

## INFORMATION

## Matteo Montagna

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Sex Male | Date of birth 08/02/1980 | Nationality Italian

## POSITION HELD

**Associate professor in General and Applied Entomology (AGR/11)**

Department of Agriculture – University of Naples Federico II, Viale Università 100, 80055 Portici, Italy.

## PROFESSIONAL EXPERIENCE

- Apr 2020 – Dec 2021** Associate professor in General and Applied Entomology (AGR/11)  
Department of Agricultural and Environmental Sciences – University of Milan, Via Celoria 2, 20133, Milano, Italy.
- Mar 2017 – Mar 2020** Fixed-term research assistant RTD-B (lett. b art. 24 comma 3, della Legge n. 240/2010), General and Applied Entomology (AGR11)  
Department of Agricultural and Environmental Sciences – University of Milan, Via Celoria 2, 20133, Milano, Italy.
- Dec 2013 – Dec 2016** Fixed-term research assistant RTD-A (lett. a art. 24 comma 3, della Legge n. 240/2010), General and Applied Entomology (AGR11)  
Department of Agricultural and Environmental Sciences – University of Milan, Via Celoria 2, 20133, Milano, Italy.
- Feb 2013 – Dec 2013** **Research fellowship**  
Center of Applied Studies for Sustainable Management and Defense of the Mountain.  
Department of Agricultural and Environmental Sciences – University of Milan, Via Celoria 2, 20133, Milano, Italy.
- Feb 2013** Visiting scientist Synthesys call (European FP7 Programme, Access to Research Infrastructures)  
Department of Entomology, Museum fur Naturkunde, Berlin – DE.
- 4-10 Mar 2012** Visiting scientist Synthesys call (European FP7 Programme, Access to Research Infrastructures)  
Department of Entomology, Museum fur Naturkunde, Berlin – DE.
- 8-18 Feb 2012** Visiting scientist in the laboratory of Dr. Jesus Gomez-Zurita  
Institut de Biologia Evolutiva CSIC-UPF, Barcelona – ES.
- Jun 2009** Visiting scientist in the laboratory of Prof. Lorenza Beati  
U.S. National Tick Collection (USNTC), Institute of Arthropodology & Parasitology (Statesboro GA, USA).

## INSTRUCTION AND FORMATION

### Education

Jan 2009 – Jan 2013. Ph.D. in Animal Biology, Department of Veterinary Sciences, Università degli Studi di Milano, Milan – IT.

Oct 2006 – Oct 2008. Master degree in Agri-environmental science (with a grade of 110/110 *cum laude*). Università degli Studi di Milano, Faculty of Agriculture, Milan – IT.

Oct 2003 – Oct 2006. Bachelor in Valorisation and Protection of the Environment and of the Mountain territory, Università degli Studi di Milano, Faculty of Agriculture, Edolo – IT.

Sep 1994 – Jul 1999. High school Liceo statale G. Galilei, Erba – IT.

### Courses e workshops

Jul 2019. Using Geiger, Phytools, and other Computational Tools to Study Macroevolution on Phylogenies, Crete – GR.

Jan – Feb 2019. HPC-HTC for metabarcoding – COST DNAqua-net, La Doua campus, Lyon – FR.

Jun 2018. Phylogenomics – Physalia Courses, Berlino – DE.

Sep 2016. The Use of Phylogenies in the Study of Macroevolution, Barcellona – ES.

Aug 2016. Population Genomics in R, Losanna – CH.

Jun 2015. 1<sup>st</sup> Italian Workshop on RAD-sequencing, Edolo – IT.

Sep 2013. Geometric morphometrics and phylogeny (4<sup>th</sup> ed), Barcellona – ES.

Jul-Aug 2012. Molecular evolution, Woods Hole MA – USA.

Jan 2010. European course on comparative genomics, Ecole Normale Supérieure Lyon – FR.

Aug-Sep 2009. Italian workshop on phylogenetic methods and applications (1<sup>st</sup> ed), Asti – IT.

## ACADEMIC POSTS AND SCIENTIFIC RESPONSIBILITIES

### Member of PhD board

Since 2022 Board Member of the Sustainable Agricultural and Forestry Systems and Food Security PhD School, UNINA – IT.

2014-2021 Board Member of the Agriculture, Environment and Bioenergy PhD School, UMiL – IT.

### PhD tutoring

Since 2014 tutor of four PhD students enrolled in the Agriculture, Environment and Bioenergy PhD School, UMiL – IT; co-tutor of four PhD students (UMiL - IT; University of Lodz – PL; University of Karachi – IR). Since Dec 2020, co-supervisor of a PhD student from the Department of Biology–University of Pisa - IT.

## UMiL – DiSAA academic posts

Nov 2020 – Dec 2021 member of DiSAA Space Management Committee.  
 Apr 2020 – Nov 2020 member of the DiSAA Scientific Committee.  
 Jun 2018 – Dec 2021 member of the Environmental DNA platform Scientific Committee at UMiL DiSAA – IT.  
 May 2020 – Dec 2021 scientific manager of the Environmental DNA platform - Università degli Studi di Milano, DiSAA – IT.

