Name: Moshe Gish **Updated: 21/5/2019**

CURRICULUM VITAE

1. Personal Details

Name: Moshe Gish
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2. Higher Education

a. Undergraduate and Graduate Studies

Period of Study	Name of Institution and Department	Degree
2001-2004	University of Haifa - Oranim	B.Sc.
2005	University of Haifa	M.Sc.
2006-2012	University of Haifa	Ph.D.

b. Post-Doctoral Studies

Period of Study	Name of Institution and Department/Lab	Name of Host
2012-2016	Pennsylvania State University, Department of Entomology and Department of Biology	Consuelo De Moraes

3. Academic Ranks and Tenure in Institutes of Higher Education

Years	Name of Institution and Department	Rank/Position
2017-present	University of Haifa- The Department of Natural Resources and Environmental Management	Senior Lecturer

4. Offices in Academic Administration

Years	Name of Institution and Department	Role
None	None	None

5. Scholarly Positions and Activities outside the University

Years	Memberships in Academic Professional Associations
2017	Entomological Society of Israel
2004-2012	Zoological Society of Israel
2008-2009	International Society for Behavioral Ecology
2014	Ecological Society of America

Years	Editorial Assignments
None	None

Years	Reviewing for Refereed Journal
2014	Journal of Experimental Biology (I.F. 2.9; Rank: 17/86 ; Quartile: Q1)
2015	PLOS ONE (I.F. 3.1; Rank: 11/63 ; Quartile: Q1)
2016	American Journal of Botany (I.F. 2.8; Rank: 43/209 ; Quartile: Q1)
2018	Oecologia (I.F. 3.13; Rank: 46/160 ; Quartile: Q2)

Years	Reviewing for Fund Agencies
None	None

6. Active Participation in Scholarly Conferences

a1. International Conferences - Held Abroad

Date	Name of Conference	Place of Conference	Subject of Lecture/Discussion	Role
2008	12th International Behavioral Ecology Congress	Ithaca, New York	How do tiny insect herbivores avoid being eaten by large mammalian herbivores?	Speaker
2014	30th annual meeting of the International Society for Chemical Ecology	Urbana, Illinois	The chemical defense of extrafloral nectaries	Speaker
2014	99th annual meeting of the Ecological Society of America	Sacramento, California	Destructive consumption of extrafloral nectaries: An overlooked cost of an indirect defense mechanism	Speaker
2014	99th annual meeting of the Ecological Society of America	Sacramento, California	Non-destructive detection across landscapes of mass marked insects	Poster presenter

a2. International Conferences - Held in Israel

Date	Name of Conference	Place of Conference	Subject of Lecture/Discussion	Role
2017	Plant Ecology	Sde-Boker	Localized chemical defense of extrafloral nectary tissue	Speaker

a3. Local Conferences

Date	Name of Conference	Place of Conference	Subject of Lecture/Discussion	Role
2003	40th annual meeting of the Zoological Society of Israel	Sde-Boker	Dropping behavior in aphids as an escape response: suicide or calculated risk?	Speaker
2008	27th annual meeting of the Entomological Society of Israel	Oranim	Jump or die: How to avoid being eaten by an herbivore	Speaker
2008	45th annual meeting of the Zoological Society of Israel	Mikhmoret	How aphids avoid being eaten by mammalian herbivores	Speaker
2009	28th annual meeting of the Entomological Society of Israel	Tel-Aviv	Young aphids ride mature aphids back to the plant after dropping off the plant	Speaker
2009	46th annual meeting of the Zoological Society of Israel	Haifa	Riding on adults to get back to the host	Speaker
2018	Disappearing open landscapes- conference held by the Society for the Protection of Nature in Israel	Kfar-Tavor	The Mediterranean phrygana- a heaven for insects	Invited speaker

b. Organization of Conferences or Sessions

Year	Name of Conference	Place of Conference	Subject of Conference	Role
2017	Plant Ecology	Sde-Boker	Plant ecology	Session Co-chair
2017	Plant Ecology	Sde-Boker	Plant ecology	Panel Co-chair

7. Invited Lectures (Others than in Scholarly Conferences)

Year	Name of Forum	Place of Lecture	Subject of Lecture	Role
None	None	None	None	None

8. Colloquium Talks

Year	Name of Forum	Place of Lecture	Presentation
2014	Juniata College, Huntingdon, PA	From aphid defenses to defenses against aphids	Speaker
2016	Department of Entomology, Hebrew University, Rehovot	Insect herbivory and plant chemical defense: ecological and evolutionary implications	Speaker

