

Sept. 2019

## Curriculum vitae

**Yossi Loya**

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School of Zoology, Tel Aviv University  
Tel Aviv, 69978 Israel**



### Lab

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<http://scholar.google.co.il/citations?user=cpv4vqAAAAAJ>

[http://www.academy.ac.il/asp/members/members\\_in.asp?person\\_id=1156](http://www.academy.ac.il/asp/members/members_in.asp?person_id=1156)

### Home

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**Mobile: 054-637-2121**

Date of birth:.....23 May, 1942

Place of birth:.....Plovdiv, Bulgaria

Year of immigration.....1944

Zahal, Military Service: 1960-1962

Marital Status:.....Married to Shoshana Loya

Children: Yael, Shay and Assaf

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## *EDUCATION*

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Year	University/ Institute	Department	Degree
1962-1965	Tel Aviv University, Israel	Biology	<b>B.Sc.</b>
1965-1967	Tel Aviv University, Israel	Zoology	<b>M.Sc.</b>
1967-1971	State University of New York at Stony Brook, L.I. N.Y.	Ecology	<b>Ph.D.</b>
<b><u>M.Sc. Thesis:</u></b>	Ecology of fish breeding in brackish water ponds near the Dead Sea ( <i>Suma cum laude</i> ).		
<b><u>Ph.D. Thesis:</u></b>	Community structure and species diversity hermatypic corals at Eilat, Red Sea. <u>Supervisor:</u> Prof. L.B. Slobodkin		
<b><u>Post doctorate</u></b> 1971-1972	Woods Hole Oceanographic Institution, Mass. <u>Research:</u> Oil pollution effects on benthic communities in Buzzards Bay Woods Hole- <u>Supervisor:</u> Prof. Howard Sanders		

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## *AREAS OF SCIENTIFIC INTEREST*

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Ecology and Evolution of reef corals; Coral reef community structure; Species diversity and community structure of corals; Life history strategies of reef corals and their associated fauna; Effects of environmental stress on anthozoan reproduction; Sex change in corals; Hormonal influences on anthozoan reproduction Competitive networks and space partitioning within coral populations; The role of boring organisms in bioerosion of coral reefs; Effects of oil-pollution on coral- reef communities; Effects of natural and anthropogenic disturbances on coral reef communities; Conservation ecology and management of coral reef nature reserves; Biologically active compounds derived from coral-reef organisms in search for new drugs; Global climatic changes and its effect on coral-reef communities; Coral bleaching; Coral diseases.

**ACADEMIC AND PROFESSIONAL EXPERIENCE**

<b>Year</b>	<b>University/Institute</b>	<b>Department</b>	<b>Title</b>
1962-1965	Tel Aviv University	Biology	B.Sc.
1965-1967	Tel Aviv University	Zoology	M.Sc.
1968-1971	State University of New York at Stony Brook, L.I., N.Y.	Ecology & Evolution	Ph.D.
1971-1972	Woods Hole Oceanographic Institute, Woods Hole, Mass.	Marine Ecology	Post-doctorate
1972-1976	Tel Aviv University	Zoology	Lecturer
1976-1980	Tel Aviv University	Zoology	Senior lecturer
1980-1986	Tel Aviv University	Zoology	Associate Professor
1986-present	Tel Aviv University	Zoology	Full Professor
1979-1980	The Australian Institute of Marine Science (AIMS)	Marine Ecology	Senior Queen Elizabeth Fellow
1988-1989	Tel Aviv University	Zoology	Chairman
1990-1995	Tel Aviv University	Faculty of Life Sciences	Dean
1995-2000	The Porter Center for Ecological and Environmental Studies, Tel Aviv University	Ecology	Director
1997-2012	Raynor Chair for Environmental Conservation Research, TAU	Environmental Conservation	Chair
1985-1986	Scripps Inst. of Oceanography La Jolla, San Diego USA	Ecology	Visiting Professor
1995, 97, 99, 04, 05 07, 08, 09, 10, 12,14 (summers)	University of the Ryukyus, Okinawa, Japan	Sesoko Tropical Biosphere Research Center	Visiting Professor
2007-2008	University of California Los Angeles (UCLA)	Ecology and Evolutionary Biology	Visiting Professor
2008-present	James Cook University, Townsville, Australia	Marine Ecology	Adjunct Professor
2009	Center of Excellence, James Cook University, Townsville, Australia	Coral Reef Studies	Visiting Professor
2009 - present	Israeli Academy of Sciences and Humanities	Science Division	Member

**INTERNATIONAL COMMITTEES ADVISORY AND ADMINISTRATIVE DUTIES**

1971-1973	Member-	Scientific Committee on Oceanic Research (SCOR, UNESCO), Working group on: "Quantitative studies on coral reefs"
1977-1979	Chairman-	The Zoological Society of Israel.
1979-present	Member-	Editorial board of the journals: <i>Marine Ecology Progress Series</i> (76-84); <i>Coral Reefs</i> (82-86) <i>Marine Biology</i> (86-94); <i>Marine pollution Bulletin</i> (2002-2005)
1986-1992	Advisor-	Israel National Academy of Science- Basic Research Foundation.
1978-1990	Member-	Scientific advisory board Nature Protection Authority, Israel
1978-1992	Member-	International Association of Biological Oceanography (IABO)
		<u>Scientific international committee of the following coral reef symposia:</u>
		-3 <sup>d</sup> International Symposium on Coral Reefs: Miami, Florida, 1977;
		-4 <sup>th</sup> International Symposium on Coral Reefs: Philippines, May 1981;
		-5 <sup>th</sup> International Symposium on Coral Reefs: Tahiti, June 1985;
		-6 <sup>th</sup> International Symposium on Coral Reefs: Australia, August 1988;
		-7 <sup>th</sup> International Symposium on Coral Reefs: Guam, June 1992.
1982-1992	Council Member -	International Society for Reef Studies (ISRS).
1982-1986	1 <sup>st</sup> Editor -	"Coral Reefs" (Biology Section) Springer-Verlag.
1986-1992	Member-	The Scientific Review Board, Oil Spill Project- Smithsonian Tropical Research Institute (STRI, Panama)
1992	Head-	The Israeli Scientific Delegation to the UN Conference on Environmental Development (UNCED) Rio-de Janeiro, Brazil.
1993-1994	Head -	Israeli scientific delegation to the Israel-Jordan Peace Talks establishing the Red Sea Marine Park Aqaba, Jordan
1993-2000	Chairman-	Israeli Man and the Biosphere (MAB)- Committee, UNESCO
1996-1999	Advisor-	Israeli Ministry of Science (Germany-Israel Marine Biology Program).
1997-1999	Advisor-	Israel Science Foundation (Ecology committee)
1996-1999	Chairman-	Board of Directors, Inter-University Institute of Marine Science (IUI), Eilat.
2000-2008	Member-	Board of Directors, IUI, Eilat
2001-2005	Member-	Scientific advisory board Nature Protection Authority, Israel
1989-1990	Chairman	Department of Zoology, Tel Aviv University
1990-1995	Dean -	Faculty of Life Sciences, Tel Aviv University
1990-1995	Member-	University Central Committee, Tel Aviv University
1990-1995	Member-	Board of Governors, Tel Aviv University
1990-2002	Member-	Board of Trustees, Tel Aviv University
2000-2004	Member-	Academic Planning Committee, Tel Aviv University
2004-2007	Member-	Central Nomination Committee, Tel Aviv University
2002-2004	Member-	Advisory and Review Board of the Research Institute of the Subtropics, Okinawa, Japan (Coral bleaching project).
2004- 2010	Co-Chair-	GEF/World Bank Working Group on Coral Bleaching.
2006- 2014	Chair	Scientific Board of the Australian Research Council (ARC) Centre of Excellence on coral reef research
2011-present	Chair-	Israeli Scientific Committee for Oceanic Research (SCOR)
2014-present	Chair -	Israel Academy of Sciences Committee on scientific relations with Japan
2015-present	Chair-	Advisory Board: Batsheva de Rothschild Fund for the Advancement of Science in Israel

## PRIZES/HONORS

**Senior Queen Elizabeth Fellow (79-80):** Australian Inst. of Mar. Sci. and James Cook Univ. of N. Qld.

**The Darwin Medal (Millennium Year -2000):** The most prestigious prize of the International Society for Coral Reef Studies (ISRS) awarded once every four years, "for life time outstanding contribution to the field of coral reef research".

**The Landau Prize (2003):** Awarded, by Mifaal Hapais in the category of Life Sciences "for original outstanding research contribution to the field of Ecology and Environmental Quality".

**Honorable membership of the Israel Society of Zoology (2011):** "in recognition of his important contribution to research, teaching, education and nature conservation".

**EMET Prize in Exact Sciences: Environmental studies (2015):** "for his pioneering and groundbreaking achievements in coral-reef research and for his seminal contribution in developing quantitative methodologies for assessment of biodiversity and health of coral communities and significant contribution to the knowledge of their reproductive strategies".

## AWARDS

- 1973 - NOAA - Manned Undersea Science and Technology Program:** "External distribution of energy fixed by reef corals at Puerto-Rico". Two weeks underwater expedition using underwater laboratory-PRINUL (In collaboration with Professors. S. Richman and Dr. L. McCloskey).
- 1974 - National Council for Research and Development:** "The effect of pollutants on coral reef communities".
- 1974-1976 U.S.-Israel Bi-National Science Foundation:(BSF):** "Growth and development of reef corals."
- 1975-1976 National Council for Research and Development:** "Experiments on the effect of oil pollution on hermatypic corals".
- 1976-1979 Ministry for Commerce and Industry:** "Biologically active products from marine organisms". (with Prof. Y. Kashman, Tel- Aviv University)
- 1979-1980 Senior Queen Elizabeth ResearchFellowship:** Australian Institute of Marine Science, Cape Ferguson, Australia.
- 1980-1983 Israeli Academy of Sciences- Basic Research Foundation:** "The variation in the chemical composition of soft-corals and sponges as a function of the place of collection" (with Prof. Y. Kashman, TAU).
- 1980-1983 U.S.-Israel Bi-national Science Foundation (BSF):** "Isolation and identification of New Marine Natural Products" (with Prof. Y. Kashman, TAU).
- 1984-1985 The Fund for Basic Research, Tel Aviv University:** "Ecology of boring bivalves in living stony corals".
- 1984-1987 The Society for Nature Protection:** "Massive predation of scleractinian corals at Eilat caused by a predatory gastropod".
- 1984-1987 Israeli Academy of Sciences- Basic Research Foundation:** "Reproductive strategies of Red Sea scleractinian corals".
- 1986-1989 U.S.-Israel Bi-national Science Foundation (BSF):** "Larval ecology of boring bivalves in living corals".
- 1988-1990 Harbor Branch Oceanographic Institution, Sea Pharm Project:** "Bioactive materials derived from soft corals and sponges from the Red Sea"(with Prof. Y. Kashman, TAU)
- 1989-1992 National Council for Research and Development - Joint German-Israeli Program:** "A new method to assess indicators of environmental

