

PERSONAL INFORMATIONS Eleonora Spinozzi

OCCUPATIONAL FIELD Extraction and characterization of secondary metabolites from aromatic and medicinal plants, evaluation of their biological activity and synthesis of analogues of natural-occurring compounds.

EDUCATION AND TRAINING

2014 High school leaving qualification in classical studies at Liceo Classico “F. Stabili” of Ascoli Piceno.
Final grade: 100/100
Subjects studied: Greek, Latin, Italian literature, Math, Physics, Science, Biology, English and English literature.

12/07/2019 Master degree in “Chimica e Tecnologia Farmaceutiche” (Medicinal Chemistry) at University of Camerino
Final grade: 110/110 cum laude and encomio.
Thesis: “Fluorine in the horizons of medicinal chemistry: synthesis of biologically active fluorinated small molecules”.

24/07/2019 Teaching expertise improvement with the PF24 course (24 CFU credits in anthro-psycho-pedagogical disciplines and didactic technologies (D.M. 616, 10/08/2017).

November 2019 National Abilitation as professional pharmacist.

June 2020 National Abilitation as professional chemist.

06/11/ 2019 – 06/04/2023 PhD in Chemical and Pharmaceutical Sciences and Biotechnology – Pharmaceutical, nutraceutical and food sciences (XXXV cycle) in UNICAM - Chemistry Interdisciplinary Project (ChIP), School of Pharmacy, University of Camerino, Via Madonna delle Carceri 9/B, 62032, Camerino, Italy

- Synthesis of analogues of natural products;
- Extraction of medicinal and food plants' bioactive compounds;
- Identification and quantification of essential oil/extracts constituents;
- Employment the analytical techniques GC-MS, GC-FID and HPLC to determine the chemical composition of essential oils or extracts, obtained by various extractive techniques;
- Study of the biological activity of natural products, with the focus on their insecticidal potential;
- Encapsulation of essential oils, extracts, and pure natural compounds into

stable formulations, such as nano- and microemulsions, to be used to develop potential biopesticides.

Supervisors: Prof. Maggi Filippo (Pharmaceutical Botany), Prof. Riccardo Petrelli (Medicinal Chemistry), Prof. Alessandro Palmieri (Organic Chemistry)

- 06/04/2023** PhD title in Chemical and Pharmaceutical Sciences and Biotechnology – Pharmaceutical, nutraceutical and food sciences (XXXV cycle) at the University of Camerino
- 01/05/2023-up to date** Post Doc (Borsa di Studio e Ricerca on “Extraction, purification and synthesis of polycetylenes”) at the University of Camerino.

CURRICULAR TRAININGS

- 01/10/2018** Master Thesis in the Laboratory of Organic Chemistry of Prof. Enrico Marcantoni (University of Camerino, Italy).
- 07/01/2019 – 29/03/2019** Attendance at the Department of Organic Chemistry in the laboratory of Prof. Nuno Maulide (University of Vienna, Austria) to continue the work of Thesis with an Erasmus + Traineeship programme.
- 12/07/2022 – 26/10/2022** Attendance at the Department of Organic Chemistry in the laboratory of Prof. Nuno Maulide (University of Vienna, Austria) to perform the PhD research activity abroad.
- 21/09/2023 – 22/09/2023** SIF School “Paolo Ceccherelli”, METABOLOMICS IN NATURAL PRODUCT RESEARCH, From biomarker discovery to deep metabolome analysis and targeted isolation of bioactive compounds. Hotel Nettuno, Catania.

WORK EXPERIENCE

- 09/11/2020 – 01/06/2021** Assignment of ‘Tutor Didattico’ of Chemistry for the Degree Course in ‘Ambiente e gestione sostenibile delle risorse naturali’.
- 04/11/2021 – 01/06/2022** Assignment of ‘Tutor Didattico’ of Chemistry for the Degree Course in ‘Ambiente e gestione sostenibile delle risorse naturali’.
- 28/03/2022 – 30/09/2022** Assignment of ‘Tutor D’Aula’ of Chemistry.
- 16/11/2022 – 10/06/2023** Assignment of ‘Tutor Didattico’ of Chemistry for the Degree Course in ‘Ambiente e gestione sostenibile delle risorse naturali’.

