Hila Segre September 2022

### Part I: CURRICULUM VITAE

### 1. Personal

Department of Natural Resources, Agricultural Research Organization (Volcani Center)

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Personal web-site: <a href="https://www.researchgate.net/profile/Hila-Segre">https://www.researchgate.net/profile/Hila-Segre</a>

Google Scholar web-site: <a href="https://scholar.google.co.il/citations?hl=iw&pli=1&user=PbGM1z8AAAAJ">https://scholar.google.co.il/citations?hl=iw&pli=1&user=PbGM1z8AAAAJ</a>

Dates	Description
1981	Born in Israel

### 2. University Education and Additional Training

Dates	Description					
2007 – 2010	B.Sc. in biology at the Institute of Life Sciences, The Hebrew University of Jerusalem,					
	Israel.					
2010 - 2013	M.Sc. in ecology at the Department of Ecology, Evolution and Behavior, Institute of					
	Life Sciences, The Hebrew University of Jerusalem, Israel.					
	Title of thesis: Effects of cattle grazing on herbaceous species diversity in a dry-					
	Mediterranean rangeland.					
	Supervision by: Prof. Ronen Kadmon and Dr. Zalmen Henkin					
2015 - 2019	Ph.D. in environmental studies at the Faculty of Architecture and Town Planning,					
	Technion – Israel Institute of Technology, Israel.					
	Title of thesis: Modeling alternatives for planning and management of ecological					
	corridors in agricultural environments.					
	Supervision by: Dr. Assaf Shwartz and Prof. Yohay Carmel					
2019 - 2020	Postdoctoral position at the Department of Natural Resources, Agricultural Research					
	Organization (Volcani Center) and the Department of Entomology, The Hebrew					
	University of Jerusalem, Israel, with Dr. Asaf Sadeh and Prof. Moshe Coll					
	Research subject: The relationship between arthropod pest diversity, induced					
	phytochemical diversity, and natural enemies in vegetable crops.					
2020 - 2022	Postdoctoral position at the Plant Ecology and Nature Conservation group,					
	Wageningen University and Research, Netherlands, with Prof. David Kleijn					
	Research subject: SHOWCASing synergies between agriculture, biodiversity and					
	Ecosystem services to help farmers capitalising on native biodiversity					
	(https://showcase-project.eu/), Open library of pollinator Biodiversity and ecosystem					
	Services scenarios (https://www.beeproject.science/observ.html).					

### 3. Positions Held and Academic Status

Dates	Description
2022	Research Scientist at the ARO, The Volcani Center, Institute of Plant Sciences, Dept. of Plant Resources

## 4. Teaching Experience / Guiding Students

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

Graduation date	Name	Title of thesis	Guidance with
2021	*Mr. Zhang	Effects of biodiversity interventions on pest control	Prof. David
	Rongqian	services	Kleijn
2022	*Ms. Kiki de Waart	Effect of structural and floral resources in the vegetation of agri-environmental measures on species richness and functional traits in communities of bees, hoverflies and spiders	Dr. Thijs Fijen
2022	*Ms. Inge Bach (B.Sci.)	The effect of Semi-natural habitats (SNH) on the body size of hoverflies in agricultural lands	Dr. Thijs Fijen

<sup>\*</sup>under my direct supervision

## 5. Activity in Scientific and Agricultural Committees

## B. National:

Dates	Description and role
2016-2019	Environmental farming experts' forum (Deshe institute and The Israel Society of
	Ecology and Environmental Sciences); Member

## 6. Contribution to the Scientific Community

### D. Outreach:

Dates	Description
2017	Contributed popular science article <a href="http://www.kalanit.org.il/grazing-herbs/">http://www.kalanit.org.il/grazing-herbs/</a> (Hebrew)
2020	Participating in the Youth Activities ("Noar Shocher Mada")

## E. Editorial responsibilities:

Dates	Description
2020-2021	Reviewer (ad-hoc) of manuscripts for: Journal of Applied Ecology, Agriculture, Ecosystems & Environment, Functional Ecology, Landscape Ecology, Annals of Applied Biology.

