

June 2023 – Long version

Prof. Thomas Abeli

Conservation Biologist, Plant Ecologist



Personal information

Place and date of birth: Voghera, 17 April 1983
 Permanent address: Via Indipendenza 19, 27100, Pavia, Italy
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Career summary

1st March 2019: Permanent position. Associate Professor (Conservation Biology) at the Department of Science of the University of Roma Tre, Roma.

2018: National Scientific Qualification for the position of Full Professor in Applied and Environmental Botany

2016-2018: Head of the research unit of UNIPV for the LIFE project LIFE14 NAT/IT/000759 “Conservation of amphibians and butterflies of open wet areas and their habitats at the Foreste Casentinesi National Park”

2007-2010: PhD in Experimental Ecology and Geobotany

Associated Editor of Plant Ecology (Springer).

Published articles: 87; Citations: 1305; H-Index: 22 (Scopus)

Research topics:

My research activity can be assigned to three main research fields: first, the research on the effect of climate change and connected processes on plant species and community, with a special focus on alpine areas (Alps, Apennines) and partially on arctic and sub-arctic areas. Second, the research (and practical activities) on plant conservation in highly impacted lowland areas (Po Valley, N-Italy) and mountains (Alps). The latter include the study of how modern agriculture practices affect threatened plant species and communities, with a focus on wetland dependent and grassland species. Third, I study the potential role of landraces and crop wild relatives in modern agriculture. The study of landraces focuses on their potential use as “new” products for the markets (through the identification and their characterization), while the study of crop wild relatives focuses on the identification of interesting ecological traits (resistance or tolerance traits) for their use as a source of genetic variation in the pre-breeding phase of crops.

Furthermore, I have marginally worked on plant-insect interactions in some occasions. I studied the relationships between pollen limitation, fruiting failure and bumblebee activity in the northern orchid *Calypso bulbosa* and I’m currently studying pollinators of *Leucojum aestivum*.

Effects of climate change on cold-adapted plant species and communities

Two approaches are used: 1) long-term monitoring of geographically and ecologically marginal plant populations and their response to warming, climate fluctuation and extreme events; 2) experimental field and lab manipulations of ecological conditions (climate, soil, etc.) to investigate the response of plants to ecological cues, climate *in primis*. Field works are concentrated in the Apennines, Alps, and recently in Himalaya. Plant traits evaluated in these studies are basically the reproductive performance, the seed germination and the seedling establishment. I am part of the GLORIA project (GLobal Observation Research Initiative in Alpine environments) for two target regions (N-Apennines and Orobian Alps). This worldwide project monitors the changes in the vegetation patterns and upward migration of plants at high altitudes.

Conservation Biology

The conservation topic is targeted on wetland plant species and communities. The context in which I operate is the Po Valley, one of the most populated areas of the world, where agriculture and industrial activities represent the most important pressures to biodiversity. Research and activities on conservation span from the application of the IUCN Categories and Criteria for the assessment of the species conservation status to plant reintroduction and ecological restoration. I significantly contributed to the EU Red List, the Mediterranean Red List and the Italian Red List and investigates the applicability of the IUCN protocol and its effectiveness. Most research is dedicated to the translocation of plants, habitat restoration and management. I performed ecological studies on several wetland species like *Stratiotes aloides*, *Isoetes malinverniana*, *Leucosium aestivum* and recently *Marsilea quadrifolia* and from these studies translocation projects are put in practice. Beside single species conservation studies and projects, I studied the conservation issues related to the abandonment of alpine pastures, with a special focus on the EU habitat 6230, evaluating the species richness, diversity and palatability for cattle of abandoned, partially abandoned and used pastures. Moreover, I am currently head of the unit of UNIPV in a LIFE project for the restoration of the EU habitat 6430 (*Hydrophilous tall herb fringe communities*), that, in the context of the project is important for the reproduction of several threatened amphibia. My reputation in this field resulted in an invitation to the International Botanical Congress in Shenzhen, China (July 2017) with a review on wetland plant translocation.