- stress and possible stabilization or degradation of toxicants in coral reefs”.
- 1990-1992** **FAO Mediterranean Action Plan (MED POL):** “Swarming of jellyfish along the Mediterranean Coast of Israel: An environmental approach”.
- 1990-1993** **National Coal Company:** “Effects of coal pollution on coral reefs”.
- 1991-1994** **Office of Environmental Quality:** “Medusa blooms in the Mediterranean Sea: Ecological aspects”.
- 1991-1995** **US National Institute of Health (NIH):** “Novel natural products from the sea as potential anti-AIDS drugs” (with Prof. Y. Kashman, School of Chemistry and Prof. A. Hizi, Medical School, TAU).
- 1992-1995** **Israel Academy of Sciences-Basic Research Foundation:** “Bioerosion of coral reefs by sponges, sea-urchins and bivalves”.
- 1993-1996** **The German-Israeli Foundation for Scientific Research and Development (G.I.F.):** “Patterns of stable isotope fractionation during mineralization processes in corals: environmental implications”.
- 1996-1999** **Israel Science Foundation (ISF):** “Bioerosion of coral reefs a multidisciplinary approach”. (with B. Lazar, the Hebrew University)
- 1996-1999** **U.S.-Israel Bi-National Science Foundation (BSF):** “Coral bleaching by bacteria”. (with E. Rosenberg, TAU).
- 1995-1999** **The German Ministry of Education, Science, Research and Technology (B.M.B.F.): - Red Sea Program-**“Scleractinian corals as environmental recorders of the Red Sea”.
- 1998-2002** **Israeli Ministry of Science:** (with M. Ilan, TAU).  
Novel Bioactive Compounds from Marine Invertebrates and their symbionts
- 1998-2002** **Ministry of Science:** “Establishment of a National Infrastructure Laboratory: **Center for High Israeli Throughput Screening (HTS) for Novel Bioactive Compounds at Tel Aviv University**”-(**Director and Coordinator of a research project** involving 22 scientists from 6 universities and research institutions in Israel).
- 1999-2003** **MERC-Bi-National Research and Monitoring Program (Israel -Jordan) for the Red Sea Marine Peace Park, Aqaba, Jordan** (heading the monitoring program of “community structure of stony corals at the Coral Nature Reserve”
- 2002-2006** **Israel Science Foundation (ISF):** “Alternative feeding mechanism in corals: bacterial aggregate “gardening” (Co-PI in collaboration with A. Kushmaro, Ben Gurion Univ.)
- 2004-2008** **Marie Curie European Research Training Network** (with M. Ilan, TAU)
- 2005-2010** **GEF/The World Bank/UNESCO/IOC:** International Targeted Working Group of Experts on "indicators of coral bleaching". Co-Chairman with Prof. Ove Hoegh Guldberg (Chairman) of the group, including 14 scientists from USA, England, Australia, Kenya, Israel, and Mexico. The group meets annually and works together for 2-3 weeks at one of the following reef sites: Heron Island (Great Barrier Reef, Australia), Puerto Morelos (Mexico), Philippines & Zanzibar.
- 2003-2007** **Israel Science Foundation (ISF)-** “An integrative approach of studying bacterial coral bleaching in the coral reef of Eilat”. (with E. Rosenberg, TAU).
- 2004 -2006** **Porter School of Environmental Studies in collaboration with the Italian Ministry the Environment:** "Artificial Marine Structures (AMS):Multifunctional Tool for Research and Environmental Management in the Mediterranean and Red Sea (MED- RED) (with Y. Benayahu and A. Abelson).
- 2004-2008** **Israel Science Foundation (ISF):** The isotopic composition of Eilat's corals: basic aspects of signals Build up and tracing anthropogenic stress.  
(Co-PI in collaboration with A. Shemesh, the Weizman Institute)
- 2007-2011** **Israel Science Foundation (ISF):** Etiology of Black Band Disease (BBD) Red Sea".  
(PI with E. Rosenberg, TAU).
- 2012-2013** **Israel Taxonomy initiative (ITI):** Taxonomy & molecular systematics of the

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Tel Aviv University

Ctenophore fauna along the coasts of Israel (PI in collaboration with Ada Alamaru, and Dorothee Huchon, TAU)

2012-2013 **Israel Taxonomy initiative (ITI):** Biodiversity of Mesophotic Scleractinian corals in the Gulf of Eilat/Aqaba.

2012-2016 **Israel Science Foundation (ISF):** Sex-allocation and sex change in mushroom scleractinian corals: a long term study.

2013-2016 **Middle East Regional Cooperation (Program: U.S. Agency for International Development, Bureau for the Middle East (MERC-AID):** Developing novel methodologies for preservation and maintenance of coral biodiversity.

2016-2020 **Israel Science Foundation (ISF):** The mesophotic coral reefs of Eilat: reproduction, recruitment, community structure and connectivity – a long term study

2017-2020.....**Singapore Research Foundation -Israel Science Foundation (Joint NRF-ISF) grant:** Sex allocation, reproductive strategies and reproductive senescence in fungiid corals: a comparative study in the coral reefs of Israel and Singapore

**MEMBERSHIP IN PROFESSIONAL SOCIETIES**

Ecological Society of Israel; Zoological Society of Israel;

The Israeli Association for Aquatic Sciences; Ecological Society of America

International Society for Reef Studies

**SUPERVISION OF GRADUATE STUDENTS**

**Ph.D. students**

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**Graduation**

**Year**

**Name**

**Thesis title**

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1982	Yehuda Benayahu	Population dynamics and life history strategies in Red Sea soft corals.
1982	Baruch Rinkevich	Calcification and productivity in the scleractinian coral <i>Stylophora pistillata</i> .
1984	Avi Shafir	Aspects of energy flow within the coral <i>Stylophora pistillata</i> and some of its associates.
1984	Yechiam Schlesinger	Reproduction and juvenile growth in stony corals.
1988	Craig Browdy	Growth and reproduction of the shrimp <i>Penaeus semisulcatus</i> in captivity.
1989	Micha Ilan	Life strategies of sponges from the Red Sea: Reproduction, settlement and self/non-self-recognition.
1993	Avigdor Abelson	Biomechanical aspects in the biology and ecology of sessile organisms in coral reefs.
1993	Ofer Mokady	Bioerosion rate of corals by boring bivalves: A chemical approach.
1994	Ramy Klein	Skeletal banding in recent and fossil corals.
1995	Amit Lotan	Medusae blooms in the Mediterranean Sea: Ecological and toxicological aspects.
1998	Ester Kramarsky Winter	Reproductive strategies of fungiid corals: sexual and asexual reproduction.

<b>1998</b>	<b>Ariel Kushmaro</b>	Interactions between corals and their associated bacteria. (Co-Supervisor: Prof. Eugene Rosenberg ).
<b>2002</b>	<b>Maoz Fine</b>	Community structure and dynamics of Mediterranean corals.
<b>2003</b>	<b>Michael Rosenfeld</b>	The use of contemporary corals in predictive models concerned with global climate change.
<b>2003</b>	<b>Dov Kelman</b>	Biologically active materials derived from Red Sea organisms.
<b>2003</b>	<b>Omer Choresh</b>	Expression of heat shock proteins (HSPs) in marine invertebrates: development of an early warning system for disturbed marine environments.
<b>2007</b>	<b>Gidon Winters</b>	Photoinhibition in corals – effects of UV, PAR And temperature. (Co-supervisor- S. Beer).
<b>2007</b>	<b>Noa Shenkar</b>	Population dynamics of Mediterranean and Red Sea tunicates.
<b>2009</b>	<b>Amy Shlesinger</b>	Nudibranch/Anemone associations: a study of life histories and interactions.
<b>2010</b>	<b>Assaf Zevoluni</b>	Spatial patterns in coral reef populations.
<b>2013</b>	<b>Rachel Armosa</b>	Physiological mechanisms involved in the reproduction of Anthozoa.
<b>2014</b>	<b>Omri Bronstein</b>	Ecology, biology, and taxonomy of coral-reef associated sea urchins in the Red Sea and western Indian Ocean
<b>2018</b>	<b>Ada Alamaru</b>	Molecular systematics of benthic ctenophores (Family: Coeloplanidae) from the Gulf of Eilat/Aqaba, Red Sea.
<b>2018</b>	<b>Gal Eyal</b>	Biodiversity of mesophotic (30-60 m depth) scleractinian corals in the Gulf of Eilat/Aqaba.
<b>2019</b>	<b>Lee Eyal-Shacham</b>	Individual annual fecundity and reproductive energy investment in solitary corals (Fungiidae).
<b>Current</b>	<b>Or Ben-Zvi</b>	Ecophysiological aspects of fluorescence in stony corals
<b>Current</b>	<b>Tom Schlesinger</b>	Demography, reproduction, and taxonomy of scleractinian corals along a large depth gradient (0–60 m)
<b>Current</b>	<b>Raz Tamir</b>	Effects of down-welling irradiance and light spectrum on community structure of corals (0-60 m depth).
<b>Current</b>	<b>Tal Amit</b>	Life history strategies of boring bivalves in live (corals) vs. dead substrates (rocks). Co-Supervisor: Prof. Gitai Yahel
<b>Current</b>	<b>Hannah Rapuano</b>	Senescence in fungiid corals.



*M.Sc. students*

Graduation Year	Name	Thesis title
1975	Yehuda Benayahu	Quantitative characteristics of stony corals, soft corals and algae in the northern Gulf of Eilat (Red Sea).
1975	Baruch Rinkevich	On the reproduction of <i>Stylophora pistillata</i> (Esper) and harmful effects of oil pollution on its population.
1978	Yechiam Schlesinger	Effects of phosphate pollution on the community structure of the holothurians <i>Actinopyga bannwarthi</i> and <i>Synapta maculata</i> .
1978	Mordehai Shpigel	Spatial heterogeneity in branching corals and fish species diversity.
1979	Zeev Wolodarsky	Competition and space partitioning among <i>Trapezia</i> species within the coral <i>Stylophora pistillata</i> .
1985	Esther Kramarsky-Winter	Life history strategy of the bivalve <i>Lithophaga purpurea</i> boring in the coral <i>Cyphastrea chalcidicum</i> .
1985	Itzhak Brikner	Reproductive and settlement strategy of the boring bivalve <i>Lithophaga purpurea</i> in living corals.
1987	Avigdor Abelson	Aggressiveness in stony corals: Is it competition for space?
1988	Oved Gur	Predation and life history strategies of the coral predatory snail <i>Drupella cornus</i> .
1988	Sara Sadot	Life history and reproduction of <i>Pocillopora</i> in the Gulf of Eilat.
1989	Rami Klein	Sclerochronological aspects of hermatypic corals (genus: <i>Porites</i> ) in the Gulf of Eilat.
1989	Gila Arazi	Larval ecology of boring bivalves in living corals.
1990	Oron Prager	Surface structural complexity and its influence on ecological indices of aquatic communities.
1991	Tamar Liberman	Possible benefits to the coral <i>S. pistillata</i> from the association with the fish <i>Dascyllus marginatus</i>
1991	Nadav Shashar	Nitrogen fixation in stony corals.
1996	Vered Shimoni	Population genetics of boring bivalves in stony corals.