PERSONAL SKILLS

Mother tongue Italian

Other languages

UNDERSTANDING

SPEAKING

WRITING

	Listening	Reading	Spoken interaction	Spoken production	
English	B2	B2	B2	B2	B2

First certificate in English (B2) achieved on 12/10/2020 by Cambridge Assessment English in UNICAM.

Communication skills Excellent verbal and communication skills.
Good collaborative skills and good listening skills.

Organisational skills Excellent organisational skills.

Job-related skills Excellent team working skills and study method.

Technical skills Good command of the main extractions techniques, hydro/steam distillation and microwave-assisted extraction apparatuses; good knowledge of the analytical techniques and chromatographic systems (GC-MS and GC-FID) and of HPLC, NMR, MS, IR; good knowledge of organic synthesis's reactions and chromatography.

Digital skills Good command of Microsoft Office programmes, Outlook, Internet Explorer, Chemdraw, MestreNova and Topspin, of MSD ChemStation software by Agilent for GC-MS chromatograms analysis; good knowledge of the main sources for bibliographic research, such as Google Scholar, Scopus, Reaxys and PubMed.

Driving licence B

OTHER INFORMATIONS

Publications

1. Spinozzi, E., Bauer, A., & Maulide, N. (2019). A Mild Synthesis of Bicyclic Alkoxyoxazolium Salts from Proline and Pipecolic Acid Derivatives. *European journal of organic chemistry*, 2019(31-32), 5230-5233.
2. Benelli, G., Pavoni, L., Zeni, V., Ricciardi, R., Cosci, F., Cacopardo, G., ... & Lucchi, A. (2020). Developing a highly stable *Carlina acaulis* essential oil nanoemulsion for managing *Lobesia botrana*. *Nanomaterials*, 10(9), 1867.
3. Frezza, C., Venditti, A., Bianco, A., Serafini, M., Pitorri, M., Sciubba, F., ... & Petrelli, R. (2020). Phytochemical Analysis and Trypanocidal Activity of *Marrubium incanum* Desr. *Molecules*, 25(14), 3140.
4. Spinozzi, E., Maggi, F., Bonacucina, G., Pavela, R., Boukouvala, M. C.,

- Kavallieratos, N. G., ... & Benelli, G. (2021). Apiaceae essential oils and their constituents as insecticides against mosquitoes—A review. *Industrial crops and products*, *171*, 113892.
5. Benelli, G., Rizzo, R., Zeni, V., Govigli, A., Samková, A., Sinacori, M., ... & Canale, A. (2021). *Carlina acaulis* and *Trachyspermum ammi* essential oils formulated in protein baits are highly toxic and reduce aggressiveness in the medfly, *Ceratitis capitata*. *Industrial Crops and Products*, *161*, 113191.
 6. Pavela, R., Pavoni, L., Bonacucina, G., Cespi, M., Cappellacci, L., Petrelli, R., ... & Benelli, G. (2021). Encapsulation of *Carlina acaulis* essential oil and carlina oxide to develop long-lasting mosquito larvicides: Microemulsions versus nanoemulsions. *Journal of Pest Science*, *94*(3), 899-915.
 7. Spinozzi, E., Baldassarri, C., Acquaticci, L., Del Bello, F., Grifantini, M., Cappellacci, L., & Riccardo, P. (2021). Adenosine receptors as promising targets for the management of ocular diseases. *Medicinal Chemistry Research*, *30*(2), 353-370.
 8. Kavallieratos, N. G., Skourti, A., Nika, E. P., Mártonfi, P., Spinozzi, E., & Maggi, F. (2021). *Tanacetum vulgare* essential oil as grain protectant against adults and larvae of four major stored-product insect pests. *Journal of Stored Products Research*, *94*, 101882.
 9. Spinozzi, E., Pavela, R., Bonacucina, G., Perinelli, D. R., Cespi, M., Petrelli, R., ... & Maggi, F. (2021). Spilanthol-rich essential oil obtained by microwave-assisted extraction from *Acmella oleracea* (L.) RK Jansen and its nanoemulsion: Insecticidal, cytotoxic and anti-inflammatory activities. *Industrial Crops and Products*, *172*, 114027.
 10. Angeloni, S., Spinozzi, E., Maggi, F., Sagratini, G., Caprioli, G., Borsetta, G., ... & Ricciutelli, M. (2021). Phytochemical profile and biological activities of crude and purified *Leonurus cardiaca* extracts. *Plants*, *10*(2), 195.
 11. Rizzo, R., Pistillo, M., Germinara, G. S., Lo Verde, G., Sinacori, M., Maggi, F., ... & Benelli, G. (2021). Bioactivity of *Carlina acaulis* essential oil and its main component towards the olive fruit fly, *Bactrocera oleae*: Ingestion toxicity, electrophysiological and behavioral insights. *Insects*, *12*(10), 880.

