Dr. Salma Balazadeh – List of publications

Publications (peer-reviewed); total google scholar citations = 669; h-index = 13

Koeslin-Findeklee, F., Rizi, V.S., Becker, M.A., Parra-Londono, S., Arif, M., **Balazadeh, S.**, Mueller-Roeber, S., Kunze, R. and Horst, W.J. Transcriptomic analysis of nitrogen starvation and cultivar-specific leaf senescence in winter oilseed rape (*Brassica napus* L.). ***Plant Science***, in press.

Balazadeh, S. (2014) *Stay-green* not always stays green. Spotlight article. ***Molecular Plant***, 7(8):1264-1266.

Allu, AD., Soja, AM., Wu, A., Szymanski, J., and **Balazadeh, S.** (2014) Salt stress and senescence: Identification of crosstalk regulatory components. ***Journal of Experimental Botany***, 65(14):3993-4008.

Balazadeh, S., Schildhauer, J., Wagner LA., Munné-Bosch, S., Fernie, AR., Proost, S., Humbeck, K., and Mueller-Roeber, B. (2014) Reversion of senescence by N resupply to N-starved *Arabidopsis thaliana*: transcriptomic and metabolomic consequences. ***Journal of Experimental Botany***, 65(14):3975-3992.

Pajoro, A., Madrigal, P., Muiño, JM., Matus, JT., Jian, J., Martin, AM., Debernardi, JM., Palatnik, JF., **Balazadeh, S**., Arif, M., Maoiléidigh, DS., Wellmer, F., Krajewski, P., Riechmann, JL., Angenent, GC., and Kaufmann, K. (2014) Dynamics of chromatin accessibility and gene regulation by MADS-domain transcription factors in flower development. ***Genome Biology***, 15:R41.

Rauf, M., Arif, M., Fisahn, J., Xue, G-P., **Balazadeh, S.,** and Mueller-Roeber, B. (2013) NAC transcription factor SPEEDY HYPONASTIC GROWTH regulates flooding-induced leaf movement in *Arabidopsis*. ***The Plant Cell***, 25(12):4941-55.

Mueller-Roeber, B., and **Balazadeh, S**. (2013) Auxin and its role in plant senescence. ***Journal of Plant Growth Regulation***, 33:21-33.

Ay, N., Raum, U., **Balazadeh, S**., Seidensticker, T., Fischer, A., Reuter, G., and Humbeck, K. (2013). Regulatory factors of leaf senescence are affected in *Arabidopsis* plants overexpressing the histone methyltransferase SUVH2. ***Journal of Plant Growth Regulation***, 33:119-136.

Watanabe, M., **Balazadeh, S.**, Tohge, T., Erban, A., Giavalisco, P., Kopka, J., Mueller-Roeber, B., Fernie, AR., and Hoefgen R. (2013) Comprehensive dissection of spatio-temporal metabolic shifts in primary, secondary and lipid metabolism during developmental senescence in *Arabidopsis thaliana*. ***Plant Physiology***, 162(3):1290-310.

Mehrnia, M., **Balazadeh**, S., Zanor, M-I., and Mueller-Roeber, B. (2013) EBE, an AP2/ERF transcription factor highly expressed in proliferating cells, affects shoot architecture in *Arabidopsis thaliana*. ***Plant Physiology***, 162(2):842-57.

Gliwicka, M., Nowak, K., **Balazadeh, S**., Mueller-Roeber, B., and Gaj, MD. (2013) Extensive modulation of the transcription factor transcriptome during somatic embryogenesis in *Arabidopsis thaliana*. ***PLoS ONE***, 8(7):e69261

Rauf, M., Muhammad, A., Dortay, H., Matallana-Ramírez, L-P., Waters, M., Nam, H-G., Lim, P-O., Mueller-Roeber, B., and **Balazadeh, S**. (2013) ORE1 balances leaf senescence against maintenance by antagonizing G2-like-mediated transcription. ***EMBO Reports***, 14(4):382-8.

Matallana-Ramirez, L-P., Rauf, M., Farage-Barhom, S., Dortay, H., Xue, G-P., Dröge-Laser, W., Lers, A., **Balazadeh, S**., and Mueller-Roeber, B. (2013) NAC transcription factor ORE1 and *BIFUNCTIONAL NUCLEASE1* (*BFN1*) constitute a regulatory cascade during senescence in *Arabidopsis*. ***Molecular Plant***, 6(5):1432-52.

Balazadeh, S., Jaspert, N., Arif, M., Mueller-Roeber, B., and Maurino, VG. (2012) Expression of ROS-responsive genes and transcription factors after metabolic formation of H_2O_2 in chloroplasts. ***Frontiers in Plant Science***, 3:234.

Shahnejat-Bushehri, S., Mueller-Roeber, B., and **Balazadeh, S**. (2012) *Arabidopsis* NAC transcription factor JUNGBRUNNEN1 affects thermomemory-associated genes and enhances heat stress tolerance in primed and unprimed conditions. ***Plant Signaling & Behavior***, 7(12):1518-21.

Mehterov, N., **Balazadeh, S**., Hille, J., Toneva, V., Mueller-Roeber, B., and Gechev, T. (2012) Oxidative stress provokes distinct transcriptional responses in the stress-tolerant *atr7* and stress-sensitive *loh2 Arabidopsis thaliana* mutants as revealed by multiparallel quantitative real-time PCR analysis of ROS marker and antioxidant genes. ***Plant Physiology and Biochemistry***, 59:20-9.