## Member of national and international panels

Co-chair of the “Ecology and conservation” session at the XXVII Congresso Nazionale Italiano di Entomologia, Jun 2023, Palermo – IT.

Since Sep 2022 member of the Horizon Europe - Joint Research Center experts pool of the program “Science and Technology for pollinating insects (STING): A pool of experts to assist the European Commission with the implementation of Action 1 of the EU Pollinators Initiative”. Contract number: CT-EX2022D613977-101.

Since 2021 member of the Register of Expert Peer Reviewers for Italian Scientific Evaluation (REPRISE) for Fundamental research ERC areas (LS8\_2, LS8\_8, LS8\_10; LS9\_8).

Since 2019 nomination as Italian MC Substitute to COST Actions CA18134 - Genomic Biodiversity Knowledge for Resilient Ecosystems (G-Bike).

Dec 2019, Jul 2020, Dec 2020. Member of the Evaluation panel for post-doc positions at UMiL DiSAA – IT.

Mar 2018 Ph.D. final examination Jury Member. PhD program in Life and Health Sciences: Molecular and Cellular Biotechnology, University of Camerino – IT.

2016-2020 nomination as Italian MC Substitute to COST Actions: CA15219- Developing new genetic tools for bioassessment of aquatic ecosystems in Europe (DNAqua-Net).

Since 2013 member of professorial panel for Undergraduate and Master Degree Programmes final dissertation, UMiL DiSAA – IT.

## Reviewer activity

Reviewer of research projects (German-Israeli Foundation for Scientific Research and Development: RGRP; European Research Council: ERC 2019 STG; United Arab Emirates University: UAEU Research Grant Application; Natural Environment Research Council - Pushing the Frontiers call 2020; Austrian Science Fund) and of scientific papers for journals such as *Nature Communication*, *Mol Ecol*, *Zool Scr*, *Environ Microbiol*, *Zool J Linn Soc-Lond*, *Insect Sci*, *Syst Entomol*, *J Insect Physiol*.

EARLY ACHIEVEMENTS  
TRACK-RECORD

## Research activity

I have worked on the ecology and evolution of Insecta for my entire career. My first researches were faunistic studies, which led to the description of new taxa. Moreover, some studies aimed at evaluating the effects of anthropogenic disturbance on insect community composition and structure. During my PhD studies I expanded my interests to encompass another arthropod group, the Ixodida. This work added further levels of complexity with regard to organisms ecology and evolution, in particular the associated microbiota and the vertebrate host, which participate in a network of trophic interactions. This research allowed me to acquire skills in molecular biology, bioinformatics, phylogenomics, comparative genomics and DNA metabarcoding. Thanks to this expertise I was able to set up my own research group with the main aim of studying key factors underlying the evolution and success of

insects, especially the complex network of interactions they exhibit with bacteria, particularly in the context of trophic resources. I use a combination of different approaches, investigating interactions across temporal scales and ecological niches. Specifically, my research pursues two main topics: i. systematics, evolution and ecology of different insect and other arthropod groups, including the Triassic paleoentomofauna; ii. insect-microorganism (bacterial and fungal) interactions, in particular the role played by bacteria in conferring new ecological traits to the host, such as the adaptability to novel ecological niches or host plants. In recent years, thanks to DNA barcoding/metabarcoding skills, I have extended my research to the community level. Specifically, investigating the biodiversity associated with human-influenced ecosystems, such as Alpine pastures and other agroecosystems (e.g., stable meadow, vineyard, barley and maize fields) in order shed light on the mode and tempo by which communities change due to anthropic activities. These research activities led to the development of a wide network of scientific collaborations with Italian and international universities and research institutes.

**Skills** I have substantial expertise with regard to insect systematics, ecology and evolution. Moreover, I have mastered molecular biology, microscopy, phylogenomics and related comparative methods, multivariate statistics, DNA barcoding/metabarcoding and bioinformatics techniques to investigate the exciting field of insect ecology and evolution. I have strong leadership skills.

### Independence and funded research projects

Immediately after my Ph.D. I won an early-stage post-doc fellowship for a project I devised on the phylogeography of endangered insects species. Subsequently, I obtained my full independence by winning highly competitive positions at UMIL funded by MIUR, represented by a Junior Research (RTD-A) in 2013, and by a Senior Research (RTD-B) in 2017. These positions helped me to formerly establish my own research team and pursue novel lines of investigation that have attracted funding, initially on competitive internal calls from UMIL and then both from national and international bodies. Among them, Cold&Warm project (LifeWatch LW-ITA Call 2018; project leader) aims to understand how cold-adapted species survived Pleistocene temperature oscillations by using restriction site-associated DNA sequencing. Additionally, the PROSPECT project (PRIN-MIUR call 2017; unit coordinator) which uses tomato as model to investigate the functional basis of the trophic network involving soil microbiota, plant, pests (insects and pathogens) and the pests' antagonists. Other projects include the SRF 2015/2016, focused on the study of exceptionally well-preserved insect fossils from a Middle Triassic Lagerstätte, and the MoBioS project (UMIL) aimed to investigate the soil biodiversity in different agroecosystems adopting DNA metabarcoding with the purpose of developing a molecular soil biology index. Recently, a leader company in the AgroSciences (Corteva Agriscience™) funded a project to investigate the biodiversity of soil organisms associated to vineyards across Italy by using DNA metabarcoding approach in order to associate the agricultural practices with the functional soil biodiversity.

