

CV – Mery Dafny Yelin

1. Personal

Phone: 04-6123912 (work), 052-7388646 (mobile)
 e-mail: merydy@migal.org.il, merydy@gmail.com

Dates	Description
1974	Born in Merom Golan, Israel
1993-1994	Military service

2. University Education and Additional Training

Dates	Description
1997 – 1999	B.Sc. in Agriculture, Hebrew University of Jerusalem, Faculty of Agricultural, Food and Environmental Quality Sciences, the Institute of Plant Science in Agriculture and Horticulture
1999 – 2005	Ph.D. at the Hebrew University of Jerusalem, Faculty of Agricultural, Food and Environmental Quality, the Institute of Plant Sciences Thesis: <i>Rosa hybrida</i> Petal Development – Characterization of Total Protein and Functional Analysis of sHSP-CI Supervisors: Prof. Alexander Vainshtein and Prof. Zach Adam
2006 – 2008	Postdoctoral position at the University of Michigan, Department of Molecular, Cellular and Developmental Biology with Dr. Tzvi Tzfira Research subject: Agrobacterium T-DNA Integration Study
2008 – 2009	Postdoctoral position at Migal with Rachel Amir Research subject: Pomegranate metabolism

3. Positions Held and Academic Status

Dates	Description
2010 to 2015	Research Scientist at the Golan Research Institute
2015 to date	Research Scientist at the Northern Research & Development, MIGAL
2024	Senior Scientist at Northern Research & Development, MIGAL

4. Teaching Experience / Guiding Students

A. Academic Contribution:

Dates	Description
2009 to 2015	Lecturer at Tel-Hai Academic College, Nutrition Science and Food Science Course: Scientific Writing
2019 to 2021	Lecturer at the Ohalo College Course: Agroecology, The Ministry of Labor, Social Affairs, and Social
2011 – 2012 and 2020 to date	Lecturer at the Tel Hai College, The Winery School Course: Cell Biology
2011 to date	Lecturer at the Tel Hai College, The Winery School

	Course: Plant Physiology and Anatomy
2025 to date	Lecturer at Tel-Hai Academic College, Biotechnology
	Course: Plant Phytopathology workshop
2018 to date	Lecturer at the Hebrew University of Jerusalem, Faculty of Agricultural, Food and Environmental Quality, the Institute of Plant Pathology and Microbiology
	Diseases of Dioecious trees and Grapevines
2025 -	Lecturer at the Tel Hai Academic College: Applied Management of Plant Diseases in Agriculture

Guidance of M.Sc. Students (or B.Sc. internship):

Graduation date	Name	Title of thesis	Guidance with
2022	*Orly Mairesse	Characterizing microbial communities in pear flowers before and during events of Fire Blight toward microbiome-based treatments	Dr. Itai Sharon
2022	** Alya Bouz	Identification and characterization of volatile compounds in carrot and examined their biological activity against the soil-borne phytopathogenic fungus <i>Sclerotium rolfsii</i>	Dr. Mwafaq Ibdah Dr. Marcela Karpuj
2022	** Ranin Bishara	Identification and characterization of volatile compounds from wild carrots against the soil-borne phytopathogenic fungus <i>Sclerotium rolfsii</i>	Dr. Mwafaq Ibdah
2023	*Tamir Zonenberg	Hybrid grapevine resistance to downy and powdery mildew in Israel	Dr. Mair Sliel
2024	*Asaf Greber	Using frass derived from black soldier larvae treatment of agricultural plant waste as a product enhancing plant protection and growth	Dr. Itai Opatovsky
2025	*Bar Mheler	The inhibition mechanism of quorum quenching enzymes on gram-negative plant pathogenic bacteria	Dr. Livnat Afriat-Jurnou
2027	* Solaf Farhat		Dr. Itai Sharon

*Under my direct supervision

** B. Sci. internship, as part of studies in ORT Braude College

5. Activity in Scientific and Agricultural Committees

Date	Description
2016	Member of the scientific committee of an interdisciplinary meeting Society, History, agriculture and environment study in the Golan and Hermon