9. Research Grants

a. Grants Awarded

Role in Research	Other Researchers (Name & Role)	Title	Funded by (C= Competitive Fund)	Amount	Years
CI	Rice K.B., CI Fleischer S.J., PI Tooker J.F., PI	Tracking brown marmorated stink bug dispersal among multiple crop systems	Stoy G. and Della A. Sunday Program Support for Fruit Production Research (C)	**$4216**	**2014**
PI	None	The impact of house cats on fauna near residential areas in Israel	Faculty of Management, University of Haifa	**3900₪**	**2018**

b. Submission of Research Proposals – Pending

Role in Research	Other Researchers (Name & Role)	Title	Funded by (C= Competitive Fund)	Years
None	None	None	None	None

c. Submission of Research Proposals – Not Funded

	Role in Research	Other Researchers (Name & Role)	Title	Funded by (C= Competitive Fund)	Years
	PI	None	Drought effects on insect-plant synchronization in the Mediterranean scrubland: ecosystem resistance and resilience	Israeli Ministry of Science and Technology (C)	2018

10. Scholarships, Awards and Prizes

Given by:	Given for:	Amount	Years
The Pennsylvania State University, Center for Chemical Ecology	Postdoctoral fellowship	$152,259	2012-2016
Ronit and Amalia Magen	Donation for research	20,000₪	2018

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
2016	Introduction to biological sciences	Introduction Course	M.A.	12
2017	Introduction to biological sciences	Introduction Course	M.A.	8
January 2018	Introduction to Ecology	Introduction Course	M.A.	13
2018	Nature Conservation	Lecture (regular course)	M.A.	7
2018	Introduction to biological sciences	Introduction Course, Online Course	M.A.	14
October 2018	Introduction to Ecology	Introduction Course	M.A.	12
February 2019	Nature Conservation	Lecture (regular course)	M.A.	14

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					
Zeana Ganem	Prof. Yael Lubin Dr. Efrat Gavish Regev	Spiders in an agroecological system- vineyards	M.A	2018	
Yael Lavi Efrat	Dr. Doron Merkel	Compensative irrigation as a novel management strategy for natural habitats	M.A. (project)	2018	
Yaniv Zelig					
Yaron Bartov	Prof. Ofira Ayalon	Pine seedling management after fire	M.A. (project)	2018	
Ehud Geva					

Shiri Sverdelik Hagit Shalev	Dr. Tali Raveh	Pesticide use in Israeli homes	M.A. (project)	In Progress	
Lyan Wolovelsky	None	The impact of house cats on fauna near residential areas in Israel	M.A.	In Progress	
Ph.D. Students					
None					
Post Doctorate Students					
None					

PUBLICATIONS

Index:
I.F. = Impact Factor (when published)
R = Ranking (when published)
Q = Quartile (when published)
Citations = total citations
All data taken from ISI

A. Ph.D. Dissertation

Title: Escape of herbivorous insects from incidental ingestion by mammalian herbivores.
Date of submission: February 2012
Number of pages: 72
Language: English
Name of supervisor: Professor Moshe Inbar and Professor Amots Dafni
University: University of Haifa
Publications: D2, D3, D4

