

Name: Oded Cohen

Date: 27.12.2017

CURRICULUM VITAE

1. **Personal Details**

Permanent Home Address: Mevo Hama

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Email Address: odedic@gri.org.il

Year of birth: 1973

2. **Higher Education**

a. **Undergraduate and Graduate Studies**

Period of Study	Name of Institution and Department	Degree
1998-2000	The Department of Geography, Bar-Ilan University.	B.Sc.
2001-2002	The Department of Geography, Bar-Ilan University.	M.Sc.
2003-2008	The Department of Geography. Ben-Gurion University of the Negev,	PhD

b. **Post-Doctoral Studies**

Period of Study	Name of Institution and Department/Lab	Name of Host
2011-2012	. The Rober H. Smith Faculty of Agriculture, Food and Environment, The Hebrew University of Jerusalem, Rehovot.	Prof. Elisha Tal-Or and, Prof. Yosi Riov and Dr. Iris Yedidia.

3. **Academic Ranks and Tenure in Institutes of Higher Education**

Years	Name of Institution and Department	Rank/Position
2013-present	Shamir research institute	Researcher

4. Offices in Academic Administration

NA

5. Scholarly Positions and Activities outside the University

Years	Memberships in Academic Professional Associations
2004-2008	Israeli Geographical Association
2014, 2016-2017	Israeli Society of Ecology and Environmental Sciences
2007	Weed Science Society of Israel

Years	Reviewing for Refereed Journals
2014	<i>Pest Management Science</i>
2016	<i>Horizons in Geography</i>
2017	<i>Restoration Ecology</i>

Years	Professional consulting
2009-2017	Israel Nature and Parks Authority: Restoration of moistened habitat (Einot Gibton) following invasion of <i>A. saligna</i> .
2011-2014	Israel Nature and Parks Authority: Restoration of Einat channel following invasion of <i>A. saligna</i>
2012-2017	The Society for the Protection Nature in Israel: Management control of invasive plants in Palmachim Coastal Reservation
2012-2017	The Society for the Protection Nature in Israel: Management control of Invasive plants in quarries.
2016-2017	Jewish National Fund: Management control of invasive plants in Judeean Mountains National Park.
2017	Jewish National Fund: Management control of invasive plants in Ilanot Forest.
2017	Eradication of the invasive plant <i>Parkinsonia aculeate</i> from Issachar River.

6. Active Participation in Scholarly Conferences

a1. International Conferences - Held Abroad

Date	Name of Conference	Place of Conference	Subject of Lecture/Discussion	Role
2004	The 10th international conference on Mediterranean Climate	Rhodes, Greece.	The invasion rate of <i>Acacia saligna</i> and its impact on protected Mediterranean coastal habitats.	Lecturer

	Ecosystems (MEDECOS).			
2004	The 10th international conference on Mediterranean Climate Ecosystems (MEDECOS).	Rhodes, Greece.	Soil solarization as a method for reducing viability of invasive seed bank – the case of <i>Acacia saligna</i> .	Lecturer
2004	Soil solarization as a method for reducing viability of invasive seed bank – the case of <i>Acacia saligna</i> .	Rhodes, Greece.	The 10th international conference on Mediterranean Climate Ecosystems (MEDECOS).	Lecturer
2005	Geo-Med 2007, International Symposium on Geography, Environment and Culture in the Mediterranean Region	Kemer-Antalya, Turkey	Eradication of invasive plants as a part of coastal sand dune restoration.	Lecturer
2007	International Conference on Management and Restoration of Coastal Dunes	Santander, Spain	Eradication of invasive plants as a part of coastal sand dune restoration	Lecturer

a2. International Conferences - Held in Israel

Date	Name of Conference	Place of Conference	Subject of Lecture/Discussion	Role
2007	Novel and management in arid and semi-arid agro ecosystems	Rehovot – Israel	Reducing the persistent seed-banks of a plant invader: <i>Acacia saligna</i> : applications and implications.	Lecturer
2007	Novel and management in arid and semi-arid agro ecosystems	Rehovot – Israel	The success or failure of soil solarization for weed control – a review.	Lecturer

a3. Local Conferences

Dates	Name of Conference	Place of Conference	Subject of Lecture/Discussion
2000	The annual meeting of	Jerusalem	The characteristics of <i>Acacia saligna</i>