6. Contribution to the Scientific and Agricultural Committees

A. International:

Date	Title of the Meeting/Committee	Place	Role
2022	IOBC pome fruit disease meeting	Plovdiv, Bulgaria	Co-chair

B. National

Date	Title of the Meeting/Committee	Place	Role
2015-2017	Botryosphaeria project	Volkany Center	Member of professional comity
2016	A multidisciplinary academic conference on the Golan and Hermon - research innovations	Katzrin	Member of scientific committees Co-chair of the opening session Co-chair of agriculture and environment session
2018	Organizer Migal seminar series	Kiryat Shmona	Member of scientific committees
2021	Summary season research in Western Galilee Field Crops	Zoom	Member of scientific committees
2022	Functional Mycology Meeting	Agamon Hula-JNF	Member of the scientific committee, Co-chair
2023	Israel Society of Crop and Vegetable Sciences	Rehovot	Member of the scientific committee, Co-chair

C. Editorial Responsibilities

Date	Description
2017	A reviewer of manuscripts for Plant Physiology and Biochemistry Journal
2018	A reviewer of manuscripts for Phytopathology Journal
2019	A reviewer of manuscripts for the Spanish Agricultural Research Journal
2020	A reviewer of manuscripts for the plant pathology Journal
2023	A reviewer of manuscripts for the plant pathology Journal
2024	A reviewer of manuscripts for Review Article the Frontiers Journal

7. Active Participation in Meetings (2021-2026)A. International:

Date	Title of the Meeting	Place	Role
2022	IOBC pome fruit disease meeting	Plovdiv, Bulgaria	Invited lecture
2022	IOBC pome fruit disease meeting	Plovdiv, Bulgaria	Lecture
2022	The 3rd International Symposium on Fire Blight of Rosaceous Plants (ISFB)	Dresden-Pillnitz, Germany	Lecture
2022	The 8 th International Conference on Drylands, Deserts & Desertification	Ben-Gurion University, of the Negev	Invited lecture
2023	IOBC- WPRS - Meeting of the Working Group "Integrated Protection in Viticulture"	Logroño, La Rioja, Spain.	Lecture
2023	IOBC- WPRS - Meeting of the Working Group "Integrated Protection in Viticulture"	Logroño, La Rioja, Spain.	Poster By Tirza Zahavi
2025	FUNGA fest 2025 - Inhibition of <i>Athelia rolfsii</i> -Induced Stem Rot in Tomatoes Using Secretions from the Black Soldier Fly (BSF)	Beer Sheva, Israel	Lecture

