Liora Shaltiel Harpaz

Academic Degree: PhD

Current Position: Senior researcher, Integrated Pest Management Laboratory, Northern R@D, MIGAL- Galilee Research Institute, Kiryat Shmona,/ Senior Lecturer Environmental Sciences Departments, Faculty of Sciences and Technology, Tel Hai College, Israel.

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University Education and Additional Training

1988-1992	B.Sc. (summa cum laude), Biology, University of Haifa, Haifa, Israel.
1992-1994	M.Sc. (Cum Laude) Life Sciences with specialization in Ecology, Ben-Gurion University of the Negev, Beer-Sheva, Israel. Title of thesis: Honeydew as a cue in patch evaluation by a parasitic wasp *Diaeretiella rapae* foraging for its aphid host *Brevicoryne brassicae*. The work was carried out under the supervision of Dr. Yoram Ayal.
1997-2002	Ph.D. in Eco-entomology in the Department of Entomology, Faculty of Agricultural, Food and Environmental Quality Sciences, Hebrew University of Jerusalem, Rehovot, Israel. Title of thesis: The spatial dynamics of the omnivorous Heteroptera *Anthocoris nemoralis*: Effects of host plants and prey. The work was carried out under the supervision of Prof. Boaz Yoval and Prof. Moshe Coll
2003-2005	Post-doctoral position at the Heberw univeristy and Migal Prof. Moshe Coll. Effect of host plant makeup through nitrogen fertilization and growth regulators on the pear psylla population.

Positions Held and Academic Status

2005-2007	Adjunct teacher at Tel-Hai College
2006-present	Senior Researcher at MIGAL Northern R&D Plant Protection Unit
2008-present	Lecturer and senior faculty member at Tel-Hai College
2012-2014	Head of Ecology Unit, Department of Environmental Science, Tel-Hai College
2021-present	Senior Lecturer at Tel-Hai College

Ongoing Research Projects

Year	Role	Project Title, Grant source and amount
2025	PI	Biological control of the Carrot Psylla. Ministry of agriculture fund. Total: 35,000 NIS Researcher's part: 35,000 NIS
2024-2026	PI	Development of technology for optimal feeding of waste from agricultural. Israel Innovation authority. Total: NIS 904,080; Researcher's part: NIS 804,750
2023-2025	PI	Using frass derived from black soldier larvae treatment of agricultural plant waste as a product enhancing plant protection and growth. Israel Chief Scientist Foundation of the Ministry of Agriculture ICSFA Total: 966,000 NIS; Researcher's part: 451,000 NIS
2023-2025	Co-PI	Testing the suitability of the parasitic wasp *Aganapsis daci* as a biocontrol agent of the lesser pumpkin fly *(Dacus ciliates*) in Israel. ICSFA. Total: 606,000 NIS; Researcher's part: 217,000 NIS
2023-2025	CI	Spatial risk charting and development of a regional decision support system for the management of *Ricinus communis*, a primary source of *Thaumatotibia leucotreta* infestation in orchards. ICSFA. Total: 719,000 NIS; Researcher's part: 144,000 NIS .

2023-2025	Co-PI	Feeding of farm fish with larvae of black soldier fly fed on local agricultural wastes. ICSFA (R&D fund). Total: 1,350,000 NIS; Researcher's part: 450,000 NIS .
2023-2025	PI	Providing natural resistance against pear psylla through the use of resistant inter-stock in a commercial Spadona orchard - in model plots. ICSFA (R&D fund). Total: 840,000 NIS; Researcher's part: 480,000 NIS .

Research Publications (last 5 years)