12. Kavallieratos, N. G., Boukouvala, M. C., Ntalaka, C. T., Skourti, A., Nika, E. P., Maggi, F., ... & Benelli, G. (2021). Efficacy of 12 commercial essential oils as wheat protectants against stored-product beetles, and their acetylcholinesterase inhibitory activity. *Entomologia Generalis*, 385-414.
13. Rosato, A., Barbarossa, A., Mustafa, A. M., Bonacucina, G., Perinelli, D. R., Petrelli, R., ... & Spinozzi, E. (2021). Comprehensive Evaluation of the Antibacterial and Antifungal Activities of *Carlina acaulis* L. Essential Oil and Its Nanoemulsion. *Antibiotics*, 10(12), 1451.
14. Benelli, G., Ceccarelli, C., Zeni, V., Rizzo, R., Verde, G. L., Sinacori, M., ... & Canale, A. (2022). Lethal and behavioural effects of a green insecticide against an invasive polyphagous fruit fly pest and its safety to mammals. *Chemosphere*, 287, 132089.
15. Spinozzi, E., Ferrati, M., Baldassarri, C., Cappellacci, L., Marmugi, M., Caselli, A., ... & Petrelli, R. (2022). A Review of the Chemistry and Biological Activities of *Acmella oleracea* ("jambù", Asteraceae), with a View to the Development of Bioinsecticides and Acaricides. *Plants*, 11(20), 2721.
16. Kavallieratos, N. G., Nika, E. P., Skourti, A., Xefteri, D. N., Cianfaglione, K., Perinelli, D. R., ... & Maggi, F. (2022). Piperitenone oxide-rich *Mentha longifolia* essential oil and its nanoemulsion to manage different developmental stages of insect and mite pests attacking stored wheat. *Industrial Crops and Products*, 178, 114600.
17. Giordani, C., Spinozzi, E., Baldassarri, C., Ferrati, M., Cappellacci, L., Santibañez Nieto, D., ... & Maggi, F. (2022). Insecticidal Activity of Four Essential Oils Extracted from Chilean Patagonian Plants as Potential Organic Pesticides. *Plants*, 11(15), 2012.
18. Kavallieratos, N. G., Nika, E. P., Skourti, A., Perinelli, D. R., Spinozzi, E., Bonacucina, G., ... & Maggi, F. (2022). Apiaceae essential oil nanoemulsions as effective wheat protectants against five arthropod pests. *Industrial Crops and Products*, 186, 115001.
19. Kavallieratos, N. G., Nika, E. P., Skourti, A., Spinozzi, E., Ferrati, M., Petrelli, R., ... & Benelli, G. (2022). *Carlina acaulis* essential oil: a candidate product for agrochemical industry due to its pesticidal capacity. *Industrial Crops and*