B. National:

Dates	Title of the Meeting	Role
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2021	Summary season research in Western Galilee Field Crops (Zoom)	Lecture
2021	Northern Agriculture R&D 2020 winter talk online	Lecture
2021	Conference for agriculture in Israel 2021	Lecture
2021	Conference for agriculture in Israel2021	Lecture by Assaf Chen (co-author)
2021	Conference for agriculture in Israel2021	Lecture by Afriat-Jurnou (co-author)
2021	Conference for agriculture in Israel 2021	Lecture by Itai Sharon (co-author)
2021	Conference for agriculture in Israel 2021	Poster by Shlomit Dor
2021	AgroIsrael Exhabition, Ma'ayan Harod, Israel	Chair
2021	AgroIsrael Exhabition, Ma'ayan Harod, Israel	Participation in the Researchers' panel
2021	Crop and vegetable - summary of Upper Galilee research season	Lecture
2022	Vineyard grower meeting Northern Agriculture R&D 2022	Lecture
2022	New research in the Galilee, 24 th conference	Lecture
2022	New research in the Galilee, 24 th conference	Lecture
2022	42 nd Congress of The Israeli Phytopathological Society	Lecture
2022	42 nd Congress of The Israeli Phytopathological Society	Poster
2023	Crop and vegetable - summary of Upper Galilee research season	Lecture
2023	Migal's 18th conference in memory of Yaakov Arzi - May 11, 2023, at Pastoral Hotel, Kibbutz Kfar Blum	Chair Lecture by Tamir Zonenberg (MA student) Lecture by Aia OZ (co- author)
2024	Winter conference Northern R&D and extension services	Lecture
2024	Professional community for leaf crops and crucify	Lecture
2024	43 rd Congress of The Israeli Phytopathological Society	Lecture
2024	A national seminar for grape growers	Invited Lecture
2024	The 5 th conference of the institute of Grape and Wine research, Ariel University	Invited Lecture
2024	Israel Society for Microbiology – ISM 2024 Annual Meeting	Poster by Aia oz
2024	Israel Society of Soil Science – annual meeting 2024	Lecture by Nativ Rotbart
2024	Avocado grower meeting - Granot	Invited Lecture
2024	Avocado grower meeting - Milouot	Invited Lecture
2025	Annual meeting of the Agricultural Engineering Society	Lecture by Assaf Chan (co-author)
2025	Avocado grower meeting - Tiberia	Invited Lecture
2025	44 nd Congress of The Israeli Phytopathological Society	Poster
2025	2 nd meeting of Apple and Chary in the Golan high Drouse Villages (Masada)	Invited Lecture
2025	Research in the Galilee, 26 th conference	Lecture by Liora Shaltiel Harpaz (co-author)
2025	International Conference on Agricultural Sciences	Lecture
2025	International Conference on Agricultural Sciences	Invited lecture by Liora Shaltiel Harpaz (co-author)
2025	R&D Conference – mountain fruit, Rash Pina	Invited Lecture
2026	R&D Conference – vineyard, Katzerin 2 years yield of grapevine resistance verities –	Lecter by Avital Kitov (Co-author)
2026	R&D Conference – Summer vegetable crops, vineyard, Katzerin	Invited Lecture

2026	43 rd Congress of The Israeli Phytopathological Society	Lecter by Assaf Chen (Co-author)
2026	43 rd Congress of The Israeli Phytopathological Society	Lecter by Solaf Farhat (MA Student)

C. Lectures at Ministry of Agriculture Courses (2021-2026):

Dates	Title of the lecture	Role
2023	Ozone water against plant diseases	Invited Lecture
2023	Downy Mildew in grapevine (in grapevine plant defense course)	Invited Lecture
2023	Apples growers meeting	Invited Lecture
2025	Pathogen in field and fruit crops	Invited Lecture
2025	Soil pathogen in apple orchards	Invited Lecture

8. Research Grants (2021-2026)

A. National Competitive Grants:

Year	Granting Source	Duration (years)	Role*	Title (short)	Budget (NIS / year)		Total for the Researcher (NIS)
					Total	Researcher	
2021	Training and Profession Services (TPS)	1	CI	Hybrids grapevines + Ozone in Grapevine	70,000	50,000	50,000
2021	ICA	2	PI	Fungicide reduction in grapevine	140,000	70,000	140,000
2021	Israel Ministry of Agriculture	3	CI	Using enzymes degrading <i>E. amylovora</i> signaling molecules	276,666	43,333	130,000
2022	TPS	2	CI	Epidemiology and root cause analysis of broccoli head rot	40,000	40,000	80,000
2022	TPS	2	CI	Looking after the effect of different nitrogen fertilization on fungi disease and pests In Mango.	40,000	20,000	40,000
2022	The plant's production & marketing board	2	PI	Epidemiology and root cause analysis of broccoli head rot	50,000	50,000	100,000
2022	ICA	1	PI	Inhibition of soft rot in broccoli using recombinant enzyme	65,000	32,500	32,500
2022	Israel Ministry of Agriculture	3	CI	Using frass derived from black soldier larvae as a product enhancing plant protection and growth	322,000	48,667	146,000
2023	Israel Ministry of Agriculture (R&D support)	3	PI	Optimization of high-density pome orchard to decrease fire blight damage and improve yield	200,000	165,000	495,000