# 7. Active Participation in Meetings

## A. <u>International:</u>

Date	Title of the Meeting	Place	Role
2017	World Conference on Ecological Restoration	Iguassu, Brazil	Lecture
2018	European Congress of Conservation Biology	Jyväskylä, Finland	Lecture
2019	International Association of Landscape Ecology (IALE) World Congress	Milan, Italy	Lecture
2022	European Congress of Conservation Biology	Prague, Czech Republic	Lecture

## B. National:

Date	Title of the Meeting	Role
2012	The annual conference of the Israeli Society of Ecology and	Lecture
	Environmental Sciences	
2014	The Israeli Association for Rangeland Sciences annual conference	Lecture
2016	Israeli Plant ecology conference	Lecture
2016	Annual conference of the Israeli Society of Ecology and Environmental	Lecture
	Sciences	
2017	Israeli Conference for Conservation Science	Lecture
2017	Annual seminar of Nekudat-Hen foundation	Lecture
2018	Agricultural Extension Service (Ministry of Agriculture) winter seminar	Invited lecture
	for farmers	
2018	The Annual Conference for Science and the Environment	Invited lecture
2018	The annual conference of the Israel Society of Crop and Vegetable	Invited lecture
	Sciences	
2018	Israel Zoological Society annual conference	Lecture
2019	Israeli Conference for Conservation Science	Lecture
2019	6 <sup>th</sup> Forum on Parasitoids	Invited lecture
2020	Department of Plant and Environmental Sciences, Weizmann Institute of	Invited lecture
	Science	
2021	Department of Entomology, the Hebrew University of Jerusalem	Invited lecture
2022	Mathematical Modelling of Biological Control research group seminar	Invited lecture

## 8. Research Grants

### A. <u>Internationally Peer Reviewed Grants:</u>

	Granting	Duration			В	udget
Year	Source	(years)	Role*	Title (short)	Total (US \$ / year)	Researcher (US \$ / year)
2020	BARD Vaadia	1	PI	Effects of crop diversification on pest	40,000	40,000
Awarded and	Postdoctoral			control services at		
declined due to competing postdoc offer at	Fellowship			multiple scales		
Wageningen						
University						

<sup>\*</sup>PI = Principal Investigator; CI = Cooperating Investigator

## B. <u>Nationally Peer Reviewed Grants:</u>

	Granting	<b>Duration</b>			Budget		
Year	Source	(years)	Role*	Title (short)	Total (US \$ / year)	Researcher (US \$ / year)	
2017	Chief Sci.	1	CI	Fields and fields' margins: mutual ecological effects and economic implications of different management and planning options	43,500	20,000	

<sup>\*</sup>PI = Principal Investigator; CI = Cooperating Investigator

### C. <u>National Non-Peer Reviewed Grants:</u>

	Granting	Duration			Budget		
Year	Source	(years)	Role*	Title (short)	Total	Researcher	
					(US \$ /	(US \$ /	
					year)	year)	
2016	Nekudat	1	Lead	Cost-benefit of natural field	22,500	22,500	
	Hen		author	margins in the Harod valley			

<sup>\*</sup>PI = Principal Investigator; CI = Cooperating Investigator

# 9. Awards

Dates	Description
2018	Best lecture award (2 <sup>nd</sup> place), Israel Zoological Society, December 2018
2018	Azrieli Foundation travel grant to the World Conference on Ecological Restoration
	(Iguassu, Brazil)
2019	'People & Nature' award for best presentation on human-nature interactions, Israeli
	Conference for Conservation Science, April 2019
2019	Israel Zoological Society travel grant to the International Association of Landscape
	Ecology (IALE) World Congress (Milan, Italy)
2019	Workshop for young women leaders in science with HFP-Consulting, hosted by the
	Technion
2020	Shortlisted for Shouthwood prize for best paper by an early career researcher.
	Journal of Applied Ecology special virtual issue covering my work:
	https://besjournals.onlinelibrary.wiley.com/doi/toc/10.1111/(ISSN)1365-
	2664.Southwood Prize 2020

Hila Segre **July 2021** 

#### **Part II: LIST OF PUBLICATIONS**

Marks:

 $X^*$ Equal contribution as the first author

X \*\* Corresponding Author (in cases where the researcher is the Corresponding Author)

#### 1. Articles in Reviewed Journals

1. Segre, H., Ron, R., De Malach, N., Henkin, Z., Mandel, M., & Kadmon, R. (2014). Competitive exclusion, beta diversity, and deterministic vs. stochastic drivers of community assembly. Ecology Letters, 17(11), 1400–1408. doi:10.1111/ele.12343

IF 10.68; Category: *Ecology*; Rank 2/145 (Q1)

2. **Segre, H.**\*, DeMalach, N.\*, Henkin, Z., & Kadmon, R. (2016).

Competitive Exclusion and Competitive Release in Ecological Communities: A Conceptual Framework and a Case Study.

PLoS ONE, 11(8), e0160798. doi:10.1371/journal.pone.0160798

IF 2.80; Category: Multidisciplinary sciences; Rank 15/64 (Q1)

3. Segre, H.\*\*, Carmel, Y., Segoli, M., Tchetchik, A., Renan, I., Perevolotsky, A., Dotan, R., & Shwartz, A. (2019).

Cost-effectiveness of uncultivated field-margins and semi-natural patches in Mediterranean areas: A multi-taxa, landscape scale approach.