Study of Landraces and crop wild relatives

Research on landraces include the search and identification of almost abandoned local varieties of modern vegetable and arable crops and the study of their potential as “new” product for the local markets or for the organic farming systems (see project V.C.L.R.). In particular, I focused my attention on pumpkins, onions and on buckwheat, through the morphological and genetic characterization of different landraces. For what concern the crop wild relatives, most activities have been carried out on the genus *Aegilops* (relative of wheat) and on the search of tolerance traits to drought, by comparing different populations from different ecological conditions. A similar approach has been used for the identification of tolerance traits to drought on watermelon relatives.

Education

PhD: 2007 – 2010. Experimental Ecology and Geobotany, Faculty of Natural Science, University of Pavia, Italy. Thesis title: *Survival of small isolated plant populations: an integrated approach to evaluate population viability for future conservation actions*. Supervisors: Prof. G. Rossi, Dott. G. Parolo (University of Pavia); Prof. D. Matthies (Phillips University, Marburg, Germany).

Master Degree: 2005 – 2007. Scienze della Natura (Natural Science), University of Pavia. **110/110 with honours.** Thesis title: *Applicazione delle categorie di minaccia IUCN a livello biogeografico: le piante con popolazioni al limite di areale in Appennino settentrionale*. Supervisors: Prof. G. Rossi, Dott. G. Parolo.

Language

Language	Reading	Writing	Speaking	Comprehension
Italian: First Language				
English	Excellent	Good	Excellent	Excellent

2011: **IELTS test 6,5/9 before traveling to Australia from July 2011 to January 2012**

Professional experiences - Positions

2019 (1st March) – ongoing: Associate Professor of Applied Botany at the Department of Science of the University of Roma3, Roma. Permanent position.

2018 (November)-2019 (February) – Research Fellow at the Department of Life Sciences, University of Trieste, Italy.

2013 (July)-2018 (October) – Post-doc position. Department of Earth and Environmental Sciences, University of Pavia, Italy.

2012 (September)-2013 (June) – Research contract with the University of Pavia on the ecological characterization of local crop landraces and crop wild relatives.

2011 (August)-2012 (June) Sabbatical in Australia

2007-2010 – PhD position at the University of Pavia (see Education section)

2009 – Field assistant for the ENSCONET 5th Annual General Meeting and ENSCONET Seed Collecting Workshop, Trento, Italy.

2008 – Field assistant for the GLORIA Project (The Global Observation Research Initiative in Alpine Environments), resurvey 2008, Target Region Northern Apennines (IT-NAP). Tasks: monitoring changes in the summit flora of the target region.

2006 – Field assistant for the inventory and monitoring of the Flora of Val Viola, Central Alps, Italy.

Field assistant for the inventory and monitoring of the partridge in the Sardinia Island, Sardinia, Italy.

Projects and coordination experiences

Ongoing – Contract with the **IUCN**, European Union Representative Office a.i.s.b.l., for “**Providing technical and scientific support in measuring the pulse of European biodiversity using the Red List Index**”. Contribution: **12,000 €**.

2022 - Contract with the Council of Europe, Directorate General of Democracy, Directorate of Democratic Participation, Department of Culture, Nature and Heritage, Bern Convention for “Revise 1st and 2nd draft of

the Guidance on communication on IAS and participation on the 42nd Standing Committee”. Contribution: **3650,00 €**.