2023	Israel Ministry of Agriculture (R&D support)	3	PI	Decreasing Botryosphaeria-related dieback and increasing yield of avocado trees through optimization of phosphorus fertilization	200,000	185,000	485,000
2024	TPS	3	CI	Use of resistant hybrid grapevine varieties to control canopy diseases in Israel.	33,000	33,000	100,000
2025	KKL, JNF	2	PI	Reducing Pesticide Use by Developing a UV-C to Control Grapevine Diseases	120,000	120,000	2400,000
2025	Israel Ministry of Agriculture	3	PI	Evaluation of the impact of solar panels on the cultivation of vegetables	150,000	117,000	351,000

*PI = Principal Investigator; LPI= Local Principal Investigator; CI = Cooperating Investigator

B. Industry

Year	Granting Source	Duration (years)	Role*	Title (short)	Budget (NIS / year)		Total for the Researcher (NIS)
					Total	Researcher	
2021	Strieminetica Grapevine Technologies LTD	6	PI	Hybrids grapevines	96,000	96,000	581,000
2021	Hishtil	1	PI	Hybrids grapevines	36,000	36,000	36,000
2021	Tuff Substrates	3	PI	Using frass derived from black soldier larvae treatment of agricultural plant waste as a product enhancing plant health	40,000	40,000	40,000
2022	Projini Ltd.	1	PI	Detect new fungicides against plant diseases	32,000	32,000	32,000
2022-2023	Tuff Substrates	3	PI	Using frass derived from black soldier larvae treatment of agricultural plant waste as a product enhancing plant health	176,600	79,800	176,600
2022-2023	Plantest Ltd.	1	PI	Ozone treatment efficacy against plant disease	85,050	85,050	170,100
2023	Hishtil	1	PI	Hybrids grapevines	15,000	15,000	15,000
2024	Tuff Substrates	1	PI	Using frass derived from black soldier larvae treatment of agricultural plant waste as a product enhancing plant health	11,000	11,000	11,000

C. Other Funds:

Year	Granting Source	Years	Role*	Title (short)	Budget (NIS / year)		Total for the Researcher (NIS)
					Total	Researcher	
2021	The Almond Board	1	PI	Survey of foliage diseases in almonds	80,000	80,000	75,000
2021	The Cruciferous Vegetables Board	2	PI	Epidemiology and root cause analysis of broccoli head rot	50,000	50,000	150,000

2022	The Mango Board	1	PI	Remote sensing of Mango malformation disease	40,000	20,000	20,000
2022	Israel Groundnuts Board	2	PI	<i>A. rolfsii</i> control in the field – reduce treatments and remote sensing	44,000	29,000	58,000
2023	The Mango Board	3	CI	Remote sensing of Mango malformation disease	20,000	20,000	40,000
2023	The Mango Board	2	PI	Looking after the effect of different nitrogen fertilization on fungous disease and pests In Mango	35,000	35,000	70,000
2023	The Mango Board	2	PI	Development of a pest control method using ultraviolet (UV-C) radiation to eradicate foliar diseases and sour rot in grapevines	40,000	40,000	80,000
2023	The avocado board	3	PI	Decreasing Botryosphaeria-related dieback and increasing yield of avocado trees	88,000	88,000	265,000
2024	The Cruciferous Vegetables Board	1	PI	Improving management of head rot in broccoli	25,000	25,000	25,000
2024	Israel Carrot Board	1	PI	<i>A. rolfsii</i> control in the field using crucify as cover-crop	40,000	40,000	40,000

*PI = Principal Investigator; LPI= Local Principal Investigator; CI = Cooperating Investigator

Part II: LIST OF PUBLICATIONS

Marks:

S Student or post-doc under my supervision
 * Equal contribution

1. Articles in Reviewed Journals (2021-2026)

1. Gurevich D., Dor S., Erov E., Dan Y., Moy J.C., Mairesse O., **Dafny Yelin M.**, Adler-Abramovich L., Afriat-Jurnou L. (2021) Directed enzyme evolution and encapsulation in peptide Nano spheres of quorum quenching lactonase for plant pathogen antibacterial treatment. *ACS Applied Materials & Interfaces.* 13(2), 2179-2188. <https://pubs.acs.org/doi/abs/10.1021/acsami.0c15808>. IF 9.229 Category: Nanoscience & Nanotechnology Rank 21/106, Q1; Category: Materials Science, Multidisciplinary Rank 44/334, Q1.
2. **Dafny Yelin, M.**, Moy, J. C., Mairesse, O.^S, Silberstein, M., Sapir, G., & Michaeli, D. (2021). Efficacy of fire blight management in pome fruit in northern Israel: copper agents and their effect on yield parameters. *Journal of Plant Pathology*, 103(1), 151-161. <https://doi.org/10.1007/s42161-020-00665-5>. IF 1.729 Category: Plant Science 188/251, Q3.

