

Federica Lo Muzio

ORCID iD: <https://orcid.org/0000-0003-0853-9644>

Gender: Female | Nationality: Italian

EDUCATION AND TRAINING

[01/01/2022 - 01/01/2025]

Research Doctorate (Ph.D.) in “Gestione dell'innovazione nei sistemi agro-alimentari della regione mediterranea”, XXXVII cycle

University of Foggia

City: Foggia | **Country:** Italy | **Field(s) of study:** Valorisation of Mediterranean-region productions; AGR/11 - General and Applied Entomology

Research project: “Caratterizzazione delle proprietà insetticide di estratti da sottoprodotti della lavorazione di *Punica granatum* L. e *Cynara scolymus* L. nei confronti di *Sitophilus granarius* (L.) (Coleoptera, Curculionidae) ed *Ephestia kuehniella* (Zeller) (Lepidoptera, Pyralidae)”.

- Research activities on stored-product entomology, bioassays, plant extracts and sustainable pest management.

[01/09/2023 - 01/12/2023]

Research training period abroad

Department of the Sciences of Agriculture, Food and Environment, University of Athens

City: Athens | **Country:** Greece

Research activity: “Optimizing λ -cyhalothrin for the effective control of *Alphitobius diaperinus*: Temperature and food effect revealed”.

[2020]

Master’s Degree in Plant Medicine (LM-69)

University of Bari “Aldo Moro”, Department of Soil, Plant and Food Sciences

City: Bari | **Country:** Italy | **Final grade:** 110/110 cum laude

Thesis: “Genetic variability in the fumonisin biosynthesis gene cluster of *Fusarium proliferatum* and pathogenic test on onion (*Allium cepae* L.)”.

[01/10/2019 - 01/06/2020]

Research training period abroad

Department of Plants and Crops, Faculty of Bioscience Engineering, University of Ghent

City: Ghent | **Country:** Belgium

Research activity: characterization of the fumonisin biosynthetic pathway produced by *Fusarium proliferatum* in *Allium cepae* L.

[01/07/2019 - 01/09/2019]

Research training period

Institute of Sciences of Food Production (ISPA), National Research Council, Bari

City: Bari | **Country:** Italy

Research activity: biological and molecular identification of *Fusarium* spp.

[01/05/2017 - 01/07/2017]

Research training period abroad

Department Agriculture, Policy and Development, University of Reading

City: Reading | **Country:** United Kingdom

Research activity: characterization of the protein fraction in *Triticum durum*.

[2016]

Bachelor's Degree in Food Science and Technology (L-25)

University of Foggia, Department of Agricultural, Food and Environmental Sciences

City: Foggia | **Country:** Italy | **Final grade:** 107/110

Internship report: "Caratterizzazione della resistenza ad orobanche in pisello".

[2012]

Scientific high school diploma

Liceo Scientifico "Guglielmo Marconi"

City: Foggia | **Country:** Italy | **Final grade:** 92/100

LANGUAGE SKILLS

Mother tongue(s): Italian

Other language(s): English

LISTENING B1 READING B1 WRITING SPOKEN INTERACTION B1

Language certification: English - European level B1

Cambridge

WORK EXPERIENCE

[01/02/2025 - 01/02/2026]

Research fellow

University of Foggia, Department of Agricultural, Food and Environmental Sciences

City: Foggia | **Country:** Italy

Research grant: "Biological, chemical and genetic bases of granary weevil and purple wheat interactions (GRANARIUS)".

- Research activities on interactions between granary weevil and purple wheat, experimental assays, data analysis and scientific reporting.

[27/07/2021 - 02/01/2022]

Research fellow

University of Foggia

City: Foggia | **Country:** Italy

Research activity: "Valutazione di dispositivi di monitoraggio della Mosca delle olive per lo sviluppo di un nuovo sistema di supporto alle decisioni (SSD)" within the project "Gestione olivicola attraverso l'uso di innovazione e controllo".

CONFERENCES AND SEMINARS

[24/09/2025 - 27/09/2025]

From Seed To Pasta (FSTP) Congress

Bari, Italy

Author of the poster: "Evaluation of granary weevil utilization efficiency in pigmented wheat varieties".

Co-author of the poster: "Susceptibility and attractiveness of ancient and old wheats to *Sitophilus granarius* (L.) and *Rhyzopertha dominica* (F.)".

[16/06/2025 - 20/06/2025]

XXVIII Congresso Nazionale Italiano di Entomologia (CNIE)

Siena, Italy

Oral communication: "Bioattività di estratti di buccia di *Punica granatum* (L.) verso insetti infestanti delle derrate".

Co-author of posters and oral communications on *Philaenus spumarius*, *Prays oleae*, *Sitophilus granarius* and *Rhyzopertha dominica*.

[30/09/2024 - 04/10/2024]

6th Joint Meeting of Agriculture-oriented PhD Programs at UNIFG, UNICT and UNIUD

Lesina, Italy

Oral presentation: “Bioactivity of *Punica granatum* (L.) fruit peel extracts against two stored insect pests”.

[12/06/2023 - 16/06/2023]

XXVII Congresso Nazionale Italiano di Entomologia (CNIE)

Palermo, Italy

Author of the poster: “Contact toxicity of *Punica granatum* (L.) fruit peel extracts against the granary weevil, *Sitophilus granarius* (L.) (Coleoptera, Curculionidae)”.