- 2022 – **Conference organizer and chair** of the 1st International Plant Translocation Conference. Department of Sciences, University of Roma Tre. 20-23 June 2022, Rome. Website: <https://host.uniroma3.it/eventi/IPTC2022/>
- 2021 – Granted by **Cost Action CA18201 “Conserve Plants”** for the organization of the training school “Plant Translocation – Theory and Techniques” held from 24-26 March 2021.
- 2020 – Granted by **Darwin Initiatives Partnership Projects Round 26** for the networking project “Community action and research linkages for plant conservation in Kenya”, with Plants for Life as a partner. Contribution of £ 5,630.00.
- 2019 – Granted by the **European Commission** with a **Marie Curie Individual Fellowship for the proposal 829287 PHOTOCCLIM** “*Response of arctic and alpine ecosystems to photoperiod-climate interaction in the context of climate change*” with the University of Bern as hosting institution and **with a contribution of 203,149.44 €**. Unable to accept the grant due to the incompatibility with the permanent position of Associate Professor.
- 2018 – Main responsibility for the University of Pavia for the **project H2020** “Long-term ecosystem and socio-ecological research infrastructure – eLTER H2020” coordinated by the Environment Agency Austria and managed in Italy by the National Research Council. UNIPV participates to the project as a third party with a contribution of **5,391.63 €**.
- 2016-2018 – Main scientific responsibility for UNIPV for the EU LIFE Project Nature and Biodiversity “*Conservation of amphibians and butterflies of open wet areas and their habitats at the Foreste Casentinesi National Park*” LIFE14 NAT/IT/000759. **Contribution for UNIPV: 144,000 €**; Total contribution: 1,596,342 €; Coordinator: Parco Nazionale delle Foreste Casentinesi; Duration: 72 months; Funding source: EU Commission. <http://www.lifewetflyamphibia.eu/en/>
- 2015-2018 – Main responsibility for the Project “*Reintroduzione di Isoetes malinverniana nel Parco Lombardo della Valle del Ticino*” **Contribution for UNIPV: 43,300 €**; Coordinator: single partner UNIPV; Duration: 48; Funding source: Parco Lombardo della Valle del Ticino
- 2012 – Main scientific responsibility for the production of the book “*Orchidee Spontanee dell’Appennino Pavese*” [Orchids of the Pavia Province]. **Contribution: 10.000 €**; Duration: 12 months; Funding source: Fondazione Comunitaria della Provincia di Pavia. <http://www.floraitaliae.actaplantarum.org/viewtopic.php?t=41317>
- 2010 – Granted for the project “*Pollination biology of Calypso bulbosa*”. **Contribution 3,600 €**; Duration: 3 months; Funding source: Centre for International Mobility, Finland; Supervisor: Prof. Juha Tuomi (University of Oulu, Finland). Activity carried out at the Oulanka Research Station of the University of Oulu.

Involved in the management of the following projects:

- 2020 – ongoing: Nominated as **Management Committee Substitute** (05/06/2020) in the Cost Action CA18201 - An integrated approach to conservation of threatened plants for the 21st Century. Member of Working Group 2 “Sharing experience in plant ex situ conservation” within the same Cost Action.
- 2017-2018 – Project *ATTIV-AREE: Oltrepò Biodiverso, la natura che accoglie*. Fondazione Oltrepò. <http://www.gal-oltrepo.it/oltrepo-biodiverso-la-natura-che-accoglie/>
- 2014-2016 – Project PRIMTECH “*Advanced Priming Technologies for the Lombardy Agro-Seed Industry*”. Regione Lombardia & Fondazione Cariplo. <http://www-4.unipv.it/primtech/>

2012-2014 – Project V.C.L.R. “*Produzione di potenziali Varietà da Conservazione ortive ed agrarie Lombarde Registrate*”. Regione Lombardia. <http://www.labecove.it/download/landraces/SintesiProgettoVCLR.pdf>

Involved as member of the research unit in the following projects:

2021-2022 – Project AQUAFOOD - Microalghe per la rimozione di metalli pesanti e metalloidi dall'acqua: sicurezza delle colture alimentari integrate, recupero di prodotti algali con alto valore intrinseco e riciclo dell'acqua [Microalgae for the removal of heavy metals and metalloids from water: safety of integrated food crops, recovery of algal products with high intrinsic value and recycling of water].

2018-2020 – Project “supporto tecnico-scientifico per l’elaborazione del IV Rapporto nazionale ex art. 17 per le specie e gli habitat terrestri e delle acque interne tutelati dalla Direttiva 92/43/CEE- Lotto n. 1 “Specie vegetali e habitat” [technical support for the IV national report ex art. 17 for terrestrial and freshwater species and habitats protected by the Directive 92/43/EEC - Lotto n. 1 “Specie vegetali e habitat].