- Products*, 188, 115572.
20. Perinelli, D. R., Pavela, R., Bonacucina, G., Baldassarri, C., Spinozzi, E., Torresi, J., ... & Canale, A. (2022). Development, characterization, insecticidal and sublethal effects of *Bunium persicum* and *Ziziphora clinopodioides*-based essential oil nanoemulsions on *Culex quinquefasciatus*. *Industrial Crops and Products*, 186, 115249.
 21. Sánchez-Gómez, S., Pagán, R., Pavela, R., Mazzara, E., Spinozzi, E., Marinelli, O., ... & Benelli, G. (2022). Lethal and sublethal effects of essential oil-loaded zein nanocapsules on a zoonotic disease vector mosquito, and their non-target impact. *Industrial Crops and Products*, 176, 114413.
 22. Kavallieratos, N. G., Nika, E. P., Skourti, A., Boukouvala, M. C., Ntalaka, C. T., Maggi, F., ... & Bonacucina, G. (2022). *Carlina acaulis* essential oil nanoemulsion as a new grain protectant against different developmental stages of three stored-product beetles. *Pest Management Science*, 78(6), 2434-2442.
 23. Pavela, R., Ferrati, M., Spinozzi, E., Maggi, F., Petrelli, R., Rakotosaona, R., ... & Benelli, G. (2022). The Essential Oil from the Resurrection Plant *Myrothamnus moschatus* Is Effective against Arthropods of Agricultural and Medical Interest. *Pharmaceuticals*, 15(12), 1511.
 24. Spinozzi, E., Ferrati, M., Cappellacci, L., Caselli, A., Perinelli, D. R., Bonacucina, G., ... & Benelli, G. (2023). *Carlina acaulis* L.(Asteraceae): biology, phytochemistry, and application as a promising source of effective green insecticides and acaricides. *Industrial Crops and Products*, 192, 116076.
 25. Ntalli, N., Zochios, G., Nikolaou, P., Winkiel, M., Petrelli, R., Bonacucina, G., ... & Benelli, G. (2023). *Carlina acaulis* essential oil nanoemulsion for managing *Meloidogyne incognita*. *Industrial Crops and Products*, 193, 116180.
 26. Giunti, G., Campolo, O., Laudani, F., Palmeri, V., Spinozzi, E., Bonacucina, G., Maggi, F., Pavela, R., Zeni, V., Canale, A., Lucchi, A., Benelli, G. (2023). Essential oil-based nano-insecticides: ecological costs and commercial potential. In: Koul, O. (2023). *Development and Commercialization of Biopesticides*. Costs and IITA, Elsevier.
 27. Spinozzi, E., Ferrati, M., Lo Giudice, D., Felicioni, E., Petrelli, R., Benelli, G.,

- Maggi, F.*, Cespi, M. (2023). Microwave-assisted hydrodistillation of the insecticidal essential oil from *Carlina acaulis*: a Fractional Factorial Design Optimization study. *Plants*, 12(3), 622.
28. Kavallieratos, N. G., Bonacucina, G., Nika, E. P., Skourti, A., Georgakopoulou, S. K. C., Filintas, C. S., ... & Benelli, G. (2023). The Type of Grain Counts: Effectiveness of Three Essential Oil-Based Nanoemulsions against *Sitophilus oryzae*. *Plants*, 12(4), 813.
29. Gugliuzzo, A., Francardi, V., Simoni, S., Roversi, P. F., Ferrati, M., Spinozzi, E., ... & Rizzo, R. (2023). Role of plant essential oil nanoemulsions on host colonization by the invasive ambrosia beetle *Xylosandrus compactus*. *Industrial Crops and Products*, 195, 116437.
30. Ferrati, M., Spinozzi, E., Baldassarri, C., Maggi, F., Pavela, R., Canale, A., Petrelli, R., Cappellacci, L. (2023) Efficacy of *Mentha aquatica* L. Essential Oil (Linalool/Linalool Acetate Chemotype) against Insect Vectors and Agricultural Pests. *Pharmaceuticals*, 16(4):633.
31. Feng, M., Fernandes, A. J., Sirvent, A., Spinozzi, E., Shaaban, S., & Maulide, N. (2023). Free Amino Group Transfer via α -Amination of Native Carbonyls. *Angewandte Chemie International Edition*, e202304990.
32. Spinozzi, E., Ferrati, M., Baldassarri, C., Maggi, F., Pavela, R., Benelli, G., ... & Petrelli, R. (2023). Synthesis of *Carlina* Oxide Analogues and Evaluation of Their Insecticidal Efficacy and Cytotoxicity. *Journal of Natural Products*, 86(5), 1307–1316.
33. Spinozzi, E., Zeni, V., Di Giovanni, F., Marmugi, M., Baldassarri, C., Mazzara, E., ... & Benelli, G. (2023). Aniseed, *Pimpinella anisum*, as a source of new agrochemicals: phytochemistry and insights on insecticide and acaricide development. *Agriculture Communications*, (1), 100003.
34. Álvarez-Rodríguez, S., Spinozzi, E., Sánchez-Moreiras, A. M., López-González, D., Ferrati, M., Lucchini, G., ... & Araniti, F. (2023). Investigating the phytotoxic potential of *Carlina acaulis* essential oil against the weed *Bidens pilosa* through a physiological and metabolomic approach. *Industrial Crops and Products*, 203, 117149.