## PERSONAL SKILLS

**Mother tongue** Italian

### Other languages

	COMPREHENSION		SPOKEN		WRITTEN WORK
	Listening	Reading	Interaction	Oral work	
English	B2	B2	B2	B2	B2
French	A2	A2	A2	A1	A2

### Communication skills

- Good communication skills gained through the teaching activity and through the oral presentations of my scientific works during national and international congresses.

### Information technology skills

Self-evaluation				
Processing information	Communication	content creation	Security	Problem solving
Advanced	Advanced	Advanced	Intermediate	Advanced

Levels: Basics - Intermediate - Advanced

Digital skills – Self-evaluation

- Good competence with Office software and Windows, Linux e OS operating system.
- Good competence with professional imaging software: (Adobe Photoshop, Adobe Illustrator, Zerene, Combine).
- Good Competence with R software, software for phylogenetic inference (e.g., MrBayes, RaxML, IQ-tree, PhyML, PAUP), PAML, QIIME2.
- Competence with bash.

Driving licence A e B

## FURTHER INFORMATION

### Italian National Scientific Qualification (ASN)

July 2018 Full professor in 05/B1 Zoology  
March 2017 Full professor in 07/D1 General and Applied Entomology

### Membership of Scientific Societies

Società Italiana di Entomologia  
Unione Zoologica Italiana

### Bibliometric data (Scopus Jul-2023)

Date of the first publication: Dec 2010  
Documents: 81; Citations: 1351; H-index: 22 (Scopus Author Identifier: 37047638500)

### Publications on peer-reviewed journals and book chapters

I authored 86 scientific articles published in international peer-reviewed journals (e.g., Molecular Ecology, Molecular Ecology Resources, Proceedings of the National Academy of Sciences of the United States of America, Cladistics, Molecular Phylogenetics and Evolution, Proceedings of the Royal Society B: Biological Sciences Environmental and Microbiology). Moreover, I authored two book chapters.  
Orcid: <https://orcid.org/0000-0003-4465-7146>

### Scientific articles published in international peer-reviewed journals

1. G. Magoga, C. Piombo, D.P. Locatelli, L. Limonta, M. Montagna. The microbiota of *Idaea inquinata* (Lepidoptera: Geometridae) developing on dry herbs. Entomologia Experimentalis et Applicata. doi: 10.1111/eea.13347.
2. J. Hoglund et al. (2023). How genomics can help biodiversity conservation. Trends in Genetics: 0168-9525. doi: 10.1016/j.tig.2023.01.005.
3. I. Di Lelio ... M. Casartelli, M. Montagna, F Pennacchio (2023). A soil fungus confers plant resistance against a phytophagous insect by disrupting the symbiotic role of its gut microbiota. Proceedings of the National Academy of Sciences of the United States of America. 120(10): e2216922120. doi: 10.1073/pnas.2216922120.
4. M. Brunetti, G. Magoga, F. Gionechetti, A. De Biase, M. Montagna (2022). Does diet breadth affect the complexity of the phytophagous insect microbiota? The case study of Chrysomelidae. Environmental Microbiology 24(8): 3565-3579. doi: 10.1111/1462-2920.15847.
5. P. Gadawski, M. Montagna, B. Rossaro, B., W. Gilka, V. Pesic, M. Grabowski, G. Magoga (2022). DNA barcoding of Chironomidae from the Lake Skadar region: Reference library and a comparative analysis of the European fauna. Diversity and Distributions 28: 2838-2857. <https://doi.org/10.1111/ddi.13504>.
6. G. Magoga, M. Brunetti, L. Kajtoch, A. Spada, M. Montagna (2022). Biotic and abiotic factors affecting the microbiota of Chrysomelidae inhabiting wetland vegetation. Hydrobiologia, doi: 10.1007/s10750-022-05082-6.
7. G.E. Massimino Cocuzza, G. Magoga, M. Montagna, J.M. Nieto Nafria, S. Barbagallo (2022). European and Mediterranean Myzocallidini aphid species: DNA barcoding and remarks on ecology with taxonomic modifications in an integrated framework. Insects 13(11): 1006. doi: 10.3390/insects13111006.
8. N. Bellin, M. Calzolari, G. Magoga, E. Callegari, P. Bonilauri, D. Lelli, M. Dottori, M. Montagna, V. Rossi (2022). Unsupervised machine learning and geometric morphometrics as tools for the identification of inter and intraspecific variations in the *Anopheles maculipennis* complex. Acta Trop. 233: 106585. doi: 10.1016/j.actatropica.2022.106585.
9. B. Rossaro, L. Marziali, G. Magoga, M. Montagna, A. Boggero (2022). Corrections and