2018 – Project “Assistenza coordinata alla pianificazione e realizzazione del monitoraggio delle specie vegetali e degli habitat inseriti negli allegati della dir. 92/43/CEE” – Parco Nazionale della Val Grande. [Project for the monitoring and research on habitat Directive (92/43/EEC) plant species and habitats in the Parco Nazionale della Val Grande].

2018 – Project “Assistenza coordinata alla pianificazione e realizzazione del monitoraggio delle specie vegetali e degli habitat inseriti negli allegati della dir. 92/43/CEE” – Parco Nazionale delle Dolomiti Bellunesi. [Project for the monitoring and research on habitat Directive (92/43/EEC) plant species and habitats in the Parco Nazionale delle Dolomiti Bellunesi].

2017-2018 – Development of Action Plans for the species of the habitat directive 92/43/EEC occurring in Lombardy.

2016-2018 – Project “*European Alpine conservation and research project*”. David and Claudia Harding. <http://www.alpineseedconservation.eu/>

2013-2015 – Project “*Adapting Agriculture to Climate Change: Collecting, Protecting and Preparing Crop Wild Relatives*” – Global Crop Diversity Trust & Millennium Seed Bank. <https://www.croptrust.org/our-work/supporting-crop-conservation/crop-wild-relatives/>

2013-2015 – Project of National Interest NextData. *A national system for the retrieval, storage, access and diffusion of environmental and climate data from mountain and marine areas*. Pilot project “*Effetti del cambiamento climatico sulle piante alpine*”. http://www.nextdataproject.it/sites/default/files/docs/WP1.7_ITA_2014_0.pdf

2012-2015 – Project SHARE “*Stations at High Altitude for Research on the Environment*”, research activity on “Climate change and expected impacts on alpine flora”

2009-2011 – Project ACE_SAP “*Ecosistemi alpini e cambiamento ambientale. Sensibilità e potenziale adattativo della biodiversità*” - Provincia Autonoma di Trento. http://www.acesap.it/acesap_news_detail.jsp?ID_NEWS=620&areaNews=82>emplate=acesap_home.jsp

Participation to workshops related to project preparation and management

2015 – Conference “Marie Skłodowska-Curie Actions in H2020 MSCA: bridging Business and research”. 6th June Milan.

2014 – Conference: “Importance of Communication and Dissemination for the EU Commission”, with practical training. 18th November, Pavia.

Teaching

Teaching at the Department of Science of the University of Roma Tre

2019-ongoing – Course of Conservation Biology (BIO/03), Master Course in Biodiversity and Ecosystem Management; Course of Botany (BIO/01-02-03), Bachelor Course in Science for Nature Protection and Sustainability.

2021 – Introduction to Biology (BIO/13), Bachelor Course in Biology.

2018-2019 – Lab. activities for the Course of Botany. Bachelor in Biology. University of Roma Tre.

2018 – **National Scientific Qualification for the position of Full Professor (Applied and Environmental Botany)**. Call D.D. 1532/2016. Valid until 6/11/2024.

2018 – Qualification for the position of professor and researcher in the university system of Catalunya (Agència per a la Qualitat del Sistema Universitari de Catalunya).

International teaching

2021 – **Course leader for the course entitled “Plant translocation: theory and techniques”**, University of Roma Tre, Rome, 24-26 March.

2019 – **Course leader for the course entitled “Plant translocation: theory and techniques”**, Liverpool John Moores University, Liverpool, UK, 29 April - 02 May.

2018 – **Course leader for the course entitled “Plant translocation: theory and techniques”**, Liverpool John Moores University, Liverpool, UK, 30 April - 05 May.

2017 – **Course leader for the course entitled “Plant translocation: theory and techniques”**, Omsk State Pedagogical University, Omsk, Russia, 13-28 May. <https://www.researchgate.net/project/Plant-Translocation-research-and-perspectives>.

