CURRICULUM VITAE- Lior Rubinovich, PhD

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University Education and Additional Training

Dates	Description
2004 – 2006	B.Sc. in Plant Sciences (graduated with excellence) at The Robert H. Smith Faculty of Agriculture, Food and Environment, The Hebrew University of Jerusalem.
2007 – 2008	M.Sc. in Biotechnology at The Robert H. Smith Faculty of Agriculture, Food and Environment, The Hebrew University of Jerusalem. Title of thesis: (moved on to the direct track to Ph.D.) Supervision by: Prof David Weiss
2008– 2013	PhD in Plant Sciences (direct track) at The Robert H. Smith Faculty of Agriculture, Food and Environment, The Hebrew University of Jerusalem. Title of thesis: “The role of GASA proteins in gibberellin responses and redox regulation” Supervision by: Prof David Weiss
2013 – 2015	Postdoctoral position at Migal Research Institute at Prof Rachel Amir's lab. Research subject: Establishment of *Punica granatum L.* peel cell culture for the production of bioactive compounds

Positions Held

Dates	Description
2016 - 2019	Research Scientist (P.I.) at Migal-Northern Agriculture R&D
2019- 2024	Promoted to rank B (equivalent to "Senior Lecturer") at Migal-Northern Agriculture R&D
2018- 2022	Co-founder and acting director, AgroCulture LTD, Israel
2022- present	Scientific consultant and partner, BesTree LTD, Israel
2022- present	Member of the limited management at Migal-Northern Agriculture R&D
2024- present	Promoted to rank A (equivalent to "Associate Professor ") at Migal-Northern Agriculture R&D
2024- present	Promoted to Senior Lecturer at Tel-Hai College

Teaching Experience

Dates	Description
2008 - 2013	Teaching assistant, the Hebrew University of Jerusalem Title of the course: Plant Physiology

2014- 2016	Teaching assistant, Tel Hai College Title of the courses: Cell Biology, Plant Biotechnology, Plant Hormones
2019-Present	Lecturer, Tel Hai College Title of the courses: Crop Science and Physiology, Sub-tropical Fruit Trees, Botany

Articles in Reviewed Journals

1. **Rubinovich, L**. and Weiss, D. (2010). The Arabidopsis cysteine-rich protein GASA4 promotes GA responses and exhibits redox activity in bacteria and in planta. *Plant J.* **64**:1018–27.

2. **Rubinovich, L.**, Ruthstein, S. and Weiss, D. (2014). The Arabidopsis cysteine-rich GASA5 is a redox-active metalloprotein that suppresses gibberellin responses. *Mol. Plant*. **7**:244–7.

3. Galili, S., Hovav, R., Bellalou, A., Amir-Segev, O., Badani, H., **Rubinovich, L.,** Asher, A., Faraj, T. and Singer, A. (2018). Utilization of natural variation in *Cephalaria joppensis* to diversify wheat forage crop rotation in Israel. *Isr. J. Plant Sci.***65**:195-201.

4. **Rubinovich, L.,** Segev, B., Habashi, R., Con, P. and Amir, R. (2019). Establishment of *Punica granatum* L. peel cell culture to produce bioactive compounds. *Plant Cell Tissue Organ Cult.* **138**: 131-140.

5. Bar-Noy, Y., Sofer-Arad, C., Perel, M., Cohen, H., Senesh, N., Noy, M. and **Rubinovich, L.** (2019). Frost protection efficiency evaluation in avocado with a horizontal wind machine. *Fruits* **74**:124-129.

6. Weil, A., Sofer-Arad, C., Bar-Noy, Y., Liran, O. and **Rubinovich, L.** (2019). Comparative study of leaf antioxidant activity as a possible mechanism for frost tolerance in 'Hass' and 'Ettinger' avocado cultivars. *J. Agric. Sci.* **157**: 342-349.