Co-author of posters and oral communications on stored-product insects and insect semiochemistry.

[03/10/2022 - 07/10/2022]

4th Joint Meeting of Agriculture-oriented PhD Programs at UNIFG, UNICT and UNIUD

Paluzza, Italy

Oral presentation: “Bioactivities of plant extracts against some stored-product insect pests”.

PUBLICATIONS

- Lo Muzio, F., Eleftheriadou, N., Boukouvala, M.C., Germinara, G.S., Kavallieratos, N.G. (2024). Optimizing λ -cyhalothrin for the effective control of *Alphitobius diaperinus*: Temperature and food effect revealed. *Journal of Stored Products Research*, 109. <https://doi.org/10.1016/j.jspr.2024.102425>
- D’Isita, I., Pistillo, O. M., Di Palma, A. M., Lo Muzio, F., De Vita, P., Pati, S., Germinara, G. S. (2024). Behavioural responses of *Sitophilus granarius* (L.) and *Rhyzopertha dominica* (F.) to odours of old and modern wheat genotypes. *Journal of Stored Products Research*, 109. <https://doi.org/10.1016/j.jspr.2024.102433>
- Pistillo, O. M., D’Isita, I., Lo Muzio, F., Acquaviva, M., Iadarola, G., Coduti, M., Di Palma, A., Germinara, G. S. (2024). Distribution and flight activity of the asparagus moth, *Parahyppopta caestrum*, in southern Italy as monitored by pheromone traps. *Acta Horticulturae*, 1416, 325-330. <https://doi.org/10.17660/ActaHortic.2025.1416.42>
- Lo Muzio, F., Pistillo, O. M., D’Isita, I., Iadarola, G., Di Palma, A., De Cristofaro, A., et al., Germinara, G. S. (2025). Insecticidal and Repellent Activity of Different Pomegranate Peel Extracts Against Granary Weevil Adults. *Insects*, 16(12), 1222. <https://doi.org/10.3390/insects16121222>

CONGRESS PROCEEDINGS AND ABSTRACTS

- Lo Muzio F., D’Isita I., Pistillo O.M., Rotundo G., Germinara G.S., Di Palma A., De Cristofaro A. (2023). Tossicità da contatto di estratti di buccia di *Punica granatum* (L.) verso adulti di *Sitophilus granarius* (L.). *Atti XXVII CNIE, Palermo 12-16 Giugno 2023*:172.
- D’Isita I., Pistillo O.M., Lo Muzio F., Di Palma A.M., De Vita P., Germinara G.S. (2023). Suscettibilità e attrattività di varietà di grano antiche e moderne verso il punteruolo del grano, *Sitophilus granarius* (L.). *Atti XXVII CNIE, Palermo 12-16 Giugno 2023*:307.
- Pistillo O.M., D’Isita I., Lo Muzio F., Di Palma A., Germinara G.S. (2023). Identificazione del feromone sessuale del cosside dell’asparago, *Parahyppopta caestrum*: indagine chimica, elettrofisiologica e di attrattività in campo. *Atti XXVII CNIE, Palermo 12-16 Giugno 2023*:52.
- Ilaria D’Isita, Federica Lo Muzio, Onofrio Marco Pistillo, Sandra Pati, Antonella Di Palma, Pasquale De Vita, Giacinto S. Germinara (2025). Susceptibility and attractiveness of ancient and old wheats to *Sitophilus granarius* (L.) and *Rhyzopertha dominica* (F.), Bari 24-27 Settembre 2025.

LANGUAGE SKILLS

Mother tongue(s)

Italian

Other language(s)

English - B1

Language certification: English, European level B1 (Cambridge).

TECHNICAL SKILLS

- Planning and execution of laboratory bioassays for the evaluation of insecticidal, repellent and behavioural activity of plant extracts and natural products.
- Experience in stored-product entomology, insect rearing, contact toxicity assays, feeding bioassays, repellency tests and interpretation of dose-response data.
- Molecular and microbiological methodologies acquired through training activities on DNA sequencing, gene expression analysis and *Fusarium* spp. identification.
- Bibliographic research, scientific writing, data organization and preparation of posters, oral presentations and scientific manuscripts.

ORGANISATIONAL SKILLS

- Participation in national and international conferences, with oral and poster presentations on applied entomology and sustainable pest-management strategies.
- Ability to organize experimental activities, manage laboratory workflows and collaborate within multidisciplinary research groups.
- Scientific dissemination and academic communication skills developed during doctoral training and conference participation.

FURTHER INFORMATION

This curriculum is prepared for publication purposes and omits personal contact details not required for transparency publication.

DECLARATION

Dichiaro di:

- essere consapevole delle conseguenze derivanti da dichiarazioni mendaci, previste dal D.P.R. 28/12/2000 n. 445 e s.m.i., e che le informazioni riportate nel presente curriculum corrispondono a verità;
- essere informata, ai sensi e per gli effetti di cui al Regolamento UE 2016/679, che i dati personali contenuti nel presente curriculum saranno trattati dall'Università degli Studi di Foggia per adempiere agli obblighi di pubblicazione ai fini di trasparenza previsti dalla normativa vigente.

Luogo e data

Foggia, 18/05/2026

Nome e Cognome

Federica Lo Muzio

Firma autografa sostituita a mezzo stampa
ai sensi dell'art.3, comma 2, del D. Lgs.
39/1993.