Teaching at the Department of Earth and Environmental Sciences of the University of Pavia

2017-2018 – Adjunct professor for the Laboratory of Conservation of the Genetic Resources (3 ECTS), Department of Earth and Environmental Sciences, University of Pavia.

2016-2017, 2015-2016 – Adjunct professor for the course of Applied Botany (3 ECTS), Department of Earth and Environmental Sciences, University of Pavia.

2012 – Tutor for the course of Environmental and Applied Botany and the Laboratory of Plant Ecology and Conservation. University of Pavia.

Post-graduate professional programs

2015, 2016, 2017 – Teacher of Forensic Botany for the post-graduate course “Scienze Forensi: approccio biologico-naturalistico, analitico, interpretativo”, University of Pavia. 6-10 February. 10 hours/year (total 30 h). <https://spmsf.unipv.it/master/sfor/il-master/docenti.html>

Other teaching and seminars

- 2021 – Invited lecture “*Collezioni ex situ e il loro ruolo nella conservazione delle specie minacciate*” Ciclo di conferenze online per i 250 anni dell’Orto Botanico di Ferrara. 22-04-2021.
- 2020 – Invited lecture “*Plant Translocation – Theory and Techniques*” within the course “Environmental restoration Unit” Bachelor of Science, year 2 and 3. School of Molecular and Life Sciences” Curtin University, Perth, Australia. 01-10-2020.
- 2014 – Seminar “*Plant population study and sampling*”. NASSTEC PhD induction course, a special PhD course created within the framework of the Marie Curie International Training Network (ITN), 23-28 October 2014.
- 2014 – Invited lecture “*Extreme weather events: the dark side of global climate change*” Millennium Seed Bank, Royal Botanic Garden, Wakehursts Place, UK. 29-10-2014.
- 2014 – Invited lecture “*Assessing species conservation status through red lists: a focus on Policy Species*”. University of Oulu, 23-01-2014.

Thesis supervisor

Since 2007, I supervised/co-supervised 11 Bachelor students and 8 Master students. Topics of the theses span from effect of climate change on plants, including extreme events and rare plant translocation.

Activity within PhD programs

Since 2019 - Member of the PhD Committee, PhD in Biology, Biotechnology, and Environmental Biology, at the University of Roma Tre.

PhD supervision/co-supervision

Martina D’Agostino, PhD in Biology, Biotechnology, and Environmental Biology, 37° cycle. Research title: Utilizzo e conservazione di specie segetali rare e in declino per il ripristino degli agro-ecosistemi.

Giulia Albani Rocchetti, PhD in Biology, Biotechnology, and Environmental Biology, 35° cycle. Research title: The role of old seed collections for plant de-extinction and quasi-in-situ reintroduction approaches.

Anna Corli, PhD in Earth and Environmental Sciences, University of Pavia. Title: *Competition or facilitation? Studies of wetland plant species in natural environment and agro-ecosystems for future translocation perspectives.*

Filippo Guzzon, PhD in Earth and Environmental Sciences, University of Pavia. Title: *Seed ecology and ex situ conservation of Aegilops and Citrullus in the context of climate change.*

Other supervision

2020 - External examiner of Fiona White PhD candidate at the Department of Earth and Environmental Sciences, University of Pavia for the research “Integrating ex situ seed conservation and plant translocations in the context of climate change”.

2020 - Local (University of Roma Tre) supervisor of Giulia Albani Rocchetti for the Short-Term Scientific Mission (STSM) “TESTING SEED GERMINATION FROM OLD HERBARIUM SPECIMENS FOR CONSERVATION

PURPOSES” for a short-term mission at Meise Botanic Garden (Belgium) from 27-01-2020 to 25-02-2020. Grant number: ECOST-STSM-Request-CA18201-46128.