7. Asher, A., Galili, S., Whitney, T. and **Rubinovich, L.** (2020). The potential of quinoa (*Chenopodium quinoa*) cultivation in Israel as a dual-purpose crop for grain production and livestock feed. *Sci. Hortic.* (Amsterdam) **272**, 109534.

8. Shapira, O., Chernoivanov, S., Neuberger, I., Levy, S. and **Rubinovich, L.** (2021) Physiological characterization of young `Hass` avocado plant leaves following exposure to high temperatures and low light intensity. *Plants* **10 (8)**: 1562.

9. Chernoivanov, S., Neuberger, I., Levy, S., Senesh, N. and **Rubinovich, L.** (2022) Covering young 'Reed' avocado trees with shading nets during winter alleviates cold stress and promotes vegetative growth. *Eur. J. Hortic. Sci.* **87 (1)**: 1-10.

10. Bellalou, A.; Daklo-Keren, M.; Abu Aklin, W.; Sokolskaya, R.; **Rubinovich, L**.; Asher, A. and Galili, S. (2022) Germination of Chenopodium Quinoa cv. 'Mint Vanilla' Seeds under Different Abiotic Stress Conditions. *Seed Science and Technology* **50 (1)**: 41-45.

11. Weil, A., **Rubinovich, L.**, Tchernov, D. and Liran, O. (2022) Comparative study between the

photosynthetic parameters of two avocado (*Persea americana*) cultivars reveals natural variation in light reactions in response to frost stress. *Agronomy* **12 (5)**: 1129.

12. Alon, E., Shapira, O., Azoulay-Shemer, T. and **Rubinovich, L.** (2022). Shading nets reduce canopy temperature and improve photosynthetic performance in 'Pinkerton' avocado trees during extreme heat events. *Agronomy,* **12(6)**, 1360.

13. Cohen, H., Bar-Noy, Y., Irihimovitch, V. and **Rubinovich, L.** (2022). Effects of seedling and clonal West Indian rootstocks irrigated with recycled water on `Hass` avocado yield, fruit weight and alternate bearing. *New Zealand Journal of Crop and Horticultural Science*, 1-13 (online).

14. Asher, A., Dagan, R., Galili, S. and **Rubinovich, L.** (2022). Effect of row spacing on quinoa (*Chenopodium quinoa*) growth, yield and grain quality under Mediterranean climate. *Agriculture,* **12(9)**, 1298.

15. **Rubinovich, L.**, Sofer-Arad, C., Chernoivanov, S. and Szenes, N. (2023). Effects of Covering Mature Avocado `Pinkerton` Trees with High-Density Shading Nets during Cold Winters on Microclimate, Chlorophyll Fluorescence, Flowering and Yield. *HortScience,* **58(10)**, 1201-1204.

16. **Rubinovich, L.,** Dagan, R., Lugasi, Y., Galili, S. and Asher, A. (2023). The potential of young vegetative quinoa (*Chenopodium quinoa*) as a new winter protein-rich leafy crop under Mediterranean climate. *Plos One*, **18(12)**, e029000.

17. Lahak, M., Alon, E., Chen A. and **Rubinovich L.** (2024). Covering young avocado 'Hass' trees with high-density shading nets during the winter mitigates frost damage and improves tree performance. *Trees*

18. Bellalou, A.; **Rubinovich, L.;** Asher, A.; Daklo-Keren, M.; Abu Aklin, W.; Sokolskaya, R.; Ferber, A. and Galili, S. (2024). Effect of sowing date of quinoa (*Chenopodium quinoa*) mother plants on germination of their seeds. *Seed Science and Technology* 52 (1): 17-27.

19. **Rubinovich, L.**, Sofer-Arad, C., Chernoivanov, S., Szenes, N. and Michael Noy (2024). Monitoring Multiyear Individual Tree Flowering and Yield Reveals High Variation among `Pinkerton` Avocado Trees. *New Zealand Journal of Crop and Horticultural Science* 1-9.

