signaling network translates dynamic input into robust patterning at the shoot apex. *Molecular Systems Biology*, 7(1), 508–508. doi:10.1038/msb.2011.39.
- Vilches-Barro, A. & Maizel, A. (2015). Talking through walls: mechanisms of lateral root emergence in *Arabidopsis thaliana*. *Current Opinion in Plant Biology*, 23, 31–38. doi:10.1016/j.pbi.2014.10.005.
- Wachsman, G., Zhang, J., Moreno, R., Miguel, A., Anderson, Charles, T., Benfey, P. N. (2020). Cell wall remodeling and vesicle trafficking mediate the root clock in *Arabidopsis*. *Science*, 370(6518), 819–823. doi:10.1126/science.abb7250.
- Weijers, D., Benkova, E., Jäger, K. E., Schlereth, A., Hamann, T., Kientz, M., Wilmoth, J. C., Reed, J. W., Jürgens, G. (2005). Developmental specificity of auxin response by pairs of ARF and Aux/IAA transcriptional regulators. *Development*, 132(10), 1874–1885. doi:10.1038/sj.emboj.7600659.

Willats, W. G., Orfila, C., Limberg, G., Buchholt, H. C., van Alebeek, G. J., Vorage, n A. G., Marcus, S.E., Christensen, T. M., Mikkelsen, J.D., Murray, B.S., Knox, J. P. Modulation of the degree and pattern of methyl-esterification of pectic homogalacturonan in plant cell walls. Implications for pectin methyl esterase action, matrix properties, and cell adhesion. *Journal of Biological Chemistry*. 2001 Jun 1;276(22):19404-13. doi: 10.1074/jbc.M011242200. Epub 2001 Mar 6. PMID: 11278866.

Wolf S, Mouille G, Pelloux J. Homogalacturonan methyl-esterification and plant development. *Molecular Plant*. 2009 Sep;2(5):851-60. doi: 10.1093/mp/ssp066. Epub 2009 Aug 20. PMID: 19825662.