Institutional responsibility

- 2023-Ongoing – Nominated as a **member of the Scientific Committee** of the Botanical Garden of Pavia.
- 2022-Ongoing – Nominated as a **member of the Scientific Committee** of the Botanical Garden of Rome.
- 2021-Ongoing - **Member of the Student-Teacher Commission [Commissione Paritetica]** for the Bachelor’s course in Nature protection and sustainability of the University of Roma Tre.
- 2020-Ongoing – **Member of the Commissione Didattica Permanente and Commissione del Riesame for the Bachelor’s course in Nature protection and sustainability of the University of Roma Tre.** Department of Science, University Roma Tre.
- 2019-Ongoing – **Member of the Commission on Sustainable Development and delegate of the Head of Department for the working group of the University of Roma Tre on Sustainable Development.** Department of Science, University Roma Tre.
- 2015-2018 – **Member of the Research Monitoring and Development Commission of the Department** of Earth and Environmental Sciences of the University of Pavia.
- 2014-2018 – **Representative of research fellows and post-docs in the administrative organs of the Department** of Earth and Environmental Sciences of the University of Pavia. Elected for the first time for the biennium 2014-2016 and re-elected for the biennium 2016-2018.

Awards

- 2018 – Awarded with the Seal of Excellence” from the European Commission for the Marie-Sklodovska Curie project “Response of arctic and alpine ecosystems to photoperiod-climate interaction in the context of climate change; PHOTOCCLIM”, with a score of 91/100.
- 2017 – Granted by “ERASMUS teaching staff” for the second edition of the course “Plant Translocation: Theory and Techniques” at John Moores University, Liverpool. April 2018.
- 2016 – Awarded by the Italian Botanical Society with a travel grant for the 111^o International Congress of the Italian Botanical Society, Rome, 20-23 September 2016.
- 2014 – Awarded by the ENSCONET Consortium with a travel grant for research activity at the Millennium Seed Bank, Royal botanic Gardens, UK.
- 2014 – Awarded by the New Phytologist Trust with a travel grant for the “*New Phytologist next generation scientists’ meeting*” Nowrich (UK) 29th – 30th July 2014.

Editorial duties

2012-Today – **Associated Editor of the Journal Plant Ecology**

2021 – External reviewer for Springer Nature for the book proposal “Plant Ecology of Indian Himalaya” by Dr. Rajendra Mohan Panda.

2019-2020 – **Guest editor** of the Virtual Special Issue “Frankenstein's work or everyday conservation? Examining plant de-extinction in practice”, Journal for Nature Conservation.

2016 – **Guest editor** of the Special Issue “The role of ecological sciences in plant translocation” Plant Ecology, volume 217 (2).

2015 – **International reviewer** for a project of the Czech Academy of Sciences (info on the project confidential).

2014 – **Guest editor** of the Special Issue “Living with extreme” Plant Ecology volume 215 (7).

2011 – **International reviewer** for the PhD thesis R.F. Zamudio - Plantas acuáticas del Parque Nacional de Doñana, University of Sevilla, Spain.

Reviewer for several international journals: Global Change Biology, New Phytologist, Conservation Biology, Journal of Biogeography, Frontiers in Plant Science, Biological Conservation, BMC Evolutionary Biology, PlosOne, Climatic Change, Ecology and Evolution, Oecologia, Global Ecology and Conservation, PeerJ, Journal for Nature Conservation, Aquatic Botany, Plant Ecology, Plant Diversity, Biology, Flora, Hydrobiologia, Israel Journal of Plant Science, Journal of Agricultural Science and Technology, Land Degradation, American Fern Journal, Wildlife Society Bulletin, Sibbaldia.

Computer skills:

Excellent knowledge of the computer packages Office, Acrobat, Adobe PhotoShop, Gimps, Digital Photo Professional; **GIS** softwares (Arcview 3.2, Qgis) to create maps and thematic maps, digitalization, definition of species range, DEM, geographic parameter measurements, habitat mapping, etc.); **differential GPSs** and their softwares. **Statistical analysis** with SPSS, Canoco, PAST, basic knowledge of Origin and R. Excellent internet skills (Internet Explorer, FireFox, GoogleChrome) and use of online source database (SCOPUS, Web of Science, PubMed). Statistical skills were improved with participation to the following courses: 2008 - Course “Statistical Analyses for Botanists and Ecologists” held by Prof. Jan Leps at the University of Siena and 2008 - Course “Statistics”. held by Prof. Lorenzo Fattorini, at the University of Pavia.