Sakuraba, Y., **Balazadeh, S.,** Tanaka, R., Mueller-Roeber, B., and Tanaka, A. (2012) Overproduction of chlorophyll *b* retards senescence through transcriptional re-programming in *Arabidopsis*. ***Plant & Cell Physiology***, 53(3):505-517.

Wu, A., Allu, AD., Garapati, P., Siddiqui, H., Dortay, H., Zanor, M-I., Asensi-Fabado, MA., Munné-Bosch, S., Antonio, C., Tohge, T., Fernie, A., Kaufmann, K., Xue, G-P., Mueller-Roeber, B., and **Balazadeh, S.** (2012) JUNGBRUNNEN1, a reactive oxygen species-responsive NAC transcription factor, regulates longevity in *Arabidopsis*. ***The Plant Cell***, 24(2):482-506. *The F1000 Article Factor: 8.*

Brotman, Y., Landau, U., Pnini, S., Lisec, J., **Balazadeh, S**., Mueller-Roeber, B., Zilberstein, A., Willmitzer, L., Chet, I., and Viterbo, A. (2012) The LysM receptor-like kinase LysM RLK1 is required to activate defense and abiotic-stress responses induced by overexpression of fungal chitinases in *Arabidopsis* plants. ***Molecular Plant***, 5(5):1113-24.

Parlitz, S., Kunze, R., Mueller-Roeber, B., and **Balazadeh, S**. (2011) Regulation of photosynthesis and transcription factor expression by leaf shading and re-illumination in *Arabidopsis thaliana* leaves. ***Journal of Plant Physiology***, 168:1311-1319.

Balazadeh, S., Kwasniewski, M., Caldana, C., Merhnia, M., Zanor, M.-I., Xue, G.-P., and Mueller-Roeber, B. (2011) ORS1, a H_2O_2-responsive NAC transcription factor, controls senescence in *Arabidopsis thaliana*. ***Molecular Plant***, 8:1-15.

Balazadeh, S., Wu, A., and Mueller-Roeber, B. (2010) Salt-triggered expression of the ANAC092-dependent senescence regulon in *Arabidopsis thaliana*. ***Plant Signaling & Behavior***, 5(6):1-3.

Balazadeh, S., Siddiqui, H., Allu, A-D., Matallana-Ramirez, L-P., Caldana, C., Mehrnia, M., Zanor, M-I., Köhler, B., and Mueller-Roeber, B. (2010) A gene regulatory network controlled by the NAC transcription factor ANAC092/AtNAC2/ORE1 during salt-promoted senescence. ***Plant Journal***, 62:250-264.

Szarzynska, B., Sobkowiak, L., Pant, BD., **Balazadeh, S.,** Scheible, W.-R., Mueller-Roeber, B., Jarmolowski, A., and Szweykowska-Kulinska, Z. (2009) Gene structures and processing of *Arabidopsis thaliana* HYL1-dependent pri-miRNAs. ***Nucleic Acids Research***, 37(9): 3083-3093.

Balazadeh, S., Parlitz, S., Mueller-Roeber, B., and Meyer, RC**.** (2008) Natural variation for developmental leaf and plant senescence in *Arabidopsis thaliana*. ***Plant Biology***, Suppl. 1:136-147.

Balazadeh, S., Riaño-Pachón, DM., and Mueller-Roeber, B**.** (2008) Transcription factors regulating leaf senescence in *Arabidopsis thaliana.* ***Plant Biology***, Suppl. 1:63-75.

Manuscripts submitted / in preparation

Garapati, P., Feil, R., Lunn, J.E., van Dijck, P., Mueller-Roeber, B. and **Balazadeh, S.**: Transcription factor ATAF1 integrates carbon starvation responses with trehalose metabolism. ***Plant Physiology***, in revision.

Garapati, P., Xue, G.-P., Munné-Bosch, S., **Balazadeh, S.** Transcription factor ATAF1 in *Arabidopsis* promotes senescence by direct regulation of key chloroplast maintenance and senescence transcriptional cascades. ***Plant Physiology,*** in revision.

Allu A.D., Xue G-P., Brotman Y., and **Balazadeh, S.** STAX orchestrates JA/SA signalling in the response to *Pseudomonas syringae* infection. **Submitted**.

Watanabe, M., Tohge, T., **Balazadeh, S**., Erban, A., Giavalisco, P., Kopka, J., Mueller-Roeber, B., Fernie, A.R., and Hoefgen, R.: Comprehensive Metabolomics Studies of Plant Developmental Senescence. In: Plant Senescence - Methods and Protocols. Springer. **Submitted**.

Shubchynskyy, V., Boniecka, J., Schweighofer, A., Simulis, J., Kvederaviciute, K., Stumpe, M., Mauch, F., **Balazadeh, S.**, Mueller-Roeber, B., Boutrot, F., Zipfel, C., Meskiene, I. The PP2C AP2C1 negatively regulates basal resistance to *Pseudomonas syringae* by controlling MAPK activation, ET and callose accumulation, transcription factor and immune gene expression. **Submitted.**

Allu, A.D. and **Balazadeh, S.** *Arabidopsis* NAC transcription factor STAX regulates developmental fates by directly suppressing AUXIN RESPONSE FACTOR 2. **In preparation.**

Shahnejat-Bushehri, S., Sakuraba, S., and **Balazadeh, S.** JUB1 modulates growth by regulating the expression of key BR and GA biosynthetic genes in *Arabidopsis thaliana*. **In preparation.**