20. Vitrack-Tamam, S., Yasuor, H., Hamus-Cohen, D., Erel, R., **Rubinovich, L.** and Liran, O. (2023, Submitted, under review). Solar Induced Fluorescence Retrieved from Avocado (*Persea americana* Mill.) Canopies Along the Season Correlates with Sugar Levels in the Developing Fruit. *Heliyon*.

21. Samir, K., Bellalou, A., Asher, A., **Rubinovich, L.** and Galili, S. (2024, Submitted, under review). The evaluation of *Cephalaria Joppensis* hay in feeding dairy goats. *Grassland Science.*

22. Bellalou, A., **Rubinovich, L.,** Asher, A., Deutch-Traubman, T., Galili, L., Malede, I. and Galili, S. (2024, Submitted, under revision). Influence of plant density and harvest time on *Cephalaria joppensis* performance as a forage crop. *The Journal of Agricultural Science.*

23. Khattib, H., Pintel, N., Khatib, S., **Rubinovich, L.** and Avni, D. (2024, Submitted, under review). Young Green Quinoa: A Novel Sustainable Functional Crop Addressing Climate Change, Food Security, and Health Needs.
Scientific reports

Articles in reviewed journals in Hebrew

1. Asher, A., Galili, S. and **Rubinovich, L.** (2017). The development of Quinoa (*Chenopodium quinoa*) as a new crop in Israel- observation summary. Nir Va Telem, **71:** 21-26.

2. Asher, A., Sadan, A., Galili, S. and **Rubinovich, L.** (2017). Potential evaluation of quinoa (*Chenopodium quinoa*) as a new winter crop. Nir Va Telem, **75:** 22-28.

3. Sidan, G., Daklo-Keren, M., Abu-Aklin, W., Sokolskia, R., **Rubinovich, L.,** Asher, A., Ballelo, A., Londner, A., Amir-Segev, O. and Galili, S. (2019). Characterization of different factors affecting quinoa germination under controlled conditions. Nir Va Telem, October 1-9.

4. Ballelo, A., Daklo-Keren, M., Abu-Aklin, W., Sidan, G., Sokolskia, R., **Rubinovich, L.,** Asher, A., Londner, A., Amir-Segev, O., Farber, A. and Galili, S. (2020). Influence of sawing date of quinoa mother plants on seed germination. Nir Va Telem, August 1-9.

5. Asher, A., Dagan, R., Galili, S., Salmon, A. and **Rubinovich, L.** (2021). The development of young green quinoa (*Chenopodium quinoa*) as a new multifunctional summer crop in Israel. Nir Va Telem, January 1-10.

6. **Rubinovich, L.**, Galili, S., Shabtai, A., Cohen-Sinder, M., Federson, E. and Asher, A. (2022). The use of quinoa (*Chenopodium quinoa*) as a new forage crop and its effect on productivity and production efficiency in cattle fattening . Yediot Labokrim, **135**, 24-26.

7. Liel, G., Ballelo, A., Daklo-Keren, M., Abu-Aklin, W., Sokolskia, R., **Rubinovich, L.,** Asher, A., Barazani O. and Galili, S. (2023). Selection for primary growth of *Cephalaria joppensis* plants. Nir Va Telem, December 1-8.

8. Ballelo, A., **Rubinovich, L.,** Asher, A., Traubman-Doitch, T., Liel, G., Ishashim, M. and Galili, S.(2024). The effect of plant density on the performance of *Cephalaria joppensis* for fodder production. Nir Va Telem, February 1-17.

9. Ballelo, A., **Rubinovich, L.,** Asher, A., Traubman-Doitch, T., Liel, G., Ishashim, M. and Galili, S. (2024). The effect of morphological variation at the time of flowering on growth and yield indices of *Cephalaria joppensis*. Nir Va Telem, March 1-15.