Other international activities and collaborations

2020 – Visit to the Center for Plant Conservation in San Diego, California, USA. Dr. Joyce Maschinski.

2019 – Visit to the Fairchild Botanic Garden, Miami, Florida, USA. Dr. Jennifer Possley.

- 2018 – Visit to the John Moores University (Dr. Sarah Dalrymple) and to Sefton Coast to the site of reintroduction of *Coninicya monensis* and Freshfield Dune Heath Nature Reserve.
- 2016 – Visit to the Botanical Garden of the University of Bern, Switzerland (at Markus Fischer lab.).
- 2016 – Visit to the University of Calgary, Canada (at Jana Vamosi lab.) for a collaboration on peripheral plant populations.
- 2015 – Visit to seed industries Hoopman Industries and Bejo in the framework of the project PRIMTECH, 10-15 February, The Netherlands.
- 2015 – Research activity on seed germination of Crop Wild Relatives at Royal Botanic Garden, Millennium Seed Bank, Kew. 19-25 January.
- 2014-2015 – Research activity on Crop Wild Relatives (*Aegilops*) and *Triticum* in collaboration with the Millennium Seed Bank.
- 2013-2014 – Collaboration with Prof. Ulla Carlson-Graner (University of Umeå) for a research on the seed ecology of *Silene suecica* in northern and southern populations. Visit to Abisko Research Station, November 2014.
- 2013 – Supporting staff for the BBC film on the Crop Wild Relatives project of the Global Crop Diversity Trust and the Millennium Seed Bank, Kew. 16-18 July, Italy.
- 2010 – France, Research Centre “Tour du Valat”. Delegate of the Italian Botanical Society to the IUCN meeting for the assessment of the conservation status of a list of aquatic plants of the Mediterranean region; international workshop. 19-22 January.
- 2009 – Germany, Phillips-Universitat Marburg. Data analysis with Prof. Diethart Matthies. January.
- 2008 – France, Mercantour National Park. GLORIA Project, resurvey 2008, French Alps Summits 23-26th June. Co-ordinator: Dr. Harald Pauli (University of Vienna).
- 2008 – Sweden, visit at the Artdatabanken (Prof. Ulf Gardenfors), Uppsala. 27-29th May.
- 2007 – Ireland, ENSCONET Project, visit at the Dublin Seed Bank (prof. Steve Waldren), Trinity College, Dublin. September.

Membership of international societies

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- Since 2018 – Member of the Plant Translocation Network coordinated by the Liverpool John Moores University and by the Nature Resource Canada.
- 2015 – Member of the scientific committee for the International Plant Congress, Italian Botanical Society, Pavia 14-17 September 2015.
- Since 2015 – Member of the Italian Botanical Society
- Since 2013 – Member of the **IUCN SSC Freshwater Plant Specialist Group** (Chair: R. Lansdown)
- Since 2013 – Member of the **IUCN SSC Reintroduction Specialist Group** (Chair: P. Soorae)

Education and popularization

28/01/2023 Rai Radio 1, radio interview on de-extinction

<https://eur01.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.raiplaysound.it%2Faudio%2F2023%2F01%2FInviato-Speciale-del-28012023-373f21db-4083-4c71-8f71-4a51d9088bca.html&data=05%7C01%7C%7Cb118ef94e37c4f735ccb08db081f90a6%7Cff4df68f464458ca5460fb3af66f6a%7C0%7C0%7C638112703886167856%7CUnknown%7CTWFpbGZsb3d8eyJWljojMC4wLjAwMDAiLCJQIjoiV2luMzliLCJBTiI6IkhWwiLCJXVCi6Mn0%3D%7C3000%7C%7C&sdata=WZkeCH2VB9zw%2BE3%2BZaK%2BFEm4igqTclxZW5WxvbrEI%3D&reserved=0>

26/07/2022 Futuro24, Rainews24, interview on plant conservation and on the IPTC2022.