35. Boukouvala, M. C., Kavallieratos, N. G., Maggi, F., Angeloni, S., Ricciutelli, M., Spinozzi, E., ... & Benelli, G. (2023). Being exposed to *Acmella oleracea*-based insecticides extract reduces mobility and mating success in *Prostephanus truncatus*, the major pest of maize in storages. *Journal of Stored Products Research*, *104*, 102151.
36. Mazzara, E., Spinozzi, E., Maggi, F., Petrelli, R., Fiorini, D., Scortichini, S., ... & Benelli, G. (2023). Hemp (*Cannabis sativa* cv. Kompolti) essential oil and its nanoemulsion: Prospects for insecticide development and impact on non-target microcrustaceans. *Industrial Crops and Products*, *203*, 117161.
37. Kavallieratos, N. G., Spinozzi, E., Filintas, C. S., Nika, E. P., Skourti, A., Panariti, A. M. E., ... & Benelli, G. (2023). *Acmella oleracea* extracts as green pesticides against eight arthropods attacking stored products. *Environmental Science and Pollution Research*, 1-24.
38. Rizzo, R., Ragusa, E., Benelli, G., Lo Verde, G., Zeni, V., Maggi, F., Petrelli, R., Spinozzi, E., Ferrati, M., Sinacori, M., Tsolakis, H. (2023). Lethal and sublethal effects of the polyacetylene carlina oxide on *Tetranychus urticae* (Acari: Tetranychidae) and *Neoseiulus californicus* (Acari: Phytoseiidae). *Pest Management Science*, *accepted*.
39. Merino, N., Berdejo, D., Pagán, E., Girard, C., Kerros, S., Spinozzi, E., ... & García-Gonzalo, D. (2023). Phenotypic and Genotypic Comparison of Antimicrobial-Resistant Variants of *Escherichia coli* and *Salmonella* Typhimurium Isolated from Evolution Assays with Antibiotics or Commercial Products Based on Essential Oils. *Pharmaceuticals*, *16*(10), 1443.
40. Ferrati, M., Maggi, F., Spinozzi, E. (2023). Rotenone: Advances on Resources, Biosynthetic Pathway, Bioavailability, Bioactivity, and Pharmacology. In: Xiao, J. (eds) Handbook of Dietary Flavonoids. Springer, Cham. https://doi.org/10.1007/978-3-030-94753-8_92-1.
41. Chabane, S., Boudjelal, A., Bouaziz-Terrachet, S., Spinozzi, E., Maggi, F., Petrelli, R., Tailg, G. (2023) Analgesic effect of *Centaurium erythraea* and molecular docking investigation of the major component swertiamarin. *Natural Product Research*, *accepted on 24/10/2023*.