1997	Dalit Trovezky	Bioerosion of the coral reef by parrotfish (Co-supervisor: B. Lazar, Hebrew University).
1998	Maoz Fine	The scleractinian coral <i>Oculina patagonica</i> : A new invader to the Mediterranean sea, biological and ecological aspects.
1998	Hadas Lubinevsky	Light and shade adapted Mediterranean corals
1999	Omer Choresh	Heat shock proteins in <i>Oculina patagonica</i> : a Mediterranean shallow water coral.
2000	Nachshon Siboni	Effect of coal pollution on Mediterranean benthic communities.
2001	Gidon Winters	Photo inhibition in shallow water colonies of <i>Stylophora pistillata</i> as measured in situ. (Co-supervisor Sven Beer).
2003	Noa Levin	Environmental factors influencing the chronic bleaching of the Mediterranean stony coral <i>Oculina patagonica</i> .
2003	Meir Sussman	Fluorescent in situ Hybridization (FISH) reveals the fireworm <i>Hermodice carunculata</i> as a reservoir and a possible vector for the coral pathogen <i>Vibrio shiloi</i> (Co-supervisor-E. Rosenberg, TAU).
2003	Ofer Ben-Zvi	Deterioration Index (DI): a suggested tool for monitoring reef-coral community health. (Co-supervisor- A. Abelson).
2003	Omer Polack	Reproductive cycle of <i>Palythoa</i> sp. at Eilat, Red Sea (Co-supervisor- Y. Benayahu, TAU).
2004	Amy Shlesinger	Nematocysts' toxins of the Mediterranean sea-anemone <i>Aiptasia diaphana</i> and their role in external digestion.
2005	Rachel Armoza	Bio-indicators of stress in scleractinian corals.
2006	Roe Segal	Molecular characteristics of the bleaching phenomenon of the Mediterranean stony coral <i>Oculina patagonica</i> .
2006	Yehonatan Sharon	Ecology of Lessepsian mussels invading the Mediterranean (Co-supervisor- Y. Benayahu, TAU).
2006	Daniel Allen	Community structure of deep (50 m) scleractinian corals in Eilat, Red Sea.
2008	Ada Alamaru	Trophic Biology of <i>Stylophora pistillata</i> larvae – A stable isotope approach (Co-super. A. Shemesh, Weizmann Inst).
2008	Ido Mizrachi	Sclerochronology of bleached and non-bleached corals. (Co-supervisor- A. Shemesh, Weizman Institute).
2008	Maya Weizel	Bleaching effects on reproduction of a Red Sea scleractinian coral population.
2008	Rafi Yaavetz	Reproductive cycle of a Mediterranean nudibranch.

2009	<b>Omri Bronstein</b>	Morphological and molecular aspects of sea urchins (genus <i>Echinometra</i> ) from Okinawa, Zanzibar and Eilat.
2009	<b>Ayelet Dadon</b>	Mechanisms of bleaching in the Mediterranean coral <i>Oculina patagonica</i> (Co-supervisor, M. Fine, Bar Ilan Univ.).
2011	<b>Itzhak Hoskin</b>	Life history strategies of fungiid corals.
2011	<b>Ran Sulam</b>	Scleractinian coral community in the northern Gulf of Eilat (Red Sea): Effects of a coral disease and a storm.
2012	<b>Gal Eyal</b>	Ecology and Taxonomy of mesophotic communities in Israel (Red Sea and Mediterranean).
2012	<b>Elad Mills</b>	Bleaching of the coral <i>Oculina patagonica</i> : role of bacteria in coral health and disease (Co-supervisor - E. Rosenberg).
2012	<b>Lee Eyal-Shacham</b>	Reproductive strategies of deep(mesophotic) reef corals
2012	<b>Ram Barankin</b>	A precautionary approach for environmental policy: a basic model for discussion between science, law and policy.
2014	<b>Tom Schlesinger</b>	Recruitment and mortality of corals at the coral reefs of Eilat.
2015	<b>Or Ben-Zvi</b>	Fluorescence in shallow vs. deep water (mesophotic) corals.
2015	<b>Tal Amit</b>	Ecology and Physiology of symbiotic communities of corals along a depth gradient at the Gulf of Eilat.
2016	<b>Hanna Rapuano</b>	Reproductive strategies of the coral <i>Turbinaria reniformis</i> in the northern Gulf of Eilat, Red Sea
2016	<b>Mila Grinblat</b>	Connectivity between mesophotic corals and shallow corals.
2017	<b>Bar Feldman</b>	Life history traits of the coral <i>Paramontastrea peresi</i> in shallow vs. mesophotic reef habitats.
2018	<b>Netanel Kramer</b>	Recruitment dynamics of mesophotic vs. shallow water corals on settlement panels.
2019	<b>Lachan Roth</b>	Species diversity and reproductive strategies of fire-corals.

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### ***ACTIVE PARTICIPATION IN SCIENTIFIC MEETINGS***

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1970	Symposium of Regional Variation of Indian Ocean Coral Reefs. The Royal Society and Zoological Society of London, London. Invited lecture: Coral community structure at Eilat, Red Sea.
1971	The Penrose Conference on Marine Ecology and Pale ecology, Monterey, California. Lecture: Community structure and species diversity of hermatypic corals.

- 1973** Second International Symposium on Coral Reefs, The Great Barrier Reef, Australia.  
Plenary lecture: On the possible use of plotless methods for quantitative studies of benthic communities of coral reefs.
- 1976** Third International Symposium on Coelenterate Biology, Victoria, B.C., Canada.  
Lecture: Settlement, mortality and recruitment in a Red Sea scleractinian coral population.
- 1977** Third International Coral Reef Symposium, Univ. of Miami, Florida.  
Lectures:  
**1.** Seasonal occurrence of benthic-algae communities and grazing regulation by sea-urchins at the coral reefs of Eilat, Red Sea.  
**2.** Harmful effects of chronic oil pollution on a Red Sea scleractinian coral population.
- 1978** Tenth International Congress of Sedimentology, Jerusalem.  
Field leader: "Pleistocene and Recent coral reefs and coastal sedimentation in the Gulf of Eilat".
- 1978** Second International Congress of Ecology, Jerusalem.
- 1979** Australian Institute of Marine Science (AIMS) Workshop on Coral Reefs; Cape Ferguson, Townsville, Australia  
Lecture: Life history strategy of a Red Sea coral population.
- 1980** UNESCO workshop on Marine and Coastal Processes in the Pacific: Ecological aspects of coastal zone management; Mutupore Island Research Centre, Port Moresby, Papua New Guinea  
Panel leader: Degradation of the environment.
- 1980** Second International Symposium on Biology and Management of Mangroves and Tropical Shallow Water Communities. The Western Society of Naturalists and the University of Papua New Guinea. Port Moresby, Madang, Papua New Guinea.  
Plenary lecture: Competition for space among coral reef sessile organisms.
- 1981** Fourth International Coral Reef Symposium, Manila, Philippines.  
Lecture: Life history strategies of boring bivalves in corals
- 1981** U.S. National Academy of Sciences - Update workshop on: "Oil in the sea: Inputs, Fates and Effects". Invited referee in the section of Effects of Petroleum Hydrocarbons on Coral Reefs. Clearwater, Florida, USA.
- 1982** International Conference on Marine Science in the Red Sea. Al-Ghardaqa Marine Biological Station, Egypt.  
Lecture: Seasonal changes in growth rates of a Red Sea coral population.
- 1982** Workshop on Evolution and Maintenance of Modern Coral Distributions. Australian Institute of Marine Science, Townsville, Australia.  
Invited lecture: Reproductive cycle of *Stylophora pistillata* in the Great Barrier Reef and the Red Sea.
- 1983** Great Barrier Reef Conference. James Cook University and the Australian Institute of Marine Science (AIMS), Townsville, Australia.  
Plenary lecture: Community structure and life history strategies of scleractinian corals.
- 1983** International Helgoland Symposium: "Diseases of Marine Organisms". Biologisch Anstalt Helgoland, Helgoland, Germany F.R.  
Invited lecture: Tumor formations in scleractinian corals.
- 1983** Second Conference of the International Society of Reef Studies, Nice, France.  
Plenary lecture: Reproductive patterns of Red Sea corals.
- 1985** Fifth International Coral Reef Congress, Tahiti.  
Invited lecture: Seasonal changes in growth rate of a Red Sea coral population.
- 1985** Western Society of Naturalists Annual Meeting, Monterey, USA.  
Lecture: Sexual reproduction in reef corals: Red Sea versus the Great Barrier Reef.
- 1986** The Woods Hole Research Center: Conference on Biotic Impoverishment, Woods Hole, USA.

Plenary lecture: Changes in a Red Sea coral community under chronic oil pollution: A long-term case history study.

- 1987** Twenty-second European Marine Biology Symposium, Barcelona, Spain.  
Plenary lecture: Pollution effects of coral reef communities.
- 1987** Workshop on oil pollution effects on the coral reefs of Panama; Meeting of Scientific Review Board, Phase 1. Smithsonian Tropical Research Institute, Panama.
- 1987** Regional Research Workshop and International Symposium on the Conservation and Management of Coral Reef and Mangrove Ecosystems, Okinawa, Japan.  
Invited lecture: Effects of man-made versus natural disturbances on coral reefs.
- 1988** Sixth International Coral Reef Symposium, Townsville, Australia.  
Lecture: First sclerochronological record of hermatypic corals from the Red Sea.
- 1988** Workshop on the long term assessment of the oil-spill at Bahia Las Minas, Panama. Washington, DC., USA.
- 1989** Fifth International Conference on Coelenterate Biology, Southampton, England.  
Lecture: Larval and postlarval recruitment in the broadcasting scleractinians *Favia favus* and *Platygyra lamellina*.
- 1989** Fifth International Congress of Invertebrate Reproduction, Nagoya, Japan.  
Lecture: Resource allocation between growth and reproduction in corals and boring bivalves.
- 1989** Annual meeting of the International Society for Reef Studies, Marseilles, France.  
Invited lecture: Bioerosion of coral reefs.
- 1989** Workshop on the oil pollution effects on the coral reefs of Panama;  
Meeting of the Scientific Review Board, Phase 2.  
Smithsonian Tropical Research Institute, Panama.
- 1990** Fifth International Congress of Ecology, Yokohama, Japan.  
Invited lecture: Coral host specificity between the date mussel *Lithophaga lessepsiana* and the coral *Stylophora pistillata*.  
Workshop on coral bleaching, Coral Reef Ecosystems and Global Climate Change. Miami, Florida.  
Invited lecture: Climate change in Sinai Desert during the late Quaternary inferred from fluorescent bands in fossil corals.
- 1991** Workshop on oil pollution effects on the coral reefs of Panama;  
Meeting of Scientific Review Board, Phase 3. Smithsonian Tropical Research Institute, Panama.
- 1992** Seventh International Coral Reef Symposium, Guam,  
Lectures: 1. Settlement, metamorphosis and bioerosion rate of the boring bivalve *Lithophaga lessepsiana*.  
2. Depth-dependent timing of density band formation in scleractinian corals at the coral reefs of Eilat, Red Sea, Israel.
- 1992** Status seminar of the German-Israeli Co-operation in Environmental Research; Ploen, Germany.  
Lecture: A new method to assess indicators of environmental stress and possible stabilization of toxicants in the environment.
- 1992** International Symposium on Biodiversity and Adaptive Strategies of Coral Reef Organisms, Okinawa, Japan.  
Plenary lecture: Massive predation of scleractinian corals at Eilat caused by the predatory gastropod *Drupella cornus*.
- 1993** Conference on Middle East Multilateral Talks, UCLA, Los Angeles, USA.  
Invited lecture: Development and protection of the Gulf of Aqaba.
- 1993** Conference on Global Aspects of Coral Reefs: Health, Hazards and History,

Univ. of Miami, USA.