	the Israeli Geographical Association.		<i>spread</i> in Nitzanim sand dunes, from 1962 to 1999. Rates, distribution patterns and spread directions.
2000	The annual meeting of the Israeli Geographical Association.	Tel-Aviv	The spread of <i>Acacia saligna</i> in Nitzanim sand habitats: A case study of biological invasion in coastal ecosystem.
2002	The annual meeting of the Israeli Geographical Association.	Beer-Sheva	The impact of biological invasion of <i>Acacia saligna</i> on plant's diversity, richness and composition in coastal sand ecosystem, Nitzanim Sand Dune Park.
2002	The annual meeting of the Israeli Geographical Association.	Beer-Sheva	Biological Invasion – the phenomena characteristics and its effect on the human, on the ecology and on the landscape.
2004	The annual meeting of the Israeli Geographical Association.	Haifa	Using soil solarization for reducing the <i>Acacia saligna</i> seedbank.
2004	The 18 meeting of the Weed Science Society of Israel on Weeds and their Disinfestation.	Rehovot	The effectiveness of different treatments on the seedbank reduction of invasive plant – <i>Acacia saligna</i> .
2006.	The annual meeting of The Israel Society for Ecology and Environmental Quality Sciences.	Haifa	The Aggregate Ecological Value (AEV) – An index to quantify the ecological value of a habitat for conservation objects.
2006.	The annual meeting of the Israeli Geographical Association.	Jerusalem	The effect of fire on the persistent seedbank of invasive plant (<i>Acacia saligna</i>).
2007	Novel and management in arid and semi-arid agro ecosystems.	Rehovot	Reducing the persistent seed-banks of a plant invader: <i>Acacia saligna</i> : applications and implications.
2007	The annual meeting of the Israeli Geographical Association.	Beer-Sheva	What is the main factor that affect the seedling emergence proliferation of <i>A. Saligna</i> after fire?
2007	The annual meeting of the Israeli Geographical Association.	Beer-Sheva.	Using soil solarization in weed control as an alternative to methyl-bromide – A review.
2007	The annual meeting of the Israeli Geographical Association	Beer-Sheva	The effect of changes in atmospheric composition and climate change on the invisibility of habitats – A review.
2009	The annual meeting 46 of the Israeli Zoology Association,	Haifa	The effects of invasive plants on small mammals and reptiles communities in the coastal sands.
2010	The annual meeting 47 of the Israeli Zoology Association.	Jerusalem	Findings from shifting operation of small mammals and reptiles.
2010	Jerusalem Conference	Jerusalem	Students uproot invasive species and

	on Environmental and Nature.		conserve their local environments at Holon.
2011	Annual Meetings Of Israel Society Of Ecology And Environmental Studies	Megiddo	Setting priorities for management control of invasive plant sand habitats along the coastal strip of Israel.
2011	Annual Meetings Of Israel Society Of Ecology And Environmental Studies	Megiddo	Management control as an opportunity to improve the environmental literacy of teenagers.
2011	Annual Meetings Of Israel Society Of Ecology And Environmental Studies	Megiddo	Management control against the invasive plant <i>A. saligna</i> in Einot-Gibton reserve.,
2011	Annual Meetings Of Israel Society Of Ecology And Environmental Studies,	Megiddo.	Small mammals and reptiles shifting from sand soils prior to development: Examining the feasibility of “portable ecological corridor”.
2014	The Annual Meeting of the Israeli Geographical Association.	Bar-Illan	The effect of invasive plant removal on small mammals and reptiles – The case study of the invasion of <i>Acacia saligna</i> in Nitzanim Coastal Sand Dunes Reserve.
2016	Annual Meetings Of Israel Society Of Ecology And Environmental Studies.	Tel-Aviv University	Assessment of <i>Eucalyptus camaldulensis</i> as invasive plant in Israel
2016	Annual Meetings Of Israel Society Of Ecology And Environmental Studies	Tel-Aviv University	Long-term changes in summer temperatures in Israel: Detection of trends in the frequency of extreme events.
2017	Annual Meetings Of Israel Society Of Ecology And Environmental Studies	ITZ-Herzeliya	Does breaking the physical dormancy as response to heat waves will suppress the establishment of invasive plants? <i>A. saligna</i> as a plant model

b. Organization of Conferences or Sessions

Dates	Name of Conference	Place of Conference	Subject Conference/Role at Conferences/Comments	Role
2006	Biological invasions in Israel ecosystems.	Beer-Sheva	Biological invasions	Organizing Conference
2014	The Annual Meeting of the Israeli Geographical Association.	Bar-Illan	Biological invasions in Israel ecosystems.	Organizing Committee