<https://www.rainews.it/video/2022/07/futuro24-salvare-le-piante-in-via-destinazione-3dcbb85a-f306-47ca-baf2-2476c17a3d75.html>

14/05/2021 – Biodiversità vegetale e Cambiamento climatico. Youtube Channel “Scienza Show”.

<https://www.youtube.com/watch?v=tlLlIlgqNTuw>

30-05-2020 – Reintrodurre le piante, una buona azione. [Plant reintroduction a good deed]. Interview for the national newspaper “La Repubblica” by Vincenzo Foti.

14-05-2020 – Resuscitare specie estinte come dinosauri, mammut e piante: è possibile? Youtube Channel “Scienza Show”. <https://www.youtube.com/watch?v=49Q6ikviE6I&t=2435s>

06-2019 – Effetti dei cambiamenti climatici in Appennino settentrionale. Programma Nautilus TRC Emilia-Romagna.

13-05-2018 – Ciclo Musica e Scienza. Il cambiamento climatico in Appennino. Quali prospettive per la nostra flora? [Cycle Music & Science. Climate change in the Apennines. Which perspectives for the local flora?]. Museo di Storia Naturale di Piacenza.

Oral communications and posters

I participated with about 40 posters or oral communications to several congresses of national and international relevance. I mention here only those events in which I participated as invited speaker and few other important participations.

2023 – **Abeli T.** *What are the drivers of plant translocation outcome? A global perspective.* 4th Mediterranean Plant Conservation Week (4th MPCW), Valencia, Spain, 23-27 October. **Invited oral speaker.**

2023 – **Abeli T.,** D. Smith, J. Ewen. *Extinct in the Wild: A call to action for the most endangered group of species on Earth.* International Congress for Conservation Biology, Kigali, Rwanda, July 23-27. Oral speaker.

2023 – **Abeli T.** *Impact of climate change on alpine plants in southern European mountain chains.* 4th Czech International Rock Garden Conference, Průhonice, Sylva Tarouca Institute Conference Center 5-9 May 2023. **Invited oral speaker.**

- 2021 – **Abeli T.**, Rossi G., Orsenigo S., Dalrymple S., Godefroid S. *On farm plant reintroduction: a decision framework for plant conservation translocation in EU agro-ecosystems*. International Congress for Conservation Biology 2021. Online Congress, December 2021. Oral presentation. Presenter: T. Abeli.
- 2018 – **Abeli T.**, Dalrymple S., Godefroid S., Mondoni A., Müller J.V., Graziano R., Orsenigo S. *The challenge of plant de-extinction: an overview*. Session 5: Future Opportunities. 2nd International Wildlife Reintroduction Conference. Chicago 13-16 November 2018. Oral presentation. Presenter: T. Abeli.
- 2018 – Orsenigo S., Cere M., **Abeli T.** – *Marginal population hotspots of cold-adapted species in a warmer world*. BE-9 Life distribution and responses to environmental changes in Polar ecosystems. Polar 2018. Davos, 15-26 June 2018. Oral presentation. Presenter: T. Abeli.
- 2017 – **Abeli T.**, Rossi G., Orsenigo S. – *Air, water, soil and soil pore water, a review of the four dimensional challenge for wetland plant translocation*. Symposium: Biodiversity and conservation of aquatic plants. **XIX International Botanical Congress IBC 2017**. Shenzhen 23-29 July 2017. **Invited oral speaker**.
- 2016 – **Abeli T.**, Orsenigo S., Rossi G., Vagge I., Dixon K., Muller J.V. – *The role of ecological sciences in plant translocations*. X International Meeting of Biodiversity Conservation and Management, Cagliari, Sardinia, 13-18 June 2016. **Invited oral speaker**.
- 2013 – **Abeli T.**, Mondoni A., Orsenigo S., Rossi G. – *Climate and mountain vegetation*. High Summit International Scientific Conference on Mountains and Climate Change. Lecco 23-25 October 2013. **Invited oral speaker**.
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