Biological Conservation, 240, 108262. doi: 10.1016/j.biocon.2019.108262

IF 4.45; Category: *Ecology*; Rank 22/165 (Q1)

4. **Segre, H.**\*\*, Segoli, M., Carmel, Y., & Shwartz, A. (2020).

Experimental evidence of multiple ecosystem services and disservices provided by ecological intensification in Mediterranean agro-ecosystems.

Journal of Applied Ecology, 57(10), 2041–2053. doi:10.1111/1365-2664.13713

IF 5.78; Category: *Ecology*; Rank 14/165 (Q1)

5. **Segre, H.**\*\*, Carmel, Y., & Shwartz, A. (2021).

Economic and not ecological variables shape the sparing-sharing trade-off. Journal of Applied Ecology, 59(3), 779-790, doi:10.1111/1365-2664.14092

IF 6.86; Category: *Ecology*; Rank 17/174 (Q1)

6. Raatikainen, K., Purhonen, J., Pohjanmies, T., Peura, M., Nieminen, E., Mustajärvi, L., Helle, I., Damiens, F., Shennan-Farpón, Y., Ahti, P., Basile, M., Bernardo, N., Bertram, M., Bouarakia, O., Brias-Guinart, A., Fijen, T., Froidevaux, J., Hemmingmoore, H., Hemmingmoore, S., Kendall, L., Lampinen, L., Marjakangas, E., Martin, J., Oomen, R., Segre, H., Sidemo-Holm, W., Silva, A., Thorbjørnsen, S., Torrents-Ticó, M., Zhang, D., Ziemacki, J. (2021).

Pathways towards a sustainable future envisioned by early-career conservation researchers.

Conservation Science and Practice, 3(9), 1-15, doi: 10.1111/csp2.493

IF 3.57; Category: *Biodiversity Conservation*; Rank 18/65 (Q2)

7. Teff-Seker, Y., Segre, H., Eisenberg, E., Orenstein, D.E., & Shwartz, A. (2022).

What Makes a Scheme? Practical and conceptual factors for implementing agri-environmental practices. Journal of Environmental Management, 302(PA), 114066. doi: 10.1016/j.jenvman.2021.114066 IF 8.91; Category: Environmental Sciences; Rank 34/279 (Q1)

- 2. Books, Reviews and Opinion Articles
- 3. Book Chapters
- 4. Articles in Reviewed Journals in Hebrew
- 5. Articles in Non-Reviewed Journals in Hebrew and English
- Brokovich, E., Avisar, A., Adler, U., Adler, D., Ohad, N., Ulanovsky, H., Oron, E., Oren, M., Etinger, E., Elyakim, I., Amdur, L., Endvelt, R., Epel, B., Berry, E., Ben-Hur, M., Ben Haim, U., Braun, Y., Berman, T., Gabay, E., Gavrieli, Y., Gutman, J., Goldstein, A., Dayan, T., Dean, L., Distelfeld, A., Ziv, Y., Haikin, T., Trakhtenbrot, A., Caspi Oron, S., Levine, H., Mayor, S., Miller, H., Mandelik, Y., Manor, S., Segre, H., Skutelsky, O., Perez, S., Chehanovsky, N., Cukierman, G., Kissinger, M., Kachan, A., Rothschild, A., Rotem, D., Ramon, U., Shaltiel Harpaz, L., Sagi, Y., Sagi, H., Schwartz, A., Steinberger, Y., Steiner, N., Shalev Koernblit, D., Shalem, E., Shepon, A., & Shapira, I. (2016). Combining objectives and indices for sustainable agriculture in the frame of direct supports to agriculture. Experts' opinion.

*The Israel Society of Ecology and Environmental Sciences.* pp 52. Available from <a href="http://www.isees.org.il/committee/sustainable-agriculture/">http://www.isees.org.il/committee/sustainable-agriculture/</a>. (Hebrew)

2. Gil, H., Ziv, Y., Rotem, G., Ramon, U., Mandelik, Y., **Segre, H.**, Keasar, T., Rotem, D., Shelef, O., Shapira, I., & Levi, A. (2020).

Wildlife friendly agricultural practices - Natural habitat patches and field margins – Experts' opinion. *The Israel Society of Ecology and Environmental Sciences*. pp 30. Available from <a href="https://www.isees.org.il/committee/">https://www.isees.org.il/committee/</a>. (Hebrew)

- 6. Articles in Symposia Proceedings (including Acta Horticulturae)
- 7. Granted Patents and Registered Cultivars