- additions to descriptions of some species of the subgenus *Orthocladius* s. str. (Diptera, Chironomidae, Orthoclaadiinae). Insects. 13(1): 51. doi: 10.3390/insects13010051.
10. G. Magoga, G. Forni, M. Brunetti, A. Meral, A. Spada, A. De Biase, M. Montagna (2022) Curation of a reference database of COI sequences for insect identification through DNA metabarcoding: COins. Database (Oxford). 2022: baac055. doi: 10.1093/database/baac055.
  11. E. Beretta, V. Capasso, S. Scacchi, M. Brunetti, M. Montagna (2022). Prevention and control of OQDS (olive quick decline syndrome) outbreaks caused by *Xylella fastidiosa*. J Theor Biol. 542: 111118. doi: 10.1016/j.jtbi.2022.111118.
  12. M. Kadej et al. 2022. Disentangling phylogenetic relations and biogeographic history within the *Cucujus haematodes* species group (Coleoptera: Cucujidae). Molecular Phylogenetics and Evolution 173: 107527. doi: 10.1016/j.ympev.2022.107527.
  13. S. Villa, M. Montagna, S. Pierce (2022). Endemism in recently diverged angiosperms is associated with polyploidy. Plant Ecology 223 (4): 479-492. doi:10.1007/s11258-022-01223-y
  14. D. Bulgari, S. Filisetti, M. Montagna, E. Gobbi, F. Faoro (2022). Pathogenic potential of bacteria isolated from commercial biostimulants. Arch Microbiol. 204(3):162. doi: 10.1007/s00203-022-02769-1.
  15. P. Gadawski, B. Rossaro, W. Gilka, M. Montagna, A. Zawal, M. Grabowski (2022). First insights into the diversity and ecology of non-biting midges (Diptera: Chironomidae) of the unique ancient Skadar Lake basin (Montenegro/Albania). Journal of Great Lakes Research, 48(2): 538-550. <https://doi.org/10.1016/j.jglr.2021.02.003>.
  16. G. Formenti et al. 2022. European Reference Genome Atlas (ERGA). Consortium. The era of reference genomes in conservation genomics. Trends Ecol Evol. 37(3): 197-202. doi: 10.1016/j.tree.2021.11.008.
  17. B. Rossaro, L. Marziali, M. Montagna, G. Magoga, S. Zaupa, A. Boggero (2022). Factors controlling morphotaxa distributions of Diptera Chironomidae in freshwaters. Water 14: 1014. <https://doi.org/10.3390/w14071014>
  18. E. Mori, G. Magoga, M. Panella, M. Montagna, L. Winsor, J.L. Justine, M. Menchetti, E. Schifani, B. Melone, G. Mazza (2022). Discovering the Pandora's box: the invasion of alien flatworms in Italy. Biological Invasions 24: 205-216. <https://doi.org/10.1007/s10530-021-02638-w>
  19. B. Chouaia, M. Montagna, P. Suma, F. Faoro (2021). Complete genome sequence of *Rhynchophorus ferrugineus* endocytobiont "*Candidatus* Nardonella dryophthoridicola" strain NardRF. Microbiology Resource Announcements 10(26): e00355-21.
  20. G. Magoga, D. Fontaneto, M. Montagna (2021). Factors affecting the efficiency of molecular species delimitation in a species-rich insect family. Molecular Ecology Resources 21: 1475-1489. doi: 10.1111/1755-0998.13352.
  21. E. Olivieri, ..., M. Montagna, D. Sassera (2021). Multi-country investigation of the diversity and associated microorganisms isolated from tick species from domestic animals, wildlife and vegetation in selected african countries. Experimental and Applied Acarology 83(3): 427-448. doi: 10.1007/s10493-021-00598-3.
  22. M. Brunetti, V. Capasso, M. Montagna, E. Venturino (2020). A mathematical model for *Xylella fastidiosa* epidemics in the Mediterranean regions. Promoting good agronomic practices for their effective control. Ecological Modelling 432: 109204.
  23. D. Kubisz, G. Magoga, M. A. Mazur, M. Montagna, R. Scibior, P. Tykarski & L. Kajtoch (2020). Biogeography and ecology of geographically distant populations of sibling *Cryptocephalus* leaf beetles. The European Zoological Journal 87: 223-234. DOI: 10.1080/24750263.2020.1752832
  24. M. Montagna (2020) Comment on Phylogenetic analyses with four new Cretaceous bristletails reveal inter-relationships of Archaeognatha and Gondwana origin of Meinertellidae. Cladistics 36: 227-231. DOI:10.1111/cla.12387.
  25. M. Montagna, K.J. Tong, G. Magoga, L. Strada, A. Tintori, S.Y.W. Ho, N. Lo (2019). Recalibration of the insect evolutionary time scale using Monte San Giorgio fossils suggests survival of key lineages through the End-Permian Extinction. Proceedings of the Royal Society B: Biological Sciences 286(1912): 20191854. doi:



- 10.1098/rspb.2019.1854.
26. B. Chouaia, N. Goda, G. Mazza, S. Alali, F. Florian, F. Gionechetti, M. Callegari, E. Gonella, G. Magoga, M. Fusi, E. Crotti, D. Daffonchio, A. Alma, F. Paoli, P.F. Roversi, L. Marianelli, M. Montagna (2019). Developmental stages and gut microenvironments influence gut microbiota dynamics in the invasive beetle *Popillia japonica* Newman (Coleoptera: Scarabaeidae). *Environmental Microbiology* doi: 10.1111/1462-2920.14797.
  27. M. Brunetti, G. Magoga, M. Iannella, M. Biondi, M. Montagna (2019). Phylogeography and species distribution modelling of *Cryptocephalus barii* (Coleoptera: Chrysomelidae): is this alpine endemic species close to extinction? *Zookeys* 856: 3-25.
  28. D. Bulgari, M. Montagna, E. Gobbi, F. Faoro (2019). Green technology: bacteria-based approach could lead to unsuspected microbe plant animal interactions. *Microorganisms* 7(2). doi: 10.3390/microorganisms7020044.
  29. S. Alali, V. Mereghetti, F. Faoro, S. Bocchi, F. Al Azmeh, M. Montagna (2019). Thermotolerant isolates of *Beauveria bassiana* as potential control agent of insect pest in subtropical climates. *PLoS One* 14(2): e0211457.
  30. D. Coral Sahin, G. Magoga, H. Özdikmen, M. Montagna (2019). DNA Barcoding as useful tool to identify crop pest flea beetles of Turkey. *Journal of Applied Entomology* 143: 105-117. <https://doi.org/10.1111/jen.12566>
  31. V. Mereghetti, B. Chouaia, L. Limonta, D.P. Locatelli, M. Montagna (2019). Evidence for a conserved microbiota across the different developmental stages of *Plodia interpunctella*. *Insect Science* 26(3): 466-478. doi: 10.1111/1744-7917.12551.
  32. M. Montagna ... A. Alma (2019). Molecular species delimitation of the Asian chestnut gall wasp biocontrol agent released in Italy. *Insect Systematics & Evolution* 50(3): 327-345. doi: <https://doi.org/10.1163/1876312X-00002188>.
  33. B. Rossaro, N. Pirola, L. Marziali, G. Magoga, A. Boggero, M. Montagna (2019). An updated list of chironomid species from Italy with biogeographic considerations (Diptera, Chironomidae). *Biogeographia – The Journal of Integrative Biogeography* 34. <http://dx.doi.org/10.21426/B634043047>
  34. G. Magoga, DC. Sahin, D. Fontaneto, M. Montagna (2018). Barcoding of Chrysomelidae of Euro-Mediterranean area: efficiency and problematic species. *Scientific Reports* 8: 13398.
  35. M. Montagna, Berruti A, Bianciotto V, Cremonesi P, Giannico R, Gusmeroli F, Lumini E, Pierce S, Pizzi F, Turri F, Gandini G. (2018). Differential biodiversity responses between kingdoms (plants, fungi, bacteria and metazoa) along an Alpine succession gradient. *Molecular Ecology* 27(18): 3671-3685.
  36. E. Mori, Pisanu B, Zozzoli R, Solano E, Olivieri E, Sassera D, Montagna M. (2018). Arthropods and associated pathogens from native and introduced rodents in Northeastern Italy. *Parasitology Research* 117(10): 3237-3243.
  37. E. Martin, I. Varotto Boccazzi, L. De Marco, G. Bongiorno, M. Montagna, L. Sacchi, P. Mensah, I. Ricci, L. Gradoni, C. Bandi, S. Epis (2018). The mycobiota of the sand fly *Phlebotomus perniciosus*: involvement of yeast symbionts in uric acid metabolism. *Environmental Microbiology* 20: 1064-1077.
  38. M. Pajoro, D. Pistone, I. Varotto Boccazzi, V. Mereghetti, C. Bandi, M. Fabbi, M. Montagna (2018). Molecular screening for bacterial pathogens in ticks (*Ixodes ricinus*) collected on migratory birds captured in northern Italy. *Folia Parasitologica* 65: 008.
  39. M. Montagna, L. Strada, P. Dioli, A. Tintori 2018. The Middle Triassic Lagerstätte of Monte San Giorgio reveals the oldest lace bugs (Hemiptera: Tingidae): *Archetingis ladinica* gen n. sp n.. *Rivista Italiana di Paleontologia e Stratigrafia* 124: 35-44.
  40. L. Kajtoch, M. Montagna, M. Wanat (2018). Species delimitation within the Bothryorrhynchapion weevils: multiple evidence from genetics, morphology and ecological associations. *Molecular Phylogenetics and Evolution* 120: 354-363.
  41. A. Boggero, M. Ruocco, M. Shokri, V. Gjoni, I. Ansaloni, S. Zaupa, M. Montagna, B. Rossaro (2017). *Chironomus* (*Chironomus*) *aprilinus* Meigen, 1818 (Diptera Chironomidae), first record from Italy: cytotaxonomy and ecology. *Redia* 100: 11-17.
  42. B. Rossaro, G. Magoga, M. Montagna (2017). Revision of the genus *Chaetocladius* Kieffer