Plenary lecture: Long-term changes in coral community structure at Eilat, Red Sea.

- 1994** The Porter Super-Center for Ecological and Environmental Studies Organizer of the International Symposium on the Peace Process and the Environment (Sept. 2004).  
Lecture: Development and Protection, of the Gulf of Aqaba .....
- 1995** UNESCO 28th General Meeting:-Scientific Representative of the Israeli delegation proposing to declare the Gulf of Aqaba (Eilat) as a Biosphere Reserve.
- 1995** Conference of the Red Sea Program (RSP) on Marine Sciences, Dahab, Egypt.  
Lecture: The use of scleractinian corals as environmental recorders of the Red Sea.
- 1995** International Coral Reef Initiative Workshop; Dumaguete City, Philippines.  
Israeli representative discussing quantitative methods for monitoring coral reefs.
- 1995** 18th Pacific Science Congress: Population, Resources and Environment Prospects; Beijing, China.  
Lecture: Stony corals as environmental recorders.
- 1996** Eighth International Coral Reef Symposium, Panama City, Panama.  
Lecture: Predation of corals by the predatory snail *Drupella cornus*.
- 1997** Biotic recoveries from mass extinctions; Panel member.  
Academy of Sciences, Prague, Czech Republic.
- 1997** Workshop of the Bi-national Research and Monitoring Program (Israel –Jordan)- (MERC) for the Red Sea Marine Peace Park:–Discussion Leader. Aqaba, Jordan.
- 1998** Annual meeting of the Society for Integrative and Comparative Biology; Boston, USA.  
Lecture: Bleaching of corals caused by bacteria.
- 1998** Meeting of the Red Sea Program of Marine Sciences, Bremen, Germany.  
Lecture: Scleractinian corals as environmental recorders of global change.
- 1998** Hawaii Coral Reef Monitoring Workshop-A Tool for Management; Univ. of Hawaii  
Plenary lecture: The Red Sea Peace Park Coral Reefs Benthic Communities: Ecology and Biology Monitoring Program.
- 1998** The Third EuroMab Biosphere Reserves Coordinators' Meeting Ilimantsi, Finland.  
Lecture: The Red Sea Peace Park as a Trans-boundary Marine Biosphere Reserve.
- 1998** Expert workshop on coral bleaching: Convention on Biological Diversity  
Manila, Philippines.  
Invited lecture: Devastating Coral bleaching in Okinawa, Japan.
- 1998** The Third Euro-MAB Biosphere Reserves Coordinators Meeting, Ilimantsi, Finland.  
Lecture: The Red Sea Peace Park as a Trans-boundary Marine Biosphere Reserve.
- 1999** Japan Marine Science and Technology (JAMSTEC) International Coral reef Symposium- Coral reef biodiversity and health as indicators of environmental change, Tokyo, Japan. Invited lecture: Regeneration processes in scleractinian corals.
- 1999** SUNY at Stony Brook: A Symposium in honor of Laurence B. Slobodkin:  
Invited Lecture: The Coral Reefs of Eilat: A Long term Case History Study.
- 2000** **The 9<sup>th</sup> International Coral Reef Symposium, Bali, Indonesia. Awarded the Darwin Medal (Year 2000) for life time contribution to coral reef research.**  
**Plenary lecture:** Homage to *Stylophora pistillata*: a significant coral species in Red Sea coral reef research.
- 2001** The World Bank/UNESCO/IOC Workshop on Indicators of Coral Stress, Paris, France. Initiation of the International Working Group of Experts.  
Lecture: Coral bleaching: the winners and the losers
- 2002** The International Society of Reef Studies European Coral Reef Meeting; Cambridge, England  
Lecture: Bleaching of Mediterranean corals is caused by a bacterial pathogen

- 2002** The World Bank/UNESCO/IOC International Targeted Group of Experts on "indicators of coral bleaching". First Field-Workshop of the Working Group; Heron Island, The Great Barrier Reef, Australia.
- 2002** Sixth EU Framework Programme of the European Community for research technological development and demonstration activities; Network of Excellence- Marine Molecular Biotechnology; Brussels, Belgium.  
Invited lecture: Bioactive Compounds from Red Sea Marine Organisms.
- 2002** Workshop on "Biological considerations associated with current geochemical approaches using stony corals as proxies for the reconstruction of different aspects of past climates"; Woods Hole Oceanographic Institution, Cape Cod, Mass.  
Invited lecture: "Using stony corals as proxies for the reconstruction of Red Sea past climates".
- 2002** The World Bank/UNESCO/IOC International Targeted Group of Experts on "indicators of coral bleaching".  
Second Field-Workshop of the Working Group, Puerto Morelos, Mexico.
- 2003** International Review Board Meeting of the Coral Bleaching Project.  
Research Institute of the Subtropics (RIS), Tokyo, Japan.
- 2003** The World Bank/UNESCO/IOC International Working Group on indicators of coral bleaching:- Workshop on Coral Bleaching: Biological Early Warning Systems, Paris, France.
- 2003** Marine Molecular Biotechnology and Biodiversity Meeting; Wendelsheim, Germany.  
Plenary lecture: Biodiversity of the Red Sea coral reefs: A unique source for new natural products.
- 2003** Workshop on "Coral Health and Diseases", Eilat, Israel.  
Invited lecture: The coral reefs of Eilat: 35 years of monitoring their coral community structure
- 2003** The Red Sea Marine Peace Park International Symposium Integration of Marine Science and Resource Management, Aqaba 2-4 December 2003
- 2003** International Coral Ecotoxicology and Health Workshop: Bermuda Biological Station for Research  
Invited lecture: The coral reefs of Eilat - past, present and future: Three decades of coral community structure studies
- 2004** The 10th International Coral Reef Symposium, June, Okinawa, Japan  
Lecture: How to kill a coral reef?
- 2004** Census of Marine Life (CoML) Coral Reef Initiative Working Group: Quantitative methodologies for assessing coral community bleaching 14-16 October Washington DC
- 2004** IOC-GEF/World Bank working group on coral bleaching Workshop, 19-22 October, Washington DC
- 2005** The World Bank/ /IOC-GEF International targeted Group of Experts third workshop on indicators of coral bleaching; 8-16 January, Puerto Morelos, Mexico
- 2005** Ilanit Congress of the Federation of the Israel Societies for Experimental Biology (FISEB ) February 7-10 Eilat.  
Invited Plenary Lecture: The Coral Reefs of Eilat: Three decades of coral community structure studies.
- 2005** Peer Review of the Department of Ecology and Evolutionary Biology, 13-16 April, Ravenna, Italy.
- 2005** World Bank/ UNESCO/IOC-GEF International targeted Group of Experts fourth workshop on indicators of coral bleaching, 10-29 May, Puerto Morelos, Mexico
- 2006** GEF/World Bank working group on coral bleaching Workshop, 7-11 April, Paris France.
- 2006** ARC Centre of Excellence- first scientific annual board meeting, February 17-20, Townsville, Australia.

- 2006** Palau Coral reef workshop, Koror June 25<sup>th</sup>-July 8<sup>th</sup>.  
Lecture: Fish net pen mariculture and the coral reefs of Eilat: a sad story.
- 2006** ISRS (Intern. Society for Reef Studies) European Meeting Bremen, Germany Sept 19-22  
Lecture: Net pen fish farming and coral reefs: An unhappy marriage.
- 2007** ARC Centre of Excellence- second scientific annual board meeting,  
February, Sydney, Australia.  
Invited Lecture: The Coral Reefs of Eilat: Three decades of coral community structure studies.
- 2007** University of California Los Angeles (UCLA), Dept. of Evolutionary Biology:  
Invited Lecture: How to influence environmental decision makers?  
The case of Eilat coral reefs.
- 2007** GEF working group on coral bleaching Workshop, Nov. 20-25, Miami, Florida
- 2008** IOC-GEF/World Bank/UNESCO working group on coral bleaching Workshop  
February 12-16, Amsterdam, the Netherlands.
- 2008** The 11<sup>th</sup> International Coral Reef Symposium, June 7-11, Miami,  
Fort Lauderdale, USA  
Lecture: Bidirectional sex change in fungiid corals.
- 2008** First International Congress Documenting, Analyzing and Managing Biodiversity in the  
Middle East. October 20-23, Aqaba, Jordan  
Lecture: The Coral Reefs of Eilat-past present and future.
- 2009** International Okinawa Churaumi Aquarium Symposium on  
"Reproduction of marine organisms" Feb. 21-23, Okinawa, Japan.  
Lecture: Repetitive sex change in mushroom corals.
- 2009** GEF/World Bank working group on coral bleaching Workshop  
May 15-30, Heron Island, Australia.
- 2009** Organizer of a joint workshop of the Australian Research Council (ARC) Center  
of Excellence(CoE) for Coral Reef Studies and the Interuniversity Institute for  
Marine Sciences in Eilat (IUI): "Coral reefs of the Indo-Pacific in an era of global  
change" held at IUI, Eilat, Israel, 5-6 October.
- 2009** The 12<sup>th</sup> Japanese Coral Reef Society meeting. Memorial lecture in the honor of Professor  
Kiyoshi Yamazato. 28-29 November, Okinawa, Japan.  
Plenary Lecture: "Reproductive Patterns of Fungiid Corals in Okinawa, Japan".
- 2010** 11th Intern. Symp. on spermatology Satellite Symposium, 30<sup>th</sup> June, Okinawa, Japan.  
Lecture: "Fungiid corals: ideal model organisms to study evolution of coral reproductive traits"
- 2010** ARC Center of Excellence symposium: "Coral reefs in a changing environment"  
7 October, Canberra, Australia  
Key note address: "Multiple sex changes in mushroom corals".
- 2011** ARC Center of Excellence symposium: Coral Reefs: Coast to Coast symposium.  
Fremantle, Perth Western Australian Maritime Museum:
- 2011** Annual Zoological Society of Israel 25th Dec. Tel Aviv University  
**Recipient of honorary membership of the Zoological Society of Israel**  
**Plenary lecture: Reproductive strategies in mushroom stony corals**
- 2012** The 12th International Coral Reef Symposium 9-13 July Cairns, Queensland, Australia.  
Lecture: The solitary coral *Fungia fungites* is a protogynous sequential hermaphrodite brooder.
- 2012** Amakusa Biodiversity Symposium: Biodiversity in Changing Coastal Waters of Tropical  
and Subtropical Asia November 29-Dec.4; Amakusa Japan  
Lecture: *Fungia fungites*: a unique sex changing brooder among the Fungiidae.
- 2013** Australian Research Council (ARC) Center of Excellence Symposium, Townsville,  
Australia, 9-12 October 2013 Coral Reefs in the 21st Century  
Plenary Lecture: Reproductive Strategies of Fungiid Corals
- 2013** Eighth International Conference on Coelenterate Biology (ICCB8), Dec 1-7 Eilat, Israel