B. Scientific Books (Refereed)

None

Authored Books – Published

None

Authored Books - Accepted for Publication

None

Edited Books and Special Journal Issues - Published

None

Edited Books and Special Journal Issues - Accepted for Publication

None

C. Monographs

None

D. Articles in Refereed Journals

Published

1. **Gish M.** and Inbar M. (2006) Host location by apterous aphids after escape dropping from the plant. ***Journal of Insect Behavior*** 19: 143-153. [I.F: 0.966; 5 year I.F: 0.987; R: 53/96; Q3; Citations: 42].
2. **Gish M.**, Dafni A. and Inbar M. (2010) Mammalian herbivore breath alerts aphids to flee host plant. ***Current Biology*** 20: R628-R629. [I.F: 9.251; 5 year I.F: 9.972; R: 17/293; Q1; Citations: 31].
3. **Gish M.**, Dafni A. and Inbar M. (2011) Avoiding incidental predation by mammalian herbivores: accurate detection and efficient response in aphids. ***Naturwissenschaften*** 98: 731-738. [I.F: 2.221; 5 year I.F: 1.947; R: 19/64; Q2; Citations: 19].
4. **Gish M.**, Dafni A. and Inbar M. (2012) Young aphids avoid erroneous dropping when evading mammalian herbivores by combining input from two sensory modalities. ***PLoS ONE*** 7(4): e32706. [I.F: 2.766; 5 year I.F: 3.352; R: 15/64; Q1; Citations: 13].
5. Ribak G.†, **Gish M.**†, Weihs D. and Inbar M. (2013) Adaptive aerial righting during the escape dropping of wingless pea aphids. ***Current Biology*** 23: R102-R103. [I.F: 9.251; 5 year I.F: 9.972; R: 17/293; Q1; Citations: 23].
   † These authors **equally contributed** to this work.
6. Ben-Ari M., **Gish M.** and Inbar M. (2015) Walking aphids can partake in within-field dispersal to distant plants. ***Basic and Applied Ecology*** 16(2): 162-171. [I.F: 2.144; 5 year I.F: 3.385; R: 75/160; Q2; Citations: 17].
7. Rice K.B.†, Fleischer S.J., De Moraes C.M., Mescher M.C., Tooker J.F. and **Gish M.**†* (2015) Handheld lasers allow efficient detection of fluorescent marked organisms in the field. ***PLoS ONE*** 10(6): e0129175. [I.F: 2.766; 5 year I.F: 3.352; R: 15/64; Q1; Citations: 7].
   † These authors **equally contributed** to this work.
   *Corresponding author.
8. **Gish M.**, De Moraes C.M. and Mescher M.C. (2015) Herbivore-induced plant volatiles in natural and agricultural ecosystems: open questions and future prospects. ***Current Opinion in Insect Science*** 9: 1-6. [I.F: 4.171; 5 year I.F: 4.191; R: 4/96; Q1; Citations: 15].
9. **Gish M.**, Mescher M.C. and De Moraes C.M. (2015) Targeted predation of extrafloral nectaries by insects despite localized chemical defense. ***Proceedings of the Royal Society B*** 282: 20151835. [I.F: 4.847; 5 year I.F: 5.611; R: 9/85; Q1; Citations: 5].
10. **Gish M.**, Mescher M.C. and De Moraes C.M. (2016) Mechanical defenses of plant extrafloral nectaries against herbivory. ***Communicative & Integrative Biology*** 9(3): e1178431. [I.F: -; 5 year I.F: -; R: -; Q-; Citations: 4].

11. **Gish M.,** Ben-Ari M. and Inbar M. (2017) Direct consumptive interactions between mammalian herbivores and plant-dwelling invertebrates: prevalence, significance and prospectus. ***Oecologia*** 183: 347-352. [I.F: 3.127; 5 year I.F: 3.409; R: 46/160; Q2; Citations: 9].
12. Berman, T.S., Ben-Ari, M., Glasser, T.A., **Gish, M.** and Inbar, M. (2017) How goats avoid ingesting noxious insects while feeding. ***Scientific Reports*** 7: 14835. [I.F: 4.122; 5 year I.F: 4.609; R: 12/64; Q1; Citations: 3].
13. **Gish, M.**, & Inbar, M. (2018). Standing on the shoulders of giants: young aphids piggyback on adults when searching for a host plant. ***Frontiers in zoology*** 15: 49. [I.F: 3.627; 5 year I.F: 3.782; R: 5/167; Q1; Citations: 0].

Accepted for Publication

None

E. Articles or Chapters in Scientific Books (Refereed)

Published

None

Accepted for Publication

None

F. Articles in Conference Proceedings

Published

None

Accepted for Publication

None

G. Entries in Encyclopedias

None

H. Other Scientific Publications

Patents

"Laser detection of fluorescent marked substrates". US provisional patent application No. 62/148,310. Not accepted.

Published

None

Accepted for Publication

None

I. Other Works and Publications

Selected Media Coverage (Public Impact)

- Humid breath fells insects. **Science News**. August 9, 2010.
- Insects sense danger on mammals' breath. **Science Daily**. August 9, 2010.
- Bad breath prompts insects to keel over. **Discovery News**. August 9, 2010.
- Hot and heavy: Insects sense the breath of approaching herbivores and flee plants. **Scientific American**. August 9, 2010.
- Impressive aerial maneuvers of the pea aphid. **Science Daily**. February 4, 2013.
- Aphids always land on their feet. **Discover**. February 5, 2013.
- How falling aphids land on their feet like cats. **National Geographic**. February 5, 2013.
- An insect flees danger. Suddenly, it picks up a tiny hitchhiker. **The New York Times**. December 6, 2018.
- Little aphids ride big ones to safety. **Scientific American**. December 11, 2018.

J. Submitted Publications

None