- (Diptera, Chironomidae), 1<sup>st</sup> note: description of four new species from Italy. Journal of Entomological and Acarological Research 49: 36-47.
43. D. Pistone, M. Pajoro, E. Novakova, N. Vicari, C. Gaiardelli, R. Viganò, C. Luzzago, M. Montagna, P. Lanfranchi (2017). Ticks and bacterial tick-borne pathogens in Piemonte region, Northwest Italy. Experimental and Applied Acarology 73: 477-491.
  44. M. Montagna, J.T. Haug, L. Strada, C. Haug, M. Felber, A. Tintori (2017). Central nervous system and muscular bundles preserved in a 240 million year old giant bristletail (Archaeognatha: Machilidae). Scientific Reports 7: 46016.
  45. G. Magoga, M. Montagna, L. Marziali, B. Rossaro (2017). Revision of type and non-type material assigned to the genus *Orthocladus* by Goetghebuer (1940–1950), deposited in the Royal Belgian Institute of Natural Sciences (Diptera: Chironomidae). Acta Entomologica Musei Nationalis Pragae 57(2): 723-749.
  46. M. Kolosa, M. Montagna, V. Mereghetti, D. Kubisz, M. A. Mazur, L. Kajtoch (2017). Preliminary evidence of the horizontal transmission of *Wolbachia* between *Crioceris* leaf beetles (Coleoptera: Chrysomelidae) and their *Asparagus* host plants. European Journal of Entomology 114: 446-554.
  47. V. Mereghetti, B. Chouaia, M. Montagna (2017). New Insights into the microbiota of moth pests. International Journal of Molecular Sciences 18: 2450.
  48. V. Mastrantonio, M. Ferrari, S. Epis, A. Negri, G. Scuccimarra, M. Montagna, G. Favia, D. Porretta, S. Urbanelli, C. Bandi (2017). Gene expression modulation of ABC transporter genes in response to permethrin in adults of the mosquito malaria vector *Anopheles stephensi*. Acta Tropica 171: 37-43.
  49. M. Montagna, D. Kubisz, M.A. Mazur, G. Magoga, R. Scibior, L. Kajtoch (2017). Exploring species-level taxonomy in the *Cryptocephalus flavipes* species complex (Coleoptera: Chrysomelidae). Zoological Journal of the Linnean Society 179(1): 92-109. doi: 10.1111/zoj.12445
  50. B. Rossaro, M. Montagna, V. Lencioni (2016). Environmental traits affect chironomid communities in glacial areas of the Southern Alps: evidence from a long-lasting case study. Insect Conservation and Diversity 9: 192-201.
  51. E. Capra, R. Giannico, M. Montagna, F. Turri, P. Cremonesi, F. Strozzi, P. Leone, G. Gandini, F. Pizzi (2016). A new primer set for DNA metabarcoding of soil Metazoa. European Journal of Soil Biology 77: 53-59.
  52. E. Martin, G. Bongiorno, L. Giovati, M. Montagna, E. Crotti, C. Damiani, L. Gradoni, L. Polonelli, I. Ricci, G. Favia, S. Epis (2016). Isolation of a *Wickerhamomyces anomalus* yeast strain from the sandfly *Phlebotomus perniciosus*, displaying the killer phenotype. Medical and Veterinary Entomology 30: 101-106.
  53. F. Leese, F. Altermatt, A. Bouchez ... (2016). DNAqua-Net: Developing new genetic tools for bioassessment and monitoring of aquatic ecosystems in Europe. Research Ideas and Outcomes 2: e11321.
  54. G. Magoga, D. Sassi, M. Daccordi, C. Leonardi, M. Mirzaei, R. Regalin, G. Lozzia, M. Montagna (2016). Barcoding chrysomelidae: a resource for taxonomy and biodiversity conservation in the Mediterranean Region. Zookeys 597: 27-38.
  55. M. Montagna, S. Urbanelli, B. Rossaro (2016). The species of the genus *Diamesa* (Diptera, Chironomidae) known to occur in Italian Alps and Apennines. Zootaxa 4193: 317-331.
  56. M. Montagna, S. Zoia, C. Leonardi, V. Di Taddeo, R. Caldara, D. Sassi (2016). *Colasposoma dauricum* Mannerheim, 1849 an Asian species adventive to Piedmont, Italy (Coleoptera: Chrysomelidae: Eumolpinae). Zootaxa 4097: 127-129.
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  64. M. Montagna, B. Chouaia, G. Mazza, E.M. Prosdocimi, E. Crotti, V. Mereghetti, V. Vacchini, A. Giorgi, A.D. Biase, S. Longo, R. Cervo, G.C. Lozzia, A. Alma, C. Bandi, D. Daffonchio (2015). Effects of the diet on the microbiota of the Red Palm Weevil (Coleoptera: Dryophthoridae). Plos One 10: e0117439.
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  74. R. Caldara, D. Sassi, M. Montagna (2013). Systematics of the weevil genus *Mecinus* Germar, 1821 (Coleoptera: Curculionidae). 2. Phylogenetic analysis based on adult morphological characters and host plant information. Zootaxa 3664: 136-148.
  75. S. Epis, M. Mandrioli, M. Genchi, M. Montagna, L. Sacchi, D. Pistone, D. Sasser (2013). Localization of the bacterial symbiont *Candidatus Midichloria mitochondrii* within the hard