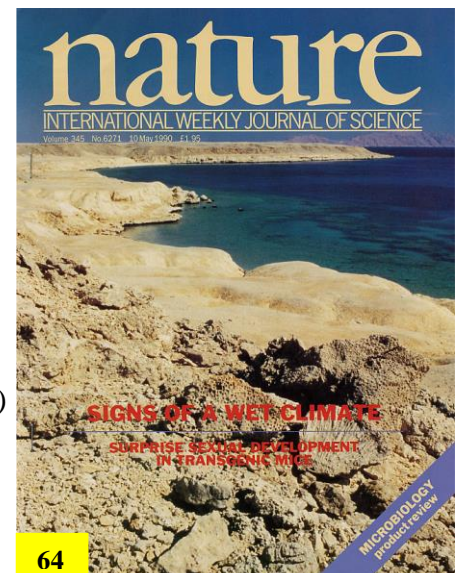
- Plenary Lecture: Reproductive Strategies of Fungiid Corals in the Coral Reefs of Okinawa, Eilat and Aqaba.
- 2014** Second International Mesophotic Coral Reef Workshop (MCEIsrael), Oct. 26-31, Inter-University Institute (IUI), Eilat, Israel (Chairman and organizer of workshop).
- 2015** **Israel's scientific representative in a High-Level Symposium at the United Nations: "One Ocean: Achieving Sustainability through Sanctuaries"** (5 March, 2015)  
Plenary Lecture: "The coral reefs of Eilat: 45 years of coral community studies".
- 2015** Expert Habitat Committee Meeting 10th to 12 March 2015 National Museum of Natural History, Paris "developing a marine habitat classification targeted at coral reefs".
- 2016** Conference on Marine Protected Areas: An Urgent Imperative A Dialogue Between Scientists and Policymakers; the Government of Italy and the Ocean Sanctuary Alliance 7 March 7-10, Rome, Italy.
- 2016** The 13th International Coral Reef Symposium 19-24 June Honolulu, Hawaii.  
Lectures: 1 The Red Sea coral *Euphyllia paradivisa*: Is it really going extinct?  
2. Ecophysiological aspects of depth dependent fluorescence in the coral *Galaxea fascicularis*
- 2016** Eco-Forum Global Conference Guiyang, China 7-14 July.  
Plenary lecture: Coral reefs in an era of Global Climate change.
- 2016** Novel Achievements in Coral-Reef Research in a Period of Global Climate Change: Japan- Israel Workshop under the Auspices of Science Council of Japan and Israel Okinawa Institute of Science and Technology Graduate University (OIST);  
Nov 28-Dec. 2. Organizer of the meeting.  
Plenary lecture: The coral reefs of Eilat: 45 years of community structure studies.
- 2017** The 1st International Symposium on Coral Reefs (Hainan); The 1st International Forum on Coral Reefs; Sanya, Hainan, China Jan. 6-13;  
Lecture: Coral reproduction and sex change.
- 2017** The European Coral Reef Symposium (ECRS) Oxford UK, Dec. 12-14.  
Co-author in posters and lectures presented by three of my students.
- 2018** International symposium on the response of coral symbionts to global climate change and human activities (Haiku, Hainan, China (Dec. 9-10, 2018)  
Plenary lecture: 50 years of coral community structure studies in Eilat, Israel (Red Sea).
- 2018** The Gordon Conference (GRC) on "The Functional Roles of Mesophotic Coral Reefs (MCEs) in the Anthropocene"; Bates College, Lewiston, ME, US; (June 17 – 22).  
Discussion Leader in the session of: "Anthropogenic Change and The Future of Mesophotic Coral Reefs"  
Introductory lecture: "Anthropogenic change and the future of mesophotic coral reefs".
- 2018** MUSÉUM NATIONAL D'HISTOIRE NATURELLE *Flongée-découverte au cœur des récifs*; l'auditorium de la Grande Galerie de l'Évolution.  
France- Israel events celebrating Israel's 70<sup>th</sup> Independence Oct.15, 2018  
Invited public lecture: "growth and senescence in stony corals".
- 2018** Steinhardt Museum of Natural History, Tel Aviv University; France- Israel events Celebrating Israel's 70<sup>th</sup> Independence, Nov. 1, 2018.  
Invited public lecture: "The future of coral reefs in an era of global climate change".
- 2018** International symposium on the response of coral symbionts to global climate change and human activities (Haiku, Hainan, China (Dec. 9-10, 2018)  
Invited plenary lecture: "Five decades of coral community structure studies in Eilat, Israel (Red Sea).
- 2019** A symposium celebrating the 50th anniversary of the Inter University Institute of Marine Sciences (IUI) in Eilat: Red Sea marine ecosystems under anthropogenic changes  
Invited plenary lecture: "The coral reefs of Eilat: 50 years of coral community studies.

**LIST OF PUBLICATIONS**

1. Fishelson L., **Y. Loya (1968)**. Preliminary observations on a population of *Gastrosaccus sanctus* (Van Benden) (Mysidacea Gastrosaccinae) on a Mediterranean sand beach of Israel. **Crustaceana** 15: 149-152.
2. Fishelson L., **Y. Loya (1969)**. Experiments of rearing *Tilapia* hybrids in brackish water ponds near the Dead Sea. **Verh. Internat. Verein. Limnol.** 17: 602-610.
3. **Loya Y., L. Fishelson (1969)**. Ecology of fish breeding in brackish water ponds near the Dead Sea (Israel). **J. Fish Biol.** 1:261-278. DOI:10.1111/j.1095-8649.1969.tb03858.x
4. **Loya Y., L.B. Slobodkin (1971)**. The coral reefs of Eilat (Gulf of Eilat, Red Sea). **Proc. Zool. Soc. London** 28:117-140.
5. **Loya Y. (1972)**. Community structure and species diversity of hermatypic corals at Eilat, Red Sea. **Mar. Biol.** 13:100-123 DOI: 10.1007/BF00366561.
6. **Loya Y. (1975)**. Possible effects of water pollution on the community structure of Red Sea corals. **Mar. Biol.** 29:177-185 DOI: 10.1007/BF00388987.
7. Richman S., **Y. Loya & L.B. Slobodkin (1975)**. The rate of mucus production by corals and its assimilation by the coral reef copepod *Acartia negligens*. **Limno. & Oceanog.** 20:918-923 DOI: 10.4319/lo.1975.20.6.0918.
8. **Loya Y. (1975)**. Environmental predictability in relation to life histories of reef corals. **Proc. Ecol. Soc. Is.** 6:215-223.
9. **Loya Y. (1976a)**. The Red Sea coral *Stylophora pistillata* is an r-strategist. **Nature** 259:478-480 DOI: 10.1038/259478a0.
10. **Loya Y. (1976b)**. Recolonization of Red Sea corals affected by natural catastrophes and man-made perturbations. **Ecology** 57:278-289 DOI:10.2307/1934816
11. **Loya Y. (1976c)**. Effects of water turbidity and sedimentation on community structure of Puerto Rican corals. **Bull. Mar. Sci.** 26:450-466.
12. **Loya Y. (1976d)**. Skeletal regeneration rate in a Red Sea scleractinian coral population. **Nature** 261:490-491 DOI: 10.1038/261490a0.
13. **Loya Y. (1976e)**. Settlement, mortality and recruitment in a Red Sea scleractinian coral population. , pp. 89-100 In: Coelenterate Ecology and Behavior Ed. By G.O. Mackie, Plenum Press, New York and London 744 p.
14. Benayahu Y., **Y. Loya (1977)**. Space partitioning by stony corals, soft corals and algae in the northern Gulf of Eilat, Red Sea. **Helgo. wiss. Meer.**, 30:362-382 DOI: 10.1007/BF02207848
15. Kashman Y., M. Bonder, **Y. Loya & Y. Benayahu (1977)**. Cembranolids from marine origin (Red Sea), survey and isolation of a new Sinulariolid derivative. **Isr. J. Chem.** 16: 1-3 DOI: 10.1002/ijch.197700002.
16. **Loya Y. (1977)**. Biology and Geology of Coral Reefs: A review. O.A. Jones and R. Endean (eds.) **The Quart. Rev. of Biology** 52:110-111.
17. Benayahu Y., **Y. Loya (1977)**. Seasonal occurrence of benthic algae communities and grazing regulation by sea urchins at the coral reefs of Eilat, Red Sea. Third Int. Coral Reef Symp. Miami, Florida, pp. 383-389.
18. Rinkevich B., **Y. Loya (1977)**. Harmful effects of chronic oil pollution on a Red Sea scleractinian coral population. Third Int. Coral Reef Symp. Miami, Florida, pp. 585-591.
19. **Loya Y. (1978)**. Plotless and transect methods. In: Monographs on Oceanic Methodology. Coral Reefs: Research Methods. D.R. Stoddart and R.E. Johannes (eds.). UNESCO Press, 5: 197-218.
20. Bradbury R.H., **Y. Loya (1978)**. A heuristic analysis of spatial patterns of hermatypic corals at Eilat, Red Sea. **American Naturalist**, 112:493-507. DOI: 10.1086/283292
21. **Loya Y. & B. Rinkevich (1979)**. Abortion effects in corals induced by oil-pollution. **Mar. Ecol. Prog. Ser.** 1:77-80. DOI: 10.3354/meps001133
22. Rinkevich B., **Y. Loya (1979a)**. The reproduction of the Red Sea coral *Stylophora pistillata*. I. Gonads and planulae. **Mar. Ecol. Prog. Ser.** 2:133-144. DOI:10.3354/meps001133