7. Invited Lectures (Others than in Scholarly Conferences)

In Israel

Date	Place of Lecture	Name of Forum	Presentation/Comments	Role
2000	Nitzanim	Nature and Park Authority, workshop on Coastal Dune Management for Nature Conservation Objectives.	The establishment of vegetation in Nitzanim sand dunes between the years 1965 to 1999, and the management implication of the process.	Lecturer
2003	Rehovot	Day of study on the conservation of sands and eolianite habitats in the Israel coastline (Rehovot).	The Impact of natural and management factors on the soil seedbank of invasive plant – the case study of <i>Acacia saligna</i> .	Lecturer
2005	Beit-Dagan	The second day study on: Studies and Innovations in the Ornamental Garden. The Office of Village and Agricultural, the Services of Guidance and Profession.	Developing new methods for reducing the re-establishment of <i>Acacia saligna</i> .	Lecturer
2006	Ashdod	Day study on: Studies and Management Plans in Nizzanim - Ashdod Sand Park. Initiated by the Israeli Green Bodies.	The invisibility of coastal ecosystems to biological invasions.	Lecturer
2008	Kibuutz Palmachim	Seminar on Rishon and Palmachim and Yavne sends:	Spread, effect and management of the <i>A. salinga</i> Invasive plant in Israel.	Lecturer

		past, present and future. In memory of Dr. Kobi strength, 27.3. Palmachim Museum in.		
2010	Tel-Aviv.	Seminar of Nature Campus Institute on invasive species.	Dealing with them or living with them in peace – The spread of invasive plants in open space.	Lecturer
2011	Ramat-Hanadiv.	National Conference for Teachers of Environmental Sciences.	Management control of invasive plants as opportunity to improve the experimental skills and awareness in teenagers.	Lecturer
2016	Agricultural Research Organization Volcani Center	Symposium on the ecological status and invasiveness of <i>Eucalyptus camaldulensis</i> in natural reservations	Assessment of <i>Eucalyptus camaldulensis</i> as invasive plant in Israel.	Lecturer
2017	Tel-Hay	Galilee researches	Risk assessment for the invasiveness of <i>Eucalyptus camaldulensis</i> in Israel	Lecturer

8. Colloquium Talks

Year	Name of Forum	Place of Lecture	Presentation
2017	Department seminar	Department of Geography and Environmental Development	Regional prioritization for invasive plant management control
2017	Agricultural Engineering Institute Seminar	Soil and Water auditorium Beit-Dagan	Management control of invasive plants in open space.
2017	Water, Communication and Environment	Kinneret Collage	The effect of global heating on invasive plants

9. Research Grants

a. Grants Awarded

Role in Research	Other Researchers (Name & Role)	Title	Funded by (C= Competitive Fund)	Amount (NIS)	Years
PI		Restoration of moistened vegetation following the invasion of <i>A. saligna</i> plant invader in moistened habitat.	Israel Nature and Parks Authority	150,000	2013-2015
PI	Riov, J and Milshtein, D.	Developing management tools to control encroachment of native and alien shrub species along the eastern shores of Lake Kinneret.	(C) Ministry of Science, Technology and Space.	250,000	2013
PI	Federman, R	Producing tools for effective detection of the invasive plant <i>Ambrosia confertiflora</i> in Hula Valley.	(C) K.K.L	100,000	2014
PI	Riov, J and Yaacoby, T	The response of invasive plants with physical seed dormancy to the effect of global climate changes and local disturbances: theory and practice	(C) Ministry of Science, Technology and Space.	250,000	2016
PI	Mendel, Z	Study of three major acute environmental threats to the sustainability of the oriental plane populations in Israel	(C) Ministry of Science, Technology and Space.	250,000	2017
PI	Shefer, E., Osem, Y	The invisibility of Mediterranean	K.K.L	100,000	2018