	<p>tick <i>Ixodes ricinus</i> by whole-mount FISH staining. Ticks and Tick-Borne Diseases 4: 39-45.</p> <p>76. D. Pistone, P. Marone, M. Pajoro, M. Fabbi, N. Vicari, S. Daffara, C. Dalla Valle, S. Gabba, D. Sassera, A. Verri, M. Montagna, S. Epis, C. Monti, E. G. Strada, V. Grazioli, N. Arrigoni, A. Giacosa, C. Bandi (2012). <i>Mycobacterium avium</i> paratuberculosis in Italy: Commensal or emerging human pathogen? Digestive and Liver Disease 44: 461-465.</p> <p>77. M. Mariconti, S. Epis, L. Sacchi, M. Biggiogera, D. Sassera, M. Genchi, E. Alberti, M. Montagna, C. Bandi, C. Bazzocchi (2012). A study on the presence of flagella in the order Rickettsiales: the case of <i>Candidatus</i> <i>Mitochondria mitochondrii</i>. Microbiology 158: 1677-1683.</p> <p>78. M. Montagna, B. Chouaia, F. Pella, M. Mariconti, D. Pistone, M. Fasola, S. Epis (2012). Screening for bacterial DNA in the hard tick <i>Hyalomma marginatum</i> (Ixodidae) from Socotra Island (Yemen): detection of <i>Francisella</i>-like endosymbiont. Journal of Entomological and Acarological Research 44: 60-63.</p> <p>79. M. Montagna, D. Sassera, F. Griggio, S. Epis, C. Bandi, C. Gissi (2012). Tick-Box for 3'-end formation of mitochondrial transcripts in Ixodida, basal Chelicerates and <i>Drosophila</i>. Plos One 7: e47538.</p> <p>80. M. Montagna, G.C. Lozzia, A. Giorgi, J. Baumgartner (2012). Insect community structure and insect biodiversity conservation in an Alpine wetland subjected to an intermediate diversified management regime. Ecological Engineering 47: 242-246.</p> <p>81. S. Epis, M. Montagna, F. Comandatore, C. Damiani, A. Diabaté, D. Daffonchio, B. Chouaia, G. Favia (2012). Molecular typing of bacteria of the genus <i>Asaia</i> in malaria vector <i>Anopheles arabiensis</i> Patton, 1905. Journal of Entomological and Acarological Research 44: 33-36.</p> <p>82. D. Sassera, N. Lo, S. Epis, G. D'Auria, M. Montagna, F. Comandatore, D. Horner, J. Peretó, A.M. Luciano, F. Franciosi, E. Ferri, E. Crotti, C. Bazzocchi, D. Daffonchio, L. Sacchi, A. Moya, A. Latorre, C. Bandi (2011). Phylogenomic evidence for the presence of a flagellum and <i>cbb3</i> oxidase in the free-living mitochondrial ancestor. Molecular Biology and Evolution 28: 3285-3296.</p> <p>83. M. Montagna (2011). <i>Pachybrachis sassii</i>, a new species from the Mediterranean Giglio Island (Italy) (Coleoptera, Chrysomelidae, Cryptocephalinae). Zookeys 155: 51-60.</p> <p>84. M. Montagna, G.C. Lozzia, C. Andreis, A. Giorgi, J. Baumgartner (2011). The beetle (Coleoptera) and True bug (Heteroptera) species pool of the alpine "Pian di Gembro" wetland (Villa di Tirano, Italy) and its conservation. Journal of Entomological and Acarological Research 43, p. 7-22, ISSN: 2038-324X, doi: 10.4081/jear.2011.7</p> <p>85. B. Chouaia, P. Rossi, M. Montagna, I. Ricci, E. Crotti, C. Damiani, S. Epis, I. Faye, N. Sagnon, A. Alma, G. Favia, D. Daffonchio, C. Bandi (2010). Molecular evidence for multiple infections as revealed by typing of <i>Asaia</i> bacterial symbionts of four mosquito species. Applied and Environmental Microbiology 76: 7444-7450.</p>
Book chapters	<p>1. S. Alberghini ... (2014). Gli insetti e il loro controllo. NAPOLI: Liguori, ISBN: 978-88-207-5351-1</p> <p>2. M. Montagna, L. Sacchi, N. Lo, E. Clementi, D. Daffonchio, A. Alma, D. Sassera, C. Bandi (2011). The Bacteroidetes <i>Blattabacterium</i> and <i>Sulcia</i> as primary endosymbionts of Arthropods. In: (a cura di): E. Zchori-Fein; K. Bourtzis, Manipulative Tenants : Bacteria Associated with Arthropods. CRC Press Taylor and Francis Group, ISBN: 9781439827499</p>
Oral presentations	<p>I gave several oral presentations at national (e.g., Congresso Nazionale Italiano di Entomologia, Congresso della Società Italiana di Biologia Evoluzionistica) and international congresses (e.g., European Congress of Entomology, International Conference on DNA Barcoding and Biodiversity).</p>
Invited speaker	<p>I was invited speaker at national and International congresses (e.g., Congresso Nazionale Italiano di Entomologia, Congresso Nazionale Congiunto SITE - UZI – SIB, Entomological Society of America Annual Meeting, Annual Meeting of the European PhD Network «Insect Science»), workshops (e.g., Workshop conoscitivo dell'azione europea COST DNAqua-net, Seminari Limnologici CNR-IRSA) and lecturer (e.g., Iranian Research Institute of Plant Protection, Tehran – IR).</p>
Teaching activities	<p>Since academic year 2022-2023. Biotecnologie per il controllo degli insetti dannosi. Master degree in</p>