23. Rinkevich B., Y. Loya (1979b). The reproduction of the Red Sea coral *Stylophora pistillata*. II. Synchronization in breeding and seasonality of planulae shedding. *Mar. Ecol. Prog. Ser.* 2:145-152. DOI: [10.3354/meps001145](https://doi.org/10.3354/meps001145)
24. Rinkevich B., Y. Loya (1979c). Laboratory experiments on the effects of crude oil on the Red Sea coral *Stylophora pistillata*. *Mar. Pollut. Bull.* 10: 328-330 DOI: [10.1016/0025-326X\(79\)90402-8](https://doi.org/10.1016/0025-326X(79)90402-8).
25. Kashman Y., Y. Loya, M. Bonder & Y. Benayahu (1980). Gas liquid chromatograms of sesquiterpenes as fingerprints for soft coral identifications. *Mar. Biol.* 55:255-259 DOI: [10.1007/BF00393777](https://doi.org/10.1007/BF00393777).
26. Carmely S., Y. Kashman, Y. Loya & Y. Benayahu (1980). New prostoglandin (PGF) derivatives from the soft coral *Lobophytum depressum*. *Tetrahed. Lett.*, 21: 875-878. DOI: [10.1016/S0040-4039\(00\)71531-0](https://doi.org/10.1016/S0040-4039(00)71531-0)
27. Loya Y., B. Rinkevich (1980). Effects of oil pollution on coral reef communities. *Mar. Ecol. Prog. Ser.* 3:167-180. DOI: [10.3354/meps003167](https://doi.org/10.3354/meps003167)
28. Benayahu Y., Y. Loya (1981). Competition for space among coral-reef sessile organisms at Eilat, Red Sea. *Bull. Mar. Sci.* 31: 514-522.
29. Slobodkin L.B., Y. Loya (1981). The Background and History of Ecology in Israel. In: Handbook of Contemporary Developments in World Ecology, E.J. Kormondy and J.F. McCormick (Eds.). Greenwood Press pp. 549-559.
30. Shafir A., Y. Loya (1983). Consumption and assimilation of coral mucus by the burrowing mussel *Lithophaga lessepsiana*. *Bull. Inst. Oceanogr. and Fish.* 9:135-140.
31. Rinkevich B., Y. Loya (1983). Response of zooxanthellae photosynthesis to low concentrations of petroleum hydrocarbons. *Bull. Inst. Oceanogr. and Fish.* 9: 109-115.
32. Rotem M., S. Carmely, Y. Kashman & Y. Loya (1983). Two new antibiotics from the Red Sea sponge *Psammaphysilla purpurea*. *Tetrahedron*, 39:667-676. DOI: [10.1016/S0040-4020\(01\)91843-5](https://doi.org/10.1016/S0040-4020(01)91843-5)
33. Kinamoni Z., A. Groweiss, S. Carmely, Y. Kashman & Y. Loya (1983). Several new cembranoid diterpenes from three soft corals of the Red Sea. *Tetrahedron*, 39:1643-1648 DOI: [10.1016/S0040-4020\(01\)88575-6](https://doi.org/10.1016/S0040-4020(01)88575-6)
34. Rinkevich B., Y. Loya (1983). Intraspecific competitive networks in the Red Sea coral *Stylophora pistillata*. *Coral Reefs*, 1: 161-172 DOI: [10.1007/BF00571193](https://doi.org/10.1007/BF00571193)
35. Rinkevich B., Y. Loya (1983). Oriented translocation of energy in grafted reef corals. *Coral Reefs*, 1: 243-247 DOI: [10.1007/BF00304422](https://doi.org/10.1007/BF00304422).
36. Benayahu Y., Y. Loya (1983). Surface brooding in the Red Sea soft coral *Parerythropodium fulvum fulvum* (Forskal, 1775). *Biol. Bull.* 165:353-369. DOI: [10.2307/1541201](https://doi.org/10.2307/1541201)
37. Rinkevich B., Y. Loya (1983). Short term fate of photosynthetic products in a hermatypic coral. *Jour. Exp. Mar. Biol. and Ecol.* 73: 175-184 DOI: [10.1016/0022-0981\(83\)90082-5](https://doi.org/10.1016/0022-0981(83)90082-5).
38. Carmely S., Y. Loya & Y. Kashman (1983). Siphonellinol, a new triterpene from the marine sponge *Siphonochalina siphonella*. *Tetrahedron Letters*, 24:3673-3676 DOI: [10.1016/S0040-4039\(00\)88198-8](https://doi.org/10.1016/S0040-4039(00)88198-8).
39. Benayahu Y., Y. Loya (1984). Life history of the Red Sea soft coral *Xenia macrospiculata* Gohar, 1940. I. Annual dynamics of gonadal development. *Biol. Bull.* 166:32-43. DOI: [10.2307/1541428](https://doi.org/10.2307/1541428)
40. Benayahu Y., Y. Loya (1984). Life history of the Red Sea soft coral *Xenia macrospiculata* Gohar, 1940. II. Planulae shedding and post larval development. *Biol. Bull.* 166:44-53. DOI: [10.2307/1541429](https://doi.org/10.2307/1541429)
41. Rinkevich B., Y. Loya (1984). Does light enhance calcification in hermatypic corals? *Mar. Biol.* 80: 1-6. DOI: [10.1007/BF00393120](https://doi.org/10.1007/BF00393120)
42. Loya Y., G. Bull and M. Pichon. (1984). Tumor formations in scleractinian corals. *Helgolander wiss. Meeresunters.* 37:99-112. DOI: [10.1007/BF01989297](https://doi.org/10.1007/BF01989297)
43. Rinkevich B., Y. Loya (1984). Coral illumination through an optic glass-fiber: incorporation of <sup>14</sup>C photosynthates. *Mar. Biol.* 80:7-15. DOI: [10.1007/BF00393121](https://doi.org/10.1007/BF00393121)
44. Benayahu Y., Y. Loya (1984). Substratum preferences and planulae settling of two Red Sea soft corals: *Xenia macrospiculata* and *Parerythropodium fulvum fulvum*. *J. Exp. Mar. Biol. Ecol.* 83:249-261. DOI: [10.1016/S0022-0981\(84\)80004-0](https://doi.org/10.1016/S0022-0981(84)80004-0)

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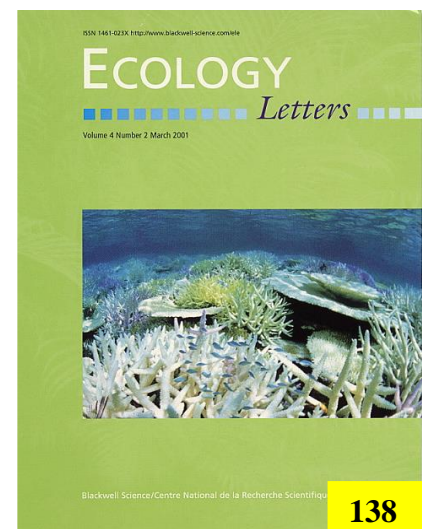
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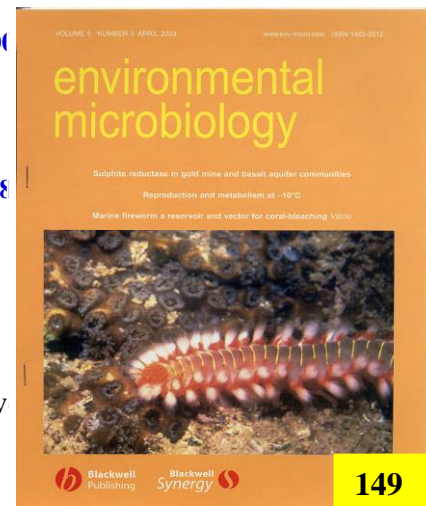
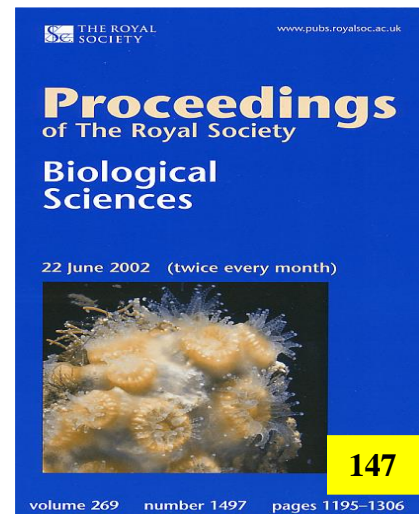




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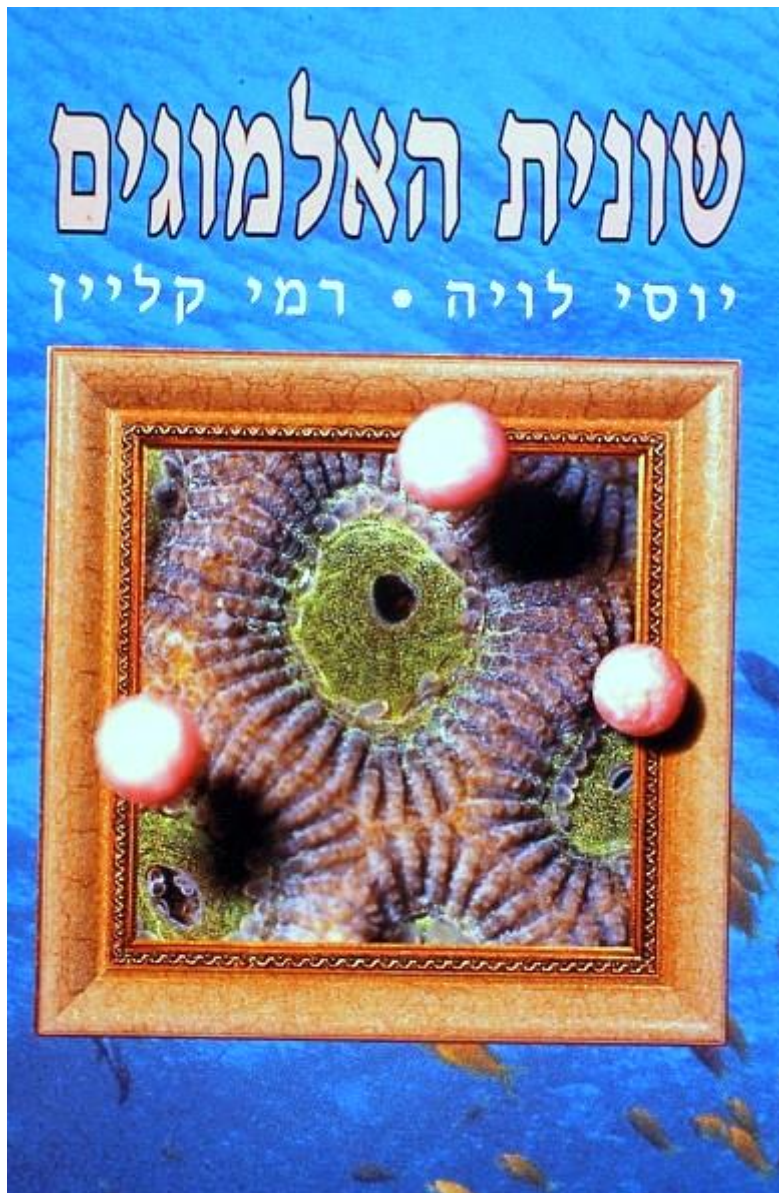
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320p (in Hebrew)