3. **Dafny Yelin, M.**, Moy, J. C., Stern, R. A., Doron, I., Silberstein, M., & Michaeli, D. (2021). High-density Spadona' pear orchard shows reduced tree sensitivity to fire blight damage due to decreased tree vigour. *Phytopathologia Mediterranea*, 60(3), 421-426. DOI: 10.36253/phyto-12847. IF 2.02 Category: Agronomy Rank 39/91, Q1.
4. Kurz, M., Carnal, S., **Dafny Yelin, M.**, Mairesse, O., Gottsberger, R. A., Ivanović, M., ... & Rezzonico, F. (2021). Tracking the dissemination of *Erwinia amylovora* in the Eurasian continent using a PCR targeted on the duplication of a single CRISPR spacer. *Phytopathology Research*, 3(1), 1-15. <https://doi.org/10.1186/s42483-021-00096-9>. IF 4.025 Category: Not yet Rank (new journal)
5. Agmon, S., Kunta, S., **Dafny Yelin, M.**, Moy, J., Ibdah, M., Harel, M., Rabinovitz, O., Levy, Y., Hovav, R. (2022) Mapping of Stem Rot Resistance in Peanut Indicates Significant Effect for Plant Architecture Locus. *Crop Science* (in press). IF 1.439 Category: Agronomy 30/91, Q2.
6. **Dafny Yelin, M**, Moy, J.C, Rabinovitz, O., Hovav, R. (2022). Reduction of *Sclerotium rolfsii* damage in Virginia-type peanuts using a combination of tolerant varieties and fungicide. *Phytoparasitica* 50(4), 769-773. IF 1.439 Category: Agronomy 55/91, Q3.
7. Linker R., **Dafny Yelin M.** (2023) Mapping fire blight cankers and autumn blooming in pear trees using Faster R-CNN. *Precision Agriculture*. Accepted. IF:5.767 Category: Agricultural and Biological Sciences Q1. <https://doi.org/10.1007/s11119-023-10077-x>
8. **Dafny Yelin, M.**, Graph, S., Rabinovitz, O., Shakked, N., Hill^S, A., Lifshitz, O. (2024) Optimal treatment against *Sclerotium rolfsii* rot in processing tomatoes using pesticide and rootstock against key stages of the disease. *Crop Protection* 176. <https://doi.org/10.1016/j.cropro.2023.106480>. IF:2.8 Category: Agronomy 24/88 Q2.
9. **Dafny Yelin, M.**, Kohavi Moy, J.C, Zahavi, T., Dor, S., Hill, A., Kfir, S. (2024) Deciduous fruit trees and grapevines as alternative crops in *Demathphora necatrix* (syn. *Rosellinia necatrix*) infested soils. *Phytopathologia Mediterranea* 63 (2):259-268. IF:2.4 Category: Agronomy and Crop Science Category: Agronomy 30/88 Q2.
10. Oz A*, Mairesse O*^S., Raikin S., Hanani H., **Dafny Yelin M***., Sharon I*. (2025) Pear flower and leaf microbiome dynamics during the naturally occurring spread of *Erwinia amylovora*. *mSphere*. IF:3.1 Category: Microbiology 54/163 Q2.
11. Zonenberg T^S., Zahavi T., Degani O., Striem M., and **Dafny-Yelin M** (2025) Hybrid grapevine resistance mechanism to downy and powdery mildews in Israel under warm Middle Eastern conditions. accepted in *Plant Disease*. IF:4.4 Category: Plant Science 41/273 Q1.