		habitats for <i>Tetraclinis articulata</i>			
PI		The effect of summer heat on the persistency of <i>A. saligna</i> seed bank: Implication for management control	(C) K.K.L	375,000	2018
PI	Shemesh, H	<i>Eucalyptus camldulensis</i> in Israel- risk assessment to future invasion following the spread of Australian ectomycorrhizal fungi.	(C) Ministry of Agriculture and Rural Development	450,000	2018
PI		Invasion drivers of <i>Leucaena leucocephala</i> in Mediterranean climate region: Implications for management	(C) Ministry of Science, Technology and Space.	129,000	2018

b. Submission of Research Proposals – Pending

NA

c. Submission of Research Proposals – Not Funded

Role in Research	Other Researchers (Name & Role)	Title	Funded by (C= Competitive Fund)	Years
PI	Yagil Osem and Efrat Shefer	The invisibility of Mediterranean habitats for <i>Tetraclinis articulata</i>	(C) Ministry of Agriculture and Rural Development	2016

10. Scholarships, Awards and Prizes

2013 Distinguished Lecturer, The Kinneret Academic College.

11. Teaching

a. Courses Taught in Recent Years

Years	Name of Course	Type of Course Lecture/Seminar/ Workshop/ Online Course/ Introduction Course (Mandatory)	Level	Number of Students
2012-2017	Conservation of Israeli coastal ecosystems	Lecture	BA	20
2012-2017	Introduction to Geology	Lecture	Bs.C	40
2012-2017	Introduction to Ecology	Lecture	BA	30
2014-2017	Vegetation landscape of Israel	Lecture	BA	30
2016-2017	The main issues in nature conservation of Israel.	Seminar	BA	13
2016	Trees and Forest	Campus	BA	25
2016-2017	Fieldcrest and environmental literacy	Lecture	BA	40
2013-2017	Landscape conservation	Lecture	BA	20
2013-2017	Sustainability and environment in Israel	Field Workshop	BA	25

b. Supervision of Graduate Students

Name of Student /	Name of Other Mentors	Title of Thesis	Degree	Year of Completion/ In Progress	Students' Achievements
M.A. Students					
Soli Mones		The effect of grazing on butterfly populations in the Btecha reserve.	M.E.D	2015	
Gil Weber	Efrat Shefer, Hagay Shemesh	<i>Eucalyptus camldulensis</i> in Israel- risk assessment to future invasion	M.A	In progress	

		following the spread of Australian ectomycorrhizal fungi.			
Ph.D. Students					
	NA				
Post Doctorate Students					
	NA				

PUBLICATIONS

A. Ph.D. Dissertation

Title: The Seedbank Ecology of the Invasive Plant- *Acacia saligna*, Focusing on the Thermal Killing Effect

Number of Pages: 95

Language: Hebrew

Name of Supervisor: Prof. Pua Bar and Prof. Yosi Riov

University: Ben-Gurion University

Publications:

B. Scientific Books (Refereed)

NA

C. Monographs

NA

D. Articles in Refereed Journals

Published

- 1 Kutiel, P., **Cohen, O.**, Shoshany, M. and Shub, M. 2003. Vegetation establishment on the southern Israeli coastal sand dunes between the years 1965 and 1999. *Landscape and Urban Planning* 67: 141-156.
- 2 Bar (Kutiel), P., Cohen, O., and Shoshany, M. 2004. The invasion rate of the alien species *Acacia saligna* within coastal sand dune habitats in Israel. *Israel Journal of Plant Sciences* 52: 115-124.
- 3 Manor R., **Cohen O.** and Saltz D 2008. Community homogenization and invasiveness of commensal species in Mediterranean afforested landscapes. *Biological Invasions* 10: 507-515.
- 4 **Cohen, O.**, Riov, J., Gamliel, A., Katan, J. and Bar (Kutiel), P.2008. Reducing persistent seed-banks of invasive plants by soil solarization - the case of *Acacia saligna*. *Weed Science* 56:860-865.