Ministry of Defense publishing House



## Book

**Y. Loya and R. Klein (1996)**

***"Die Welt der Korallen"* (1996)**

**Jahr-Verlag GmbH & Co. Hamburg 312 p**



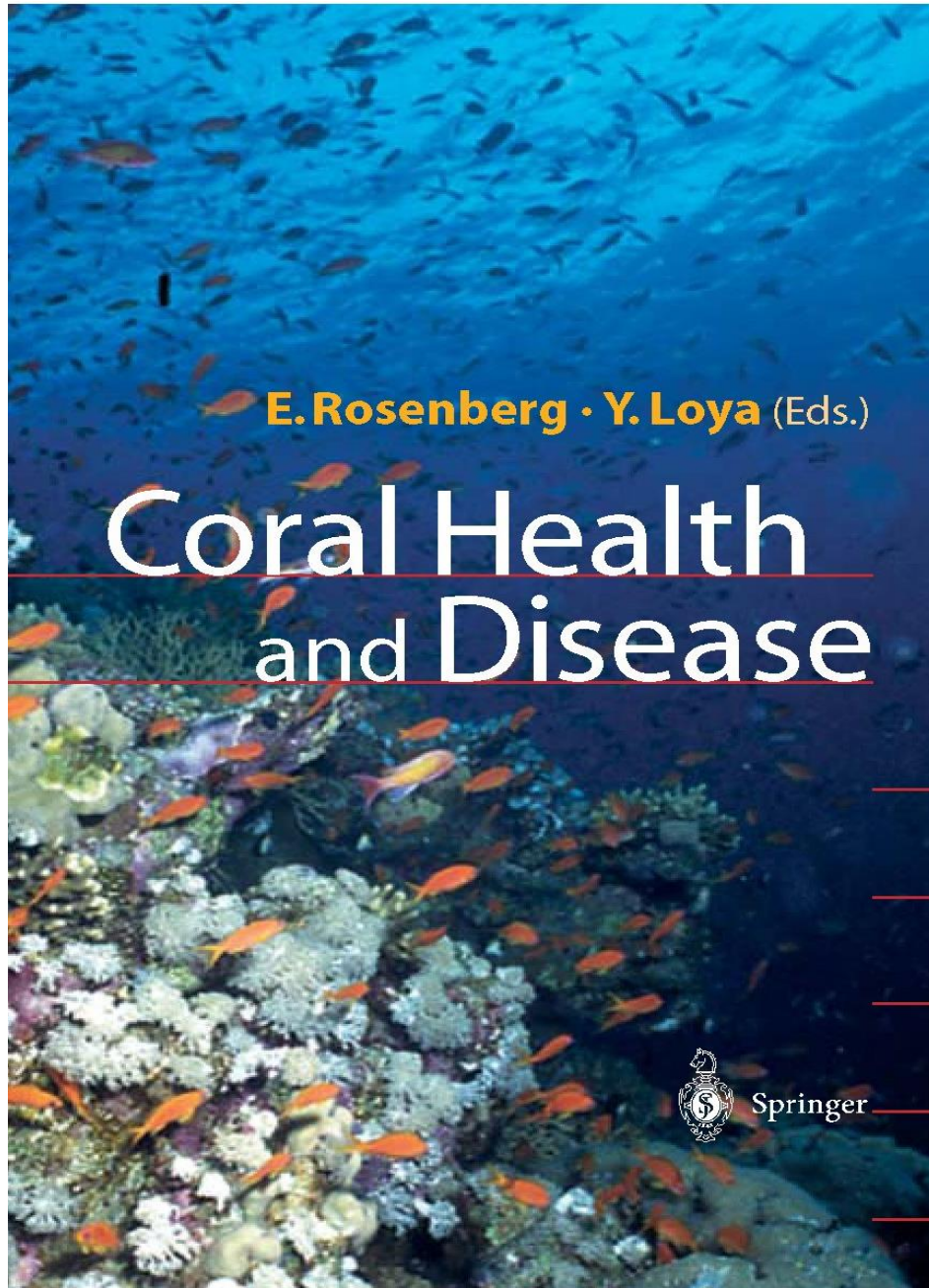
## Book

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**E. Rosenberg . Y. Loya (Eds).**

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ISBN-13: 978-3540207726

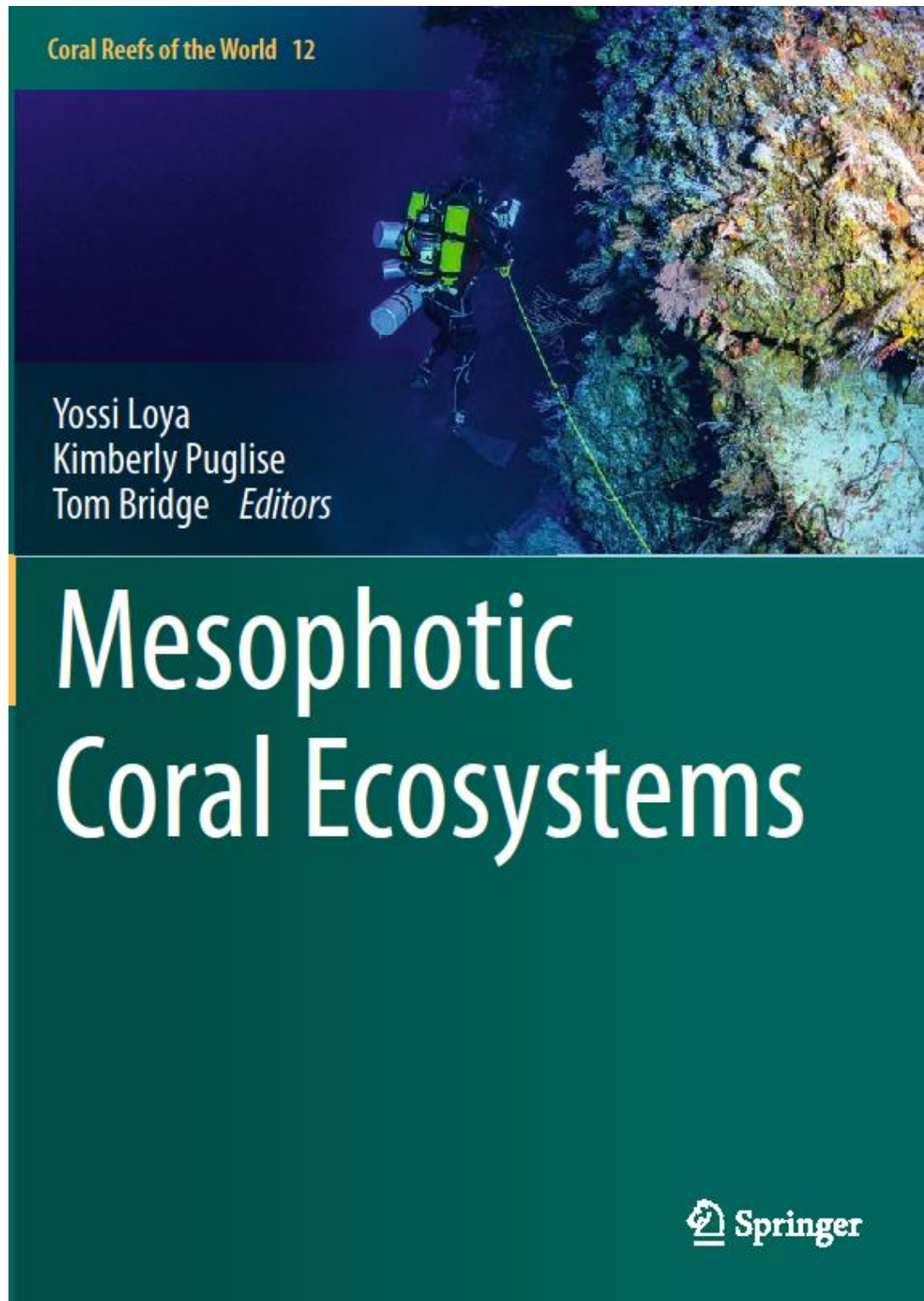


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# My theme

## Effects of natural and anthropogenic disturbances on coral reef communities

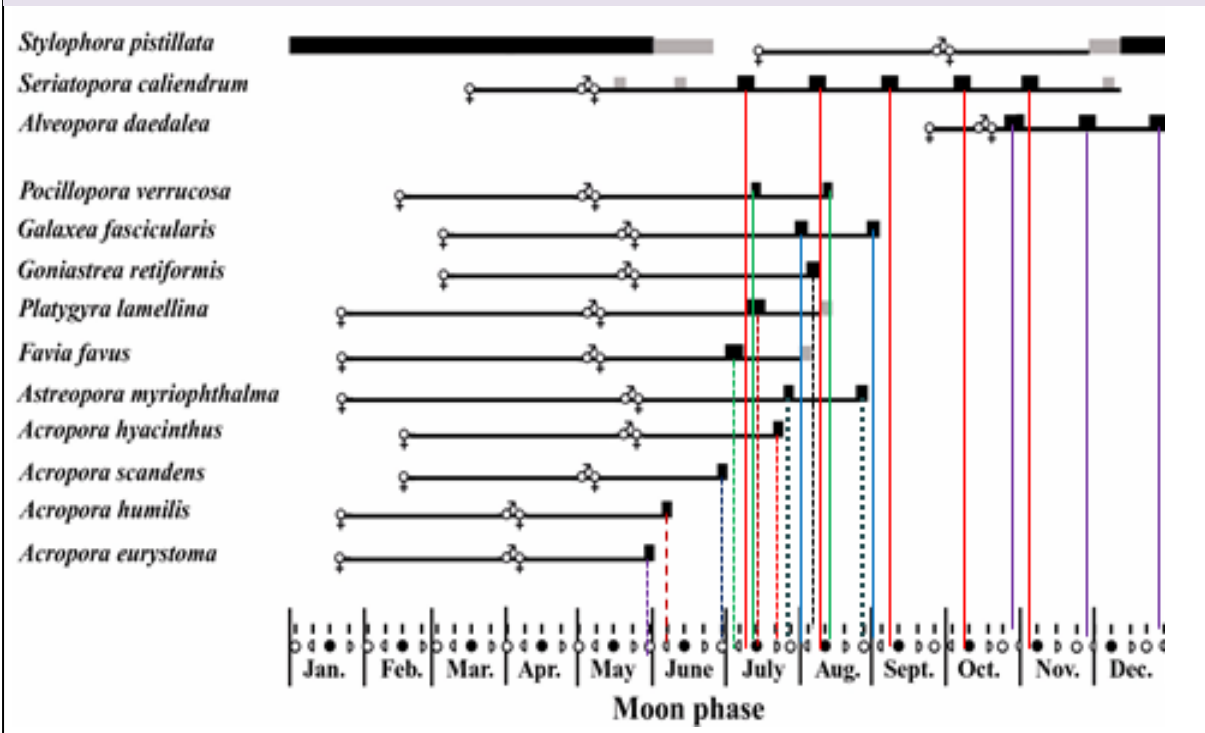


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## Life history strategies of reef corals

### Coral community reproductive patterns: Red Sea versus the Great Barrier Reef Yechiam Shlesinger & Yossi Loya (1985). *Science* (1985)



In contrast to many corals of the Great Barrier Reef, Australia, which are synchronous multispecific spawners, the abundant coral species in the northern Red Sea, Israel, exhibit temporal reproductive isolation. Spawning periods of the most abundant coral species occurred in different seasons, different months, or different lunar phases within the same month.

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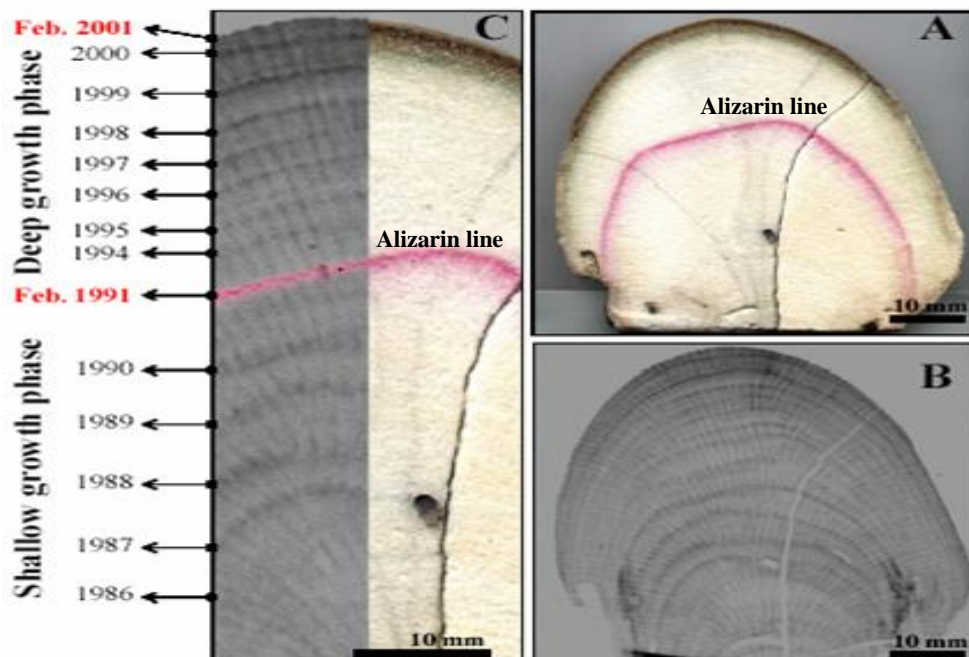
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[See also: Conservation Ecology of Coral-Reefs p. 43](#)

## The use of contemporary corals in predictive Models concerned with global climate change



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**in search for new drugs** (in collaboration with Y. Kashman, TAU)



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## Global climate changes and its effect on biodiversity of coral reef

**communities: WORLD BANK/ UNESCO Project on the consequences of Coral Bleaching in the Great Barrier Reef (Australia), Zanzibar, Philippines & Mexico** ([bleaching working group](http://www.gefcoral.org/) <http://www.gefcoral.org/>)

**The Bleaching Working Group (BWG)** has set established permanent study sites in Zanzibar, Puerto Morelos and Heron Island. At these sites, researchers are exploring the population dynamics under natural and perturbed conditions, as well as spatial patterns in population size frequency distributions and temporal changes of the populations in and out of bleaching events. Work within this research area also aims to resolve the potential impacts of changes in coral health on the many other species that are dependent on coral reefs for food and shelter.