Biotechnologie Agro-Ambientali e Alimentari, UNINA (IT).

Academic year 2018-2019 to 2021-2022. Methods in Biotechnology – Molecular Taxonomy. Master Degree in Biotechnology for Bioeconomy, UMiL (IT).

Academic year 2020-2021. Computer technology and statistics knowledge. Bachelor Production and protection of plants and green areas, UMiL (IT).

Academic year 2017-2018 to 2020-2021. Applied Entomology. Master Degree in Crops and Plant Sciences, UMiL (IT).

Academic year 2016-2017 Introduction to UNIX & Linux. PhD course within the Agriculture, Environment and Bioenergy PhD school, UMiL (IT).

Academic year 2016-2017 Biological control of insect pests: from SIT to symbiotic control. PhD course within the Agriculture, Environment and Bioenergy PhD school, UMiL (IT).

Academic year 2014-2016 Elements of Plant Protection–Entomology, Undergraduate in Crop and ornamental green production and protection sciences, UMiL (IT).

Authors of numerous seminars and short courses for PhD students and researchers at UMiL, CNR – IRSA.

#### National and International founded grants

Agritech National Research Center; European Union Next-Generation EU PNRR – Spoke 2 Crop health: a multidisciplinary system approach to reduce the use of agrochemicals. Role: researcher involved, co-leader of the work package on *Agroecology and landscape management to reinforce ecosystem services*.

Jan 2021. SEED 2019–UMIL (IT). The Insect gut Microbiota: a source of microorganisms and enzymes for PLastic BIODEgradation IMPLaBio (28.5k euro). Unit coordinator.

7/2019-7/2021 LifeWatch call 2018 VREs & MoBiLab (LW-ITA Call). Cold-adapted species: lessons from the past to face future warming (25k euro). Project leader.

6/2019-6/2020 UMiL– Research Supporting Plan (RSP) 2019-2020. SPECiEs Distribution modelling and population genomics to calculate extinction risk in a changing climate (14.2k euro). Researcher involved.

2/2019-2/2022 PRIN–MIUR, call 2017. Plant multitrophic interactions for bioinspired Strategies of PEst ConTrol-PROSPECT (5 research units). Unit coordinator (160.8k euro assigned to the research unit).

12/2017-12/2018 UMiL–RSP2015-2017. MoBioS–Molecular Biological Index of Soil Quality. (14.7k euro). Project leader.

3/2017 National Science Centre of Poland, call 2016. Species diversity and origin of Chironomidae fauna from geologically young Lake Skadar (Montenegro/Albania) and its old spring system based on morphological characters and on Next Generation Sequencing Techniques (35k euro). Scientific supervisor.

3/2016-3/2017 Systematics Research Fund–SRF 2015/16. Taxonomic description of phosphatized insect fossils from a Middle Triassic site (1.4k euro). Project leader.

12/2015-12/2017 UMiL–RSP2015-2017. Arms race between *Galeruca laticollis* and *Aconitum napellus*: bacteria as possible allies of insects. (15k euro). Project leader.

#### National and International projects that have crossed the quality threshold but were not founded

Horizon Europe Call HORIZON-CL6-2022-BIODIV-01. Title of the proposal: *Biodiversity sEntinels of Agroecosystems Health (BREATH)*. Role: Coordinator. Final score: 12.5 (quality threshold = 10)

Call ERC-2020-STG – European Commission. Title of the proposal: *DEep-time to current extinctions: Forecasting dynamics of Anthropocene Communities subjected to anThropogenic disturbance (DEFACTO)*. Role: PI. Final score: B.

Call SIR–MIUR 2014. Title of the proposal: *The role of symbiont communities in the evolution of*

*insect-plant interactions: gut bacteria, metabolomics and the host-plant defence response*. Role: PI. Final score: eligible but not funded.

Marie Curie Actions, Call: FP7-PEOPLE-2013-IEF – European Commission. Title of the proposal: *Metamicrobiomics and the role of gut symbiont communities in the evolution of insect-plant interactions* (SymBioEvo). PI. Final score: proposal of good quality, having passed all thresholds but for which funding is not available due to budgetary constraints.

July 1<sup>st</sup>, 2023

I declare that the information in this Curriculum Vitae is correct and true, according to Italian Law item 47 of DPR 445/2000.

According to law 679/2016 of the Regulation of the European Parliament of 27th April 2016, I hereby express my consent to process and use my data provided in this CV.