1) Jonas-Levi, A., Martinez J. J.I., Danay, O., Toaff-Rosenstein, R., **Shaltiel-Harpaz, L.** (2025). Artificial diets for *Hermetia illucens* (Diptera: Stratiomyidae): Investigating nutritional and environmental limitations. Journal of Insects as Food and Feed, 1.aop: 1-14. https://brill.com/view/journals/jiff/aop/article-10.1163-23524588-bja10315/article-l; **Q1** (Entomology) **IF: 4.4**
2) Hill, A. J., Cohen,Y., Aidlin-Harari, S., Blank, L., Schmilovitch, Z., Mendelsohn, O., G. Lidor, K. Ohaliav, V. Orlov, P. R. Kongala, Ibdah, M**., Shaltiel-Harpaz L.** (2025). Characterising Hot Spots of Mediterranean Fruit Fly nfestation in Apple Orchards: Implications for Pest Monitoring and Management. Journal of applied entomology. **Q2** (Entomology) **IF=1.7**. https://doi.org/10.1111/jen.13449 (PI appears last)
3) Paparella, A., Serio, A., Shaltiel-Harpaz, L., Revuru, B., Kongala, P. R., & Ibdah, M. (2025). Styrax spp.: Habitat, Phenology, Phytochemicals, Biological Activity and Applications. Plants, 14(5), 746. (PI appears last). Q1 (plant Science). **IF: 4.4** https://doi.org/10.3390/plants14050746 (PI appears last)
4) Paparella, A., Kongala, P. R., Serio, A., Rossi, C., **Shaltiel-Harpaz, L**., Husaini, A. M., & Ibdah, M. (2024). Challenges and Opportunities in the Sustainable Improvement of Carrot Production. Accepted for publication July 23, 2024, *Plants* 3102186. **Q1** (plant Science). **IF: 4.4** Preprint: https:// doi:10.20944/preprints202407.0185.v1
5) Tovi Ben-Mordechai, T., Gutman, R., **Shaltiel-Harpaz, L**., Opatovsky, I., (2024). How to reduce waste using black soldier fly larvae and produce a high-quality product. *Journal of Insects as Food and Feed 1*(aop), 1-8. https://doi.10.1163/23524588-00001039 **Q1** (food science). **IF:5.1.** (Corresponding author appears last, I was the PI)
6) Tettamanti, G.; Berini, F.; Montali, A.; Liguori, R.; Venturini, G.; Bonelli, M.; **Shaltiel-Harpaz, L.**; Reguzzoni, M.; Siti, M.; Marinelli, F.; Casartelli, M. (2024). Production and characterization of *Trichoderma asperellum* chitinases and their use in synergy with Bacillus thuringiensis for lepidopteran control. *Pest Management Science* https://doi.org/10.1002/ps.8045 **Q1 IF:4.1**
7) Meng, K., Eldar-Liebreich, M., Nawade, B., Yahyaa, M., **Shaltiel-Harpaz, L**., Coll, M., Sadeh A., Ibdah, M., (2023) Analysis of apocarotenoid volatiles from lettuce (*Lactuca sativa*) induced by insect herbivores and characterization of carotenoid cleavage dioxygenase gene. *3 Biotech,* volume 13, Article number: 94. https://doi.org/10.1007/s13205-023-03511-4,**Q1. IF: 2.893** (Corresponding author and PI appears last)
8) **Shaltiel-Harpaz L**., Kramer T., Dudai N., Kaspi R., Ben-Yakir D, Rytwo G. (2023). Sepiolite- rosemary oil combination as an environmentally oriented insecticide. *Journal of Applied Clay Science Volume* 234. https://doi.org/10.1016/j.clay.2023.106838 **Q1. IF: 5.907**
9) Keasar T., Wajnberg E., Heimpel G., Hardy I.C.W., **Shaltiel-Harpaz, L.**, Gottlieb D., van Nouhuys S. (2023). Dynamic economic thresholds for insecticide applications against agricultural pests: importance of pest and natural enemy migration. *Journal of Economic Entomology Volume 116 issue 2 p 321-330*. https://doi.org/10.1093/jee/toad019 **Q1. IF: 2.381,** Citation: 1
10) Ibdah, M., Hino S., Nawade, B., Yahyaa M., & Bosamia T**., Shaltiel-Harpaz, L. (2022)** Identification and characterization of three nearly identical linalool/nerolidol synthase from *Acorus calamus. Phytochemistry* Volume 202, 113318. https://doi.org/10.1016/j.phytochem.2022.113318 **Q1. IF: 3.99** Citations:1
11) Huchet, J. B., Azoulay, L., Danay, O., Ezov, N., Perman, I., Friedman, A. L., & **Shaltiel-Harpaz, L**. (2022). *Ochodaeus berytensis* Petrovitz (Coleoptera: Ochodaeidae), a new pest of the truffle *Tuber aestivum* in

Upper Galilee, Israel. *Journal of Applied Entomology* . https://doi.org/10.1111/jen.13027 **Q2**. **IF: 2.603;** Citations:4, (I am the PI and the Senior author)

12) Paparella, A., Nawade, B., **Shaltiel-Harpaz, L**., & Ibdah, M. (2022). A Review of the Botany, Volatile Composition, Biochemical and Molecular Aspects, and Traditional Uses of *Laurus nobilis*. Plants, 11(9), 1209. https://doi.org/10.3390/plants11091209 **Q1** (plant Science). **IF: 4.4;** Citations:28 (Corresponding author and PI appears last)

13) **Shaltiel-Harpaz L**, Yahyaa, Y., Nawade, B., Dudareva, N., Ibdah M., (2021). Identification of a Wild Carrot as Carrot Psylla (*Bactericera trigonica*) Attractant and Host. *Plant Science. 311,*- 111011. https://doi.org/10.1016/j.plantsci.2021.111011 **Q1.,IF: 4.729 ;** Citations

14) Paparella, A., **Shaltiel-Harpaz, L**., & Ibdah, M. (2021). β-Ionone: Its Occurrence and Biological Function and Metabolic Engineering. *Plants 2021, 10(4), 754; https://doi.org/10.3390/plants10040754*. **Q1** (plant Science). **IF: 4.4;** Citations:65 (Corresponding author and PI appears last)

15) Neta, A., Gafni, R., Elias, H., Bar-Shmuel, N., **Shaltiel-Harpaz, L.,** Morin, E., & Morin, S. (2021). Decision support for pest management: Using field data for optimizing temperature-dependent population dynamics models. *Ecological Modelling*, 440, 109402. https://doi.org/10.1016/j.ecolmodel.2020.109402 **Q2., IF: 2.497** Citations: (Corresponding author and PI appears last)

Biografical scatch

I am an Eco-entomologist, and my main interest is the use of ecological understanding to solve agricultural pest problems. I practice an holistic approach by studying multi trophic interaction between soil habitat-plants-pests and their natural enemies. In the last 20 years I have been leading various research dealing with many pests in field crops and orchards that yielded a significant reduction of pesticide use, decreasing negative environmental impacts of agriculture, while keeping farmers ability to sustain crops and income.

During the years I have supervised more than 17 Master, Ph.D. and Post doc students, and gave 22 lectures in international scientific and 34 lectures in national scientific conferences and mor than 40 lectures to farmers and the general public in Hebrew.

I serve as a reviewer in national and international funding comities (for exp. BSF, GIF, The Chief Scientist of the Israel Ministry of Agriculture) and as a reviewer is several journals (for exp. Bioscience, Biological Control, Journal of Pest Science, Ecology and Environment, Insects).