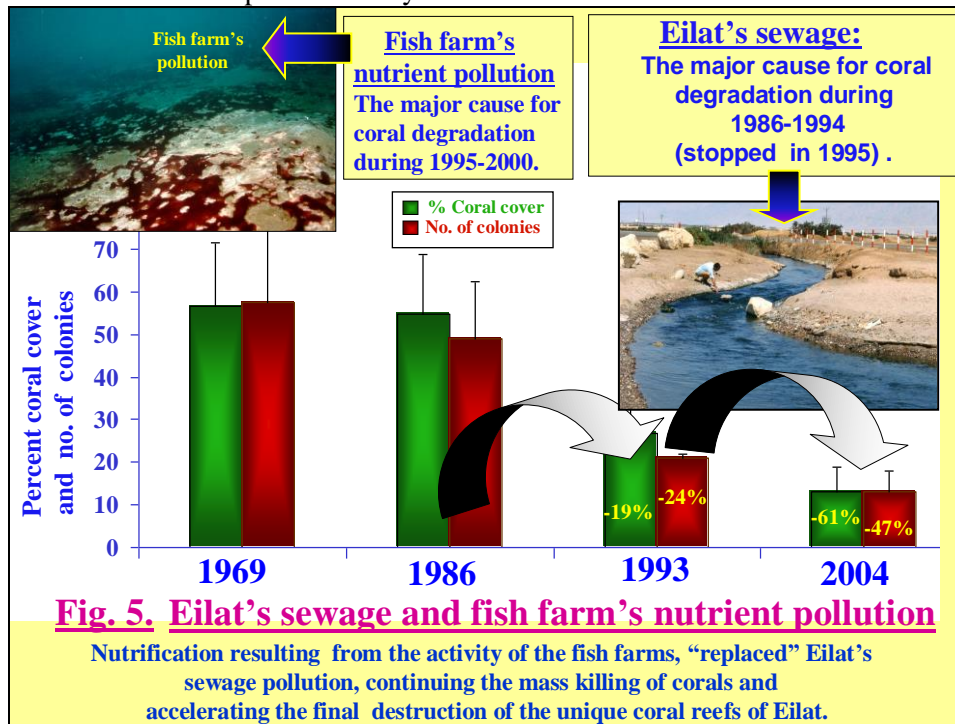
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## Conservation Ecology of Coral-Reefs

# The coral reefs of Eilat: Past, present and future

**Deterioration** in water quality due to eutrophication adversely affects coral reef community structure by promoting algal growth and turbidity, reducing light necessary for coral growth, adversely affects coral reproduction and has also been associated with increased bioerosion and epizootics. During the last 10 years, the yield of the fish farm industry in Eilat has grown exponentially from 300 tons/yr in 1994 to 2700 tons/yr in 2005. Cultured fish fed by 4500 tons/year “fish pellets” result in nutrient pollution (eutrophication), of the water column by 300 tons of Nitrogen and 50 tons of Phosphate annually.



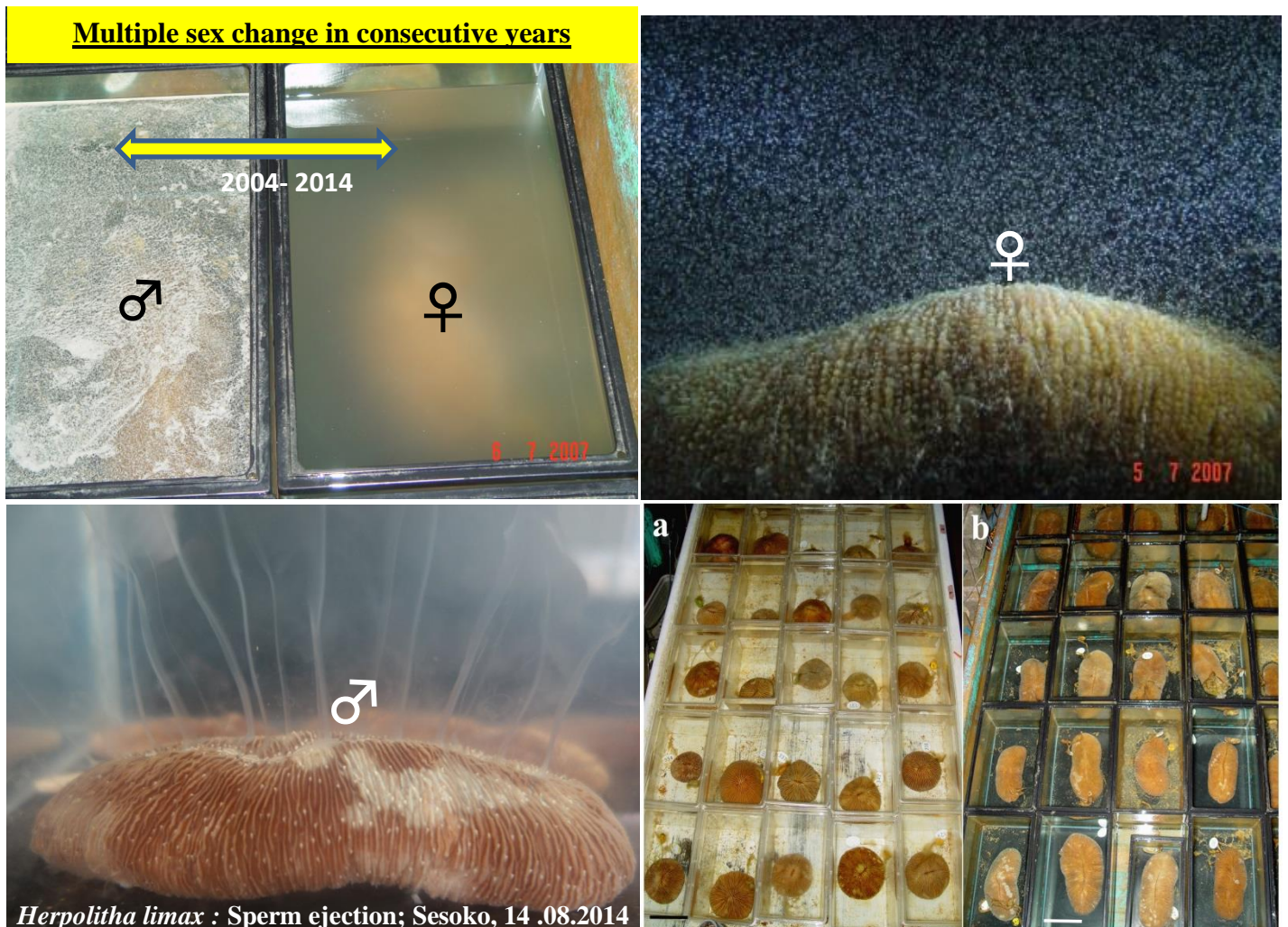
➤ **2009 After government rule: Fish cages were removed from the northern Gulf of Eilat !**

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## Repetitive sex change in Fungiid species

In this study, we describe for the first time sex change occurring in corals. This includes a novel mode of repetitive sex change, which resembles that found in plants that display labile sexuality in response to environmental and/or energetic constraints. We suggest that resource partitioning in sex-allocation constitutes a flexible response of sex changing fungiid corals to local environmental conditions, and that their bidirectional sex shift reflects energy constraints on female reproduction. We discuss some intriguing analogies between the studied corals to sexually labile plants and posit that sex change in fungiid individuals enhances their fitness in a similar way to that which occurs in those plants. The novel finding of sex change in scleractinian corals reinforces the important role of reproductive plasticity in determining the evolutionary success of the Phylum Cnidaria



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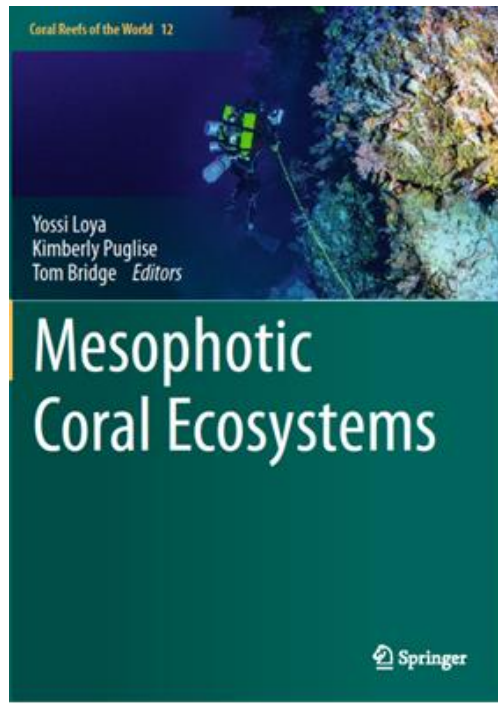
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## **Mesophotic Coral Ecosystems (MCEs)**

Mesophotic coral ecosystems (MCEs) are unique tropical and subtropical ecosystems characterized as light-dependent reef communities typically found at depths ranging from 30–40 m and extending to over 150 m in clear waters. This book provides the first comprehensive synthesis of the state of knowledge about MCEs worldwide. It also highlights how much we still have to learn. We invited authors to submit manuscripts focused on identified topics, with the co-authors of their choosing. Each manuscript underwent technical review by scientific and management experts to ensure its scientific integrity. The peer-review process consisted of over 200 individual reviews that were used by the authors to improve their manuscripts.

### **See examples:**



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Or Ben-Zvi, Gal Eyal and **Yossi Loya (2019)** Response of fluorescence morphs of the mesophotic coral *Euphyllia paradivisa* to ultra-violet radiation ***Sci. Rep. (in press)***

Raz Tamir, Gal Eyal, Netanel Kramer, Jack H. Laverick and **Yossi Loya (2019)**. Light environment drives the shallow to mesophotic coral community transition ***Ecosphere* 10(9)1–18 <https://doi.org/10.1002/ecs2.2839>**

**Cover publications:**  
Encircled numbers correspond to their publication number in full CV  
See: <http://en-lifesci.tau.ac.il/profile/vosiloya>