Book Chapters

1. **Rubinovich, L.**, Holland, D. and Amir, R. (2014). Characterization of pomegranate`s health benefiting bioactive compounds, taste, color and post-harvest fruit quality by studying a wide

collection of diverse accessions. In: *Instrumental Methods for the Analysis of Bioactive Molecules,* **10:** 201-215. American Chemical Society: Washington, DC.

Articles in Non-Reviewed Journals in Hebrew and English

1. **Rubinovich L.,** Lurie G., Ziv O. Weiss D. (2009)
   Eucomis autumnalis: propagation, storage and post-harvest.
   Olam Haperach. February 48-50.

2. **Rubinovich L.,** Ziv O. Weiss D. (2009)
   Tagetes lemmonii a new fragrant cut green.
   Olam Haperach. October-November 52-53.

3. **Rubinovich L.,** Ziv O. Weiss D. (2010*)*
   Lepidium virginicum: Flowering and post-harvest.
   Olam Haperach. January-February 52-53.

4. **Rubinovich L.,** Ziv O. Weiss D. (2011)
   MOP MERKAZ: Introduction of new cut flowers and cut green.
   Prachim Bareshet. July 5-6.

5. **Rubinovich L.,** Lurie G., Ziv O. Weiss D. (2012)
   Flowering control of "Pineapple Flower"- *Eucomis autumnalis*.
   Prachim Bareshet.

6. Weiss., D. Lurie., G, Ziv., O. and **Rubinovich., L.** (2014)
   Flowering control of "Pineapple Flower" for flowering pot plants- *Eucomis alba*.
   Alon Anaf Haprachim. June **11:** 81-86.

7. Cohen, H., Levine, A. and **Rubinovich, L.** (2016).
   Agricultural management of `*Hass*` Avocado orchards.
   Alon Hanotea **70:** 32-37.

8. Cohen, H. and **Rubinovich, L.** (2021).
   Investigation of avocado rootstocks.
   Yevul See April 40- 45.

9. Asher, A. and **Rubinovich L.** (2021).
   Quinoa as a forage crop.
   The cattle and dairy farm December 82-86.

10. Lahak, M., Alon, E., Chen A and **Rubinovich L.** (2023). Covering young avocado 'Hass' trees with high-density shading nets during the winter mitigates frost damage and improves tree performance.
    BioRxiv https://doi.org/10.1101/2023.07.03.547459

11. Vitrack-Tamam, S., Yasuor, H., Hamus-Cohen, D., Erel, R., **Rubinovich, L.** and Liran, O. (2023, Submitted, under review). Solar Induced Fluorescence Retrieved from Avocado (*Persea americana* Mill.) Canopies Along the Season Correlates with Sugar Levels in the Developing Fruit.
BioRxiv https://doi.org/10.1101/2023.07.24.550262

12. Asher, A., Dagan, R., Lugasi, Y., Galili, S. and **Rubinovich, L.** (2023). The potential of young vegetative quinoa (*Chenopodium quinoa*) as a new winter protein-rich leafy crop under Mediterranean climate.
BioRxiv https://doi.org/10.1101/2023.08.01.551448

13. **Rubinovich, L.**, Sofer-Arad, C., Chernoivanov, S., Szenes, N. and Michael Noy (2024). Monitoring Multiyear Individual Tree Flowering and Yield Reveals High Variation among `Pinkerton` Avocado Trees.
Alon Hanotea **9:** 25-28.

Allowed Patents and Registered Cultivars

1. **Rubinovich, L.** and Amir, R. (2018) *Punica Granatum L.* fruit peel cell culture. Provisional patent.
2. **Rubinovich, L.** (2019) Frost-resistant avocado clones (submitted).
3. **Rubinovich, L.** (2023) Quinoa low-saponin cultivar 'Mi-Amor' (submitted).
4. Avni, D., Ben-Herzl, O. and **Rubinovich, L.** (2023) Young green quinoa as a source and anti-inflammatory compounds and functional ingredients for the food industry and pharma. Provisional patent.