

תמר אזולאי - שמר

שם המוסד: מכון מחקר נווה יער, וולקני.

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תחומי עניין ומחקר: פיזיולוגיה של הצמח, עצי פרי, עקות אביוטיות.

רשימת פרסומים מדעיים:

- Zhang J, De-oliveira-Ceciliato P, Takahashi Y, Schulze S, Dubeaux G, Hauser F, **Azoulay-Shemer T**, Töldsepp K, Kollist H, Rappel W-J, & Schroeder JI. (2018) Insights into the Molecular Mechanisms of CO₂-Mediated Regulation of Stomatal Movements. **Current Biology** 28(23): R1356 - R1363.
- Negi, J., Munemasa, S., Song, B., Tadakuma, R., Fujita, M., **Azoulay-Shemer, T.**, Engineer, C. B., Kusumi, K., Nishida, I., Schroeder, J. I., Iba, K. (2018) Eukaryotic lipid metabolic pathway is essential for functional chloroplasts and CO₂ and light responses in *Arabidopsis* guard cells. *PNAS* 4;115(36):9038-9043.
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- Azoulay-Shemer T.**, Hsu, P.K., Schroeder, J.I. (2017) Seeing is believing. News and Views, **Nature Plants** (3):765-766.
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- Azoulay-Shemer, T.**, Harpaz-Saad, S., Eyal, Y. and Goldschmidt, E.E. (2011) Pathway of Chlorophyll Breakdown in Citrus Fruit Peel, as Compared with Senescing *Arabidopsis* Leaves and Other Plant Systems. **ISHS Acta Horticulturae**. 892.
- Azoulay-Shemer, T.**, Harpaz-Saad, S., Cohen-Peer, R., Mett, A., Gidoni, D., Lovat, N., Krokhn, O., Spicer, V., Standing, G.K., Goldschmidt, E.E. and Eyal, Y. (2011) Dual, N and C-terminal, processing of citrus chlorophyllase precursor within the plastid membranes leads to the mature enzyme. **Plant Cell Physiol**. 52(1):70-83.

Azoulay-Shemer, T., Harpaz-Saad, S., Belausov, E., Lovat, N., Krokhin, O., Spicer, V., Standing, K.G., Goldschmidt, E.E., Eyal, Y. (2008) Citrus chlorophyllase dynamics at ethylene-induced fruit color-break; a study of chlorophyllase expression, post-translational processing kinetics and in-situ intracellular localization. *Plant Physiology* 148: 108-118.

Harpaz-Saad, S., **Azoulay, T.**, Arazi, T., Ben-Yaakov, E., Mett, A., Shibolet, Y.M., Hortensteiner, S., Gidoni, D., Gal-On, A., Goldschmidt, E.E., Eyal, Y. (2007) Chlorophyllase is a rate-limiting enzyme in chlorophyll catabolism and is post-translationally regulated. *Plant Cell* 19: 1007-1022.

Work in progress and additional publications

Bar-Ya'akov I, Brukental H, Hatib K, Harel-Beja R, Attia Z, Sperling O, **Azoulay-Shemer T** and Holland D. (2020) The wild almond *Prunus arabica* (Olivier) is capable of stem winter photosynthesis and is a potential genetic resource of important traits for almond adaptation to climate change (*submitted to Tree physiology*).

Schulze S, Dubeaux G, Ceciliato H.O.P, Munemasa S, **Azoulay-Shemer T**, Zhang J, Aguilar J, Diaz R, Nuhkat M, Steinhorst L, Kudla J, Kollist H, Schroeder I.J, A Role for Calcium-Dependent Protein Kinases (CPKs) in CO₂-Controlled Stomatal Movements in *Arabidopsis*. (*In-preparation*).

Azoulay-Shemer, T., Nevo, R., Harpaz-Saad, S., Gal-On, A., Goldschmidt, E.E., Reich, Z. Eyal, Y. Kinetics of photosynthetic apparatus breakdown and synthesis under chlorophyllase triggered de-greening and re-greening in squash leaves. (*In-preparation*).