- 5 **Cohen, O.** and Bar (Kutiel), P. 2010. The effect of moderate temperature and soil moistening on the longevity of *A. saligna* seedbank. *Ecology and Environment* 2:28-37. In Hebrew
- 6 **Cohen, O.** and Rotshild, A. 2012. Determining special priorities for management control against the invasive plant *Hererotheca Subaxillaris* and its implementation using by teenagers. *Ecology and Environment* 4:330-338.
- 7 **Cohen, O.** and Ram, Y. 2015. Tourism is not only the vector of biological invasion but also the victim. *Tourism and Recreation Research* 40:407-410.
- 8 **Cohen, O.** and Bar (Kutiel), P. 2017. The impact of *Acacia saligna* invasion on the indigenous vegetation in various coastal habitats in Israel and its implication for nature conservation. *Israel Journal of Plant Science* (Mar) 45:1-11.
- 9 **Cohen, O.** and Porat, Y. 2017. Management control of invasive plant in forest. *Ecology and Environment* 2:3-4.
- 10 Kurzbaum, E., Raizner, Y., **Cohen, O.** and Bar Shalom, O. (2017) Lanthanum-modified bentonite: potential for efficient removal of phosphates from fishpond effluents. *Environmental Science Pollution research* 24:15182-15186.
- 11 Kurzbaum, E., Raizner, Y., **Cohen, O.**, Suckeveriene, R.Y., Kulikov, A., Iasur, K., Amor, R., Farber, Y. and Menash, O. 2017. Encapsulated *Pseudomonas putida* for phenol biodegradation: Use of a structural membrane for construction of a well-organized confined particle. *Water Research* 121:37-45.

Accepted for Publication

Cohen, O., Gamliel, A., Katan, J., Kurzbaum, E., Riov, J. and Bar (Kutiel), P. 2018. Controlling the seed bank of the invasive plant *Acacia saligna*: comparison of the efficacy of prescribed burning, soil solarization, and their combination. *Biological Invasions*

E. Articles or Chapters in Scientific Books (Refereed)

Published

- 1) Cohen, O. and Rubin, B. 2007. Soil solarization and weed management – a review. In Upadhyaya, M. and Blackshaw, R.E. (eds). *Non-chemical weed management*. CABI Publishing, A division of CAB International, UK.

Accepted for Publication

None

F. Articles in Conference Proceedings

Published

- 1) Cohen, O. and Bar (Kutiel) 2004. The invasion rate of *Acacia saligna* and its impact on protected Mediterranean coastal habitats. In: Arianoutsou & Papanastasis (Eds). *Proceedings 10th MEDECOS Conference*. April 21st- May1. Rhodes Greece. Milpress. Rotterdam.
- 2) Cohen, O., Riov, J., Gamliel, A. Katan, J. and Bar (Kutiel), P. 2004. Soil solarization as a method for reducing viability of invasive seed bank – the case of *Acacia saligna*. In: Arianoutsou & Papanastasis (Eds). *Proceedings 10th MEDECOS Conference*. April 21st-

May1. Rhodes Greece. Milpress. Rotterdam.

Accepted for Publication

None

G. Entries in Encyclopedias

None

H. Other Scientific Publications

Published

1. **Cohen, O.** and Riov, J. 2015. Criteria for defining invasive plants and assessing their risk in Israel. *Kalanit* 2.
2. Cohen, O. and Riov, J. 2016. The risk assessment of *Eucalyptus camaldulensis* as invasive plant in Israel. *Kalanit* 3.
3. The spread of invasive plants along the shores of Lake Kinneret. Eretz Hakinneret 17.

Accepted for Publication

None

I. Other Works and Publications

J. Submitted Publications

None

K. Summary of my Activities and Future Plans

I have a broad background in the discipline of Invasion Ecology as well as specific training and expertise in key research areas, such as red species conservation in moist habitats. My doctorate demanded deep understanding of seed bank ecology of invasive plants, with an emphasis on thermal killing effect. As a postdoctoral fellow in the Hebrew University, I developed chemical control methods to remove invasive plants and prevent their sprouting and seedling emergence. I led a restoration project in an important Israeli nature reserve (Einot-Gibton, Issashar River, Shaa'r Hagay) which were invaded by invasive legume shrubs (*Acacia saligna*, *Parkinsonia aculeate*). Currently, eight years from the beginning of Einot-Gibton project it was determined as a success by the Israeli Nature and Parks authority. In the last couple of years, I have been consulting governmental entities, public firms and nature reserves about reducing the risk of plant invasions along infrastructures and open spaces. In the last two years, I successfully won six competitive research grants (in the total sum of 1,300,000 NIS, see paragraph 9, research grants). I wish to promote the invasion ecology research in Israel, and I do believe that I have all it takes to success in this target: high motivation, good cooperation with other known researchers, significant relevant knowledge and experimental skills.