2. Patents

1. Afriat-Jurnou L, Erov M, Gurevich D, and **Dafny Yalin M.** (2020). Stabilized mutants of quorum quenching lactonase as antibacterial treatment for plant pathogens". MIGAL Applied Research, Ltd, PCT/IL2020/050673, 17-Jun-2020.

3. Articles in Non-Reviewed Journals in Hebrew and English (2021-2026)

1. דפני יلين, מ., רביביץ' א., חובבר, שחד נ. (2022). הפחחתת נזקי קשיון רולפסי באגוזי אדמה על ידי ממתק הדבירה של הפחחתת ריסוסים ו שימוש בחיטוי סולרי משולבים בזנים עמידים. <https://kenes-media.com>.
2. דפני יلين, מ., מוי י., דור ש., כפיר ש., זהבי ת., דגמי א. (2022) עלון הנוטע, גלון מס. 76 (6) : 38-43. איתור גידולים הסבילים למחלות רקבון השורשים הלבן (*Rosellinia necatrix*).
3. זונברג, תס, דפני יلين, מ., שליסל מ., זהבי ת., דגמי א. (2023). בוחנת עמידות זני גפן היברידים לכשותית וקמחון בצפון הארץ. עלון הנוטע, גלון 77 עמודים 16-21.
4. דפני יلين, מ., גורביצ' ד., דור ש., ערוב מ., דן י., אדרל אברמוביץ' ל., אפריאט-גורנו ל., (2024) אנזימים משבבי תקשורת בבדיקות להצלת מטעי האגס – הדור הבא של הדבירה אקולוגית. יבול שיא, 21.
5. דפני יلين, מ., זונברג, תס, שליסל, מ., דגמי, א., זהבי, ת. (2004) בוחנת עמידות אשכולות של זני גפנים היברידים לכשותית וקמחון. עלון הנוטע, יוניבילון 81 עמודים 31-28.
6. דפני יلين, מ., שחד, נ., עומר, נ., אברהם, ל. (2024) פיתוח ממתק הדבירה משולבת (IPM) ידידותי לסביבה לטיפול אופטימלי במחלות הגורמות לركבות ברוקולי. **ארגון מגדי הירקות, מבזק ירקות שדה וירק עழות 13-30.**
7. דפני-ילין מ, רוטברט ג, שאלתיאל-הרפז ל, אלקן ג, צעידי ש, סופר-ארד כ, זכרייה ג. (2025) רגישות המנגו למחלות ומזיקים כתלות בממתק הדישון החנקני. עלון הנוטע, 79, עמודים – 30-33.
8. פרימון י, איל י, דפני-ילין מ, אלקן ג, רענן ח, קימפלגט ק, קושמרו ביאר ע, נהרי י, ואראל ר. (2025) השפעת רמת הדישון על סוג ועוצמת הפריחה ועל תופעת "התיבשות תפוחות" באבוקדו מזן 'האס', עלון הנוטע, 26, 27-31.

4. Articles in Symposia Proceedings

1. Chen A., Jacob M., Shoshani G., **Dafny Yelin M.**, Degani O., Rabinovitz O. Early detection of soil-borne diseases in field crops via remote sensing. *Precision agriculture '21* (2021), Editor John V. Stafford. 217 – 224. https://doi.org/10.3920/978-90-8686-916-9_25.
2. **Dafny Yelin M.**, Gurevich D., Dor S, Erov M, Dan Y, Moy J.C, Mairesse O, Adler-Abramovich L, Afriat-Jurnou L (2023). New sustainable treatment against fire blight disease in pears using quorum-sensing disruption. Pome fruit diseases, IOBC-WPRS Vol. 164, 2023 p.61. <https://iobc-wprs.org/product/iobc-wprs-bulletin-vol-164-2023/>
3. **Dafny Yelin M.**, Silberstein M., Sofer Arad C., (2023). Fire blight management in pears using the local Israeli decision support system to improve plant health. Pome fruit diseases, IOBC-WPRS Vol. 164, 2023 p.115. <https://iobc-wprs.org/product/iobc-wprs-bulletin-vol-164-2023/>