Oral communications

1. National conference, oral contribution: **Spinozzi, E.**, Maggi, F., Petrelli, R., Cappellacci, L., Benelli, G., Pavela R.. *Carlina acaulis*: a promising candidate for eco-friendly botanical pesticides. 115° Congresso della Società Botanica Italiana. Online, September, 9-11, 2020, p.195.
2. International conference, oral contribution: **Spinozzi, E.**, Maggi, F., Petrelli, R., Cappellacci, L., Benelli, G., Canale, A., Pavela, R. A focus on jambù: from the Brazilian folk medicine to the development of novel botanical insecticides. 116° Congresso della Società Botanica Italiana- VII International Plant Science Conference (IPSC). Online, September, 8-10, 2021, p. xix.
3. International conference, oral contribution: **Spinozzi, E.**, Maggi, F., Petrelli, R., Cappellacci, L., Palmieri, A., Benelli, G., Canale, A., Pavela, R. *Carlina acaulis*, a traditional medicinal plant in the horizon of eco-friendly botanical insecticides. ACS Fall 2021. Online, Atalanta, GA, August, 22-26, 2021.
4. International conference, oral contribution: **Spinozzi, E.**, Maggi, F., Petrelli, R., Cappellacci, L., Benelli, G., Canale, A., Pavela R. *Carlina acaulis*: from its use in food supplements to promising insecticidal applications. 5th International Symposium on Phytochemicals in Medicine and Food (5-ISPMF). Online, Nanchang, China, August 25-September 01, 2021, p.178.
5. Maggi, F., Mazzara, E., Spinozzi, E. VERDURA DIMENTICATA DA RIVALUTARE: IL CASO DEL SEDANO SELVATICO (SMYRNIUM OLUSATRUM). Rapporti ISTISAN, 2022, 22/2, 93-98.
6. National conference: Rizzo, R., Germinara, G.S., Pistillo, M., Sinacori, M., Lo Verde, G., Maggi, F., Cappellacci, L., Petrelli, R., Spinozzi, E., Canale, A., Benelli, G. *Carlina oxide* as a new active ingredient for lure and kill against *Bactrocera oleae*? Insecticidal activity and electrophysiological insights. Atti XXVI Congr. Naz. Ital. Entomologia (CNIE), Torino, June, 7-13, 2021, p.139.
7. **Spinozzi, E.** Mela rosa dei Monti Sibillini: da antica varietà a prodotto nutraceutico. Indena e UNICAM: un cammino trentennale di ricerca nella Farmaceutica e Nutraceutica - ChIP UNICAM, Camerino, Italy, July, 05, 2022.
8. **Spinozzi, E.** Mela rosa dei Monti Sibillini: da antica varietà a prodotto nutraceutico. Convegno sulla Mela Rosa - Sibillini in rosa - Montedinove,

October, 29, 2022.

9. International conference, oral contribution: **Spinozzi, E.**, Ferrati, M., Maggi, F., Petrelli, R., Caselli, A., Benelli, G., Perinelli, D.R., Bonacucina, G. The wild artichoke *Carlina acaulis* as promising source of effective insecticides and acaricides. XI International Symposium on Artichoke, Cardoon and their Wild Relatives. Online, Molfetta, Italy, April, 18-21, 2023, p.14.
10. Oral contribution: Spinozzi E., Ferrati, M., Baldassarri, C., Maggi F., Pavela, R., Benelli, G., Aguzzi, C., Zeppa, L., Cappellacci, L., Palmieri, A., Petrelli, R. *Carlina acaulis*, a traditional medicinal plant for insect vectors management. 1° Congresso Intersocietà sui prodotti vegetali per la salute: il ruolo delle piante medicinali nella medicina moderna. Padova, Italy, June, 15-17, 2023, p. 91.
11. International conference, invited oral contribution: **Spinozzi E.**, Ferrati, M., Álvarez-Rodríguez, S., Sánchez-Moreiras, A.M., Araniti, F., Cappellacci, L., Petrelli, R., Maggi, F. *Carlina acaulis* essential oil: a potential phytotoxic agent for weed management. 34th AAIC (Association for the Advancement of Industrial Crops) Annual Meeting. Online, August, 27-30, 2023, p. 4.
12. **Spinozzi, E.**, Maggi, F. Mela rosa dei Monti Sibillini: da antica varietà a prodotto nutraceutico. Convegno sulla Mela Rosa - Sibillini in rosa - Montedinove, October, 28, 2023.
13. International conference, invited oral contribution: **Spinozzi E.**, Ferrati, M., Baldassarri, C., Perinelli, D.R., Bonacucina, G., Pavela, R., Cappellacci, L., Petrelli, R., Maggi, F. *Bunium persicum* (Boiss.) B Fedtsch. and *Ziziphora clinopodioides* Lam. essential oils and their nanoemulsions: promising candidates for the management of *Culex quinquefasciatus*. XXX Congreso Peruano de Química, XXX Congreso Italo-Latinamericano de Etnomedicina. Online, October, 16-20, 2023.

Poster presentations

1. **Spinozzi, E.**, Pavela, R., Bonacucina, G., Perinelli, D.R., Cespi, M., Petrelli, R., Cappellacci, L., Fiorini, D., Scortichini, S., Garzoli, S., Angeloni, C., Freschi, M., Hrelia, S., Quassinti, L., Bramucci, M., Lupidi, G., Sut, S., Dall'Acqua, S., Benelli, G., Canale, A., Drenaggi, E., Maggi, F. Spilanthol-rich essential oil obtained by microwave-assisted extraction from *Acmella oleracea* (L.) R.K. Jansen and its nanoemulsion: Insecticidal, cytotoxic and anti-inflammatory activities. Indena e UNICAM: un cammino trentennale di ricerca nella Farmaceutica e Nutraceutica (ChIP UNICAM, Camerino, Italy, July, 05, 2022).
2. **Spinozzi, E.**, Angeloni, S., Ricciutelli, M., Sensini, A., Ferrati, M., Baldassarri, C., Torresi, J., Petrelli, R., Maggi, F. *Acmella oleracea* (L.) R.K. Jansen: from the optimization of spilanthol-extraction procedure to the identification and quantification of alkylamides. Indena e UNICAM: un cammino trentennale di ricerca nella Farmaceutica e Nutraceutica (ChIP UNICAM, Camerino, Italy, July, 05, 2022).
3. Spinozzi, E., Ferrati, M., Piergentili, A., Petrelli, R., Cappellacci, L., Maggi, F., Angeloni, S., Ricciutelli, M., Drenaggi, E., Boukouvala, M.C., Kavallieratos, N.G., Benelli, G. Spilanthol-rich extracts from *Acmella oleracea* (L.) R.K. Jansen and their efficacy on stored product pests. 1° Congresso intersocietà sui prodotti vegetali per la salute: Il ruolo delle piante medicinali nella medicina moderna (Padova, Italy, June, 15-17, 2023).
4. Spinozzi E., Ferrati M., Lo Giudice D., Felicioni E., Petrelli R., Benelli G., Maggi F., Cespi M. Optimization of the microwave-assisted hydrodistillation of *Carlina acaulis* essential oil by fractional factorial design study. 1° Congresso intersocietà sui prodotti vegetali per la salute: il ruolo delle piante medicinali nella medicina moderna (Padova, Italy, June, 15-17, 2023).

Scientific collaborations Collaboration with the University of Pisa, University of Athens, Crop Research Institute of Prague, CREA Research Institute, Università Sapienza – Università di Roma, Università degli Studi di Bari, Università degli Studi di Padova, INDENA Spa, SIPCAM OXON Spa, Dompè farmaceutici Spa.

Editorial activity **Reviewer** for: *Antioxidants, Environmental Science and Pollution Research, Experimental Parasitology, Food Research International, Heliyon, Industrial Crops and Products, International Journal of Molecular Sciences, Journal of Pest Science, Journal of Natural Pesticide Research, Journal of Natural Products, Molecules, Nutrients, South African Journal of Botany.*

Guest Editor for *Plants*’ Special Issue “Green Insect Control: The Potential Impact of Plant Essential Oils”.

Membership of scientific societies Italian Society of Phytochemistry (S.I.F.)
Italian Botanical Society (S.B.I.)

Honours and awards 2014: Holder of a scholarship from “Pio Sodalizio” Foundation.

2018-2019: Holder of a scholarship to take part in an Erasmus + Traineeship programme of 3 months in the Laboratory of Prof. Nuno Maulide in the Department of Organic Chemistry of the University of Vienna.

In compliance with art. 19 and 47 of D.P.R. n. 445/2000, I declare that everything that is declared in this document correspond to the truth.

In compliance with the Italian legislative Decree no. 196 dated 08/07/2003, I hereby authorize you to use and process my personal details contained in this document.

Camerino, 28/10/2023