

**DANIELE SOMMAGGIO PhD**  
**July 2024**



**PERSONAL DETAILS**

Name: DANIELE  
Surname: SOMMAGGIO  
Born in: Vigevano (Italy)  
In date: 04 May 1968  
Nationality: Italian  
Address: Via Bronzi, n° 7/A - 36010 Velo d'Astico (Vicenza)  
Country: Italy  
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**EDUCATION**

June 2010, Alma Mater Studiorum, Bologna University, Italy: *Ph.D. in Entomology*. Title of the thesis: "The rule of hoverflies in sustainable agriculture: the importance of aphidophagous species in Integrated Pest Management".  
PhD director prof. Giovanni Burgio.

June 2006, Trento University, Italy: *Master in Science Teaching in Secondary School* (2 years programme).

July 1992, Padova University, Italy: *Master degree in Biology*.

**LANGUAGES**

- ♣ Italian, mother tongue
- ♣ English, fluent spoken and written
- ♣ French reading ability

**INTERESTS**

- ♣ *Bioindicators*: the use of invertebrates as bioindicators of sustainability; environmental evaluation, both in rural and natural areas.
- ♣ *Organic agriculture*: the importance of functional biodiversity for sustainable agriculture; biological control.
- ♣ *Viticulture*: pest control by predator and parasitoid; improvement of functional biodiversity to increase biological control.
- ♣ *Insect ecology*: multitrophic interactions; biodiversity conservation and monitoring; modeling host and parasitoid interaction.
- ♣ *Insect taxonomy*: in particular Diptera (Syrphidae)

**ADEMIC ACTIVITY**

*Adjunct Professor / Lecturer*

University of Modena and Reggio Emilia (September 2023 – present)

**Taught Courses:**

Functional Biodiversity of Arthropods. (MSc course in Sustainability of Agroecosystems)

Pollination and beekeeping (MSc course in Sustainability of Agroecosystems)

University of Padova (March 2009 – February 2022)

**Taught Courses:**

Terrestrial Ecosystems and Bioindicators (MSc course in Nature Science)

Entomology (MSc course in Nature Science)

2001, 2007, 2011, 2015, 2016, 2017, 2018, 2019 and 2022: teacher in courses for the identification of insects (Diptera,, Syrphidae), organized by the Natural History Museum in Ferrara, EDIT and DEST projects.

## **RESEARCH ACTIVITY**

2023-2025: researcher in University of Modena and Reggio Emilia, mainly focusing on Syrphidae biodiversity

2021-22: research fellow in Alma Mater Studiorum University of Bologna on a project about “Biodiversity conservation of Diptera Syrphidae in natural habitats and agroecosystems

2019: scientific referent for Ferrara Municipality in the Central Europe Interreg project “Hicaps-Historical Castle Parks CE 929”. Tasks: use of insects of bioindicators in urban areas.

2017: contract in Bologna University project. I’m working in collaboration with prof. G. Burgio, DiSTA Bologna University. Tasks: identification of Carabidae; evaluation of the effect of different cultural techniques on soil fauna.

2016: contract in Bologna University project. I’m working in collaboration with prof. G. Burgio, DiSTA Bologna University. Tasks: identification of Carabidae; evaluation of the effect of different cultural techniques on soil fauna.

2014 - 2015: contract in Veneto Region project (Vene Terroir). I’m working under the direction of prof. M.G. Paoletti, Biology Dept., Padova University. Tasks: the use of invertebrate as bioindicators in vineyards with different management; the study of the connection between soil fauna, terroir and wine quality.

2013, 2014: contract on Alma Mater Studiorum project: “Interveg - MIPAF”. I worked under the direction of G. Burgio, DiSTA Bologna University. Tasks: identification of Carabidae; evaluation of the effect of different cultural techniques on soil fauna.

2011-2013: contract on Life+ “Conservation actions, habitat and species improvement, and preservation of SIC Colli Berici nature reserve” LIFE08 NAT/IT/000362. I cooperated in this project as manager for entomological monitoring to evaluate the effect of environmental amelioration in xeric fields.

2010-2012: contract on CRPV and Emilia Romagna Region project “Functional biodiversity in vineyards”. I worked under the direction of prof. G. Burgio, DiSTA Bologna University. Task: effect of cover crops on useful insects in vineyards; monitoring, identification and data elaboration of main useful insects in vineyards.

2011: contract on the European project (7 FP) "Indicators for biodiversity in organic and low input farming systems" Padua University, Italy, under the direction of prof. M.G. Paoletti. Main tasks: farms mapping; fauna sampling (earthworms, spiders and bees); bee identification and their use as bioindicator.

2004 contract on Alma Mater Studiorum, Bologna University project: “Wild fauna to improve rural and local resources”, founded by Agriculture and Forestry Italian Ministry. I worked under the direction of G. Burgio, DiSTA, Bologna. Tasks: monitoring and evaluation of different landscape complexity on some insect taxa (Syrphidae, Carabidae, Papillioidea, Symphyta).

2005-2007: contract on WWF as monitoring leader in coastal pine wood natural area near Venice. During this period, I evaluated the impact of human activities (mainly tourism) on natural importance peculiarities of seaside and natural dunes.

- 2003-2009: contract on Natural History Museum in Ferrara project to use hoverflies (Diptera: Syrphidae) as monitoring tool in environmental evaluation of both natural and anthropized areas in Padania plain. During this period, I applied Syrph the Net method as standardized technique in environmental evaluation; this technique has been adapted to Italian condition.
- 2003-2006: contract on ARPA (Regional Bureau for Environment Protection in Emilia Romagna) project to monitor biodiversity in natural and anthropized area. Task: monitoring hoverflies (Diptera: Syrphidae) as tool to evaluate environmental quality in area of industrial extension.
- 2002: contract on Veneto Agriculture (Regional Bureau for Agriculture in Veneto) project: “*Environmental improvement of Adige Valley*”. Tasks: monitoring Syrphidae as tool to evaluate environmental quality.
- 1999 – 2001: contract on Calabria University, Dept. of Ecology, project: “*Checklist and distribution of the Italian Fauna*”. Tasks: mapping of Italian Syrphini (Diptera, Syrphidae).
- 1995: grant on European project AIR3-CT 920476/920477 about the use of grasses strips in enhancing the Carabids population in the agroecosystems. I worked at Padua University in prof M.G. Paoletti’s laboratory studying the role of different grasses strips on Coleoptera Carabidae
- 1994: contract from Regional Bureau for Agricultural Development in Abruzzo (Italy) on the project “Biodiversity evaluation in soil with different tillage practices”. I worked at the Dept. of Biology, under the direction of M.G. Paoletti. Tasks: monitoring soil fauna, in particular Coleoptera Carabidae; evaluating the effect of different tillage on target taxa.
- 1992-1993: grant at Padua University to evaluate *the effect of copper on soil fauna in vineyards*. I worked at the Dept. of Biology, under the direction of M.G. Paoletti. Tasks: monitoring soil fauna, in particular Coleoptera Carabidae, Collembola and Lumbricidae; evaluating the effect of different copper concentration on target taxa.

## **OTHER WORK EXPERIENCES**

- 2024: Since 2024 I’m in the Editorial Board of the Bulletin of Insectology (ISSN: 1721-8861, IF: 1.3)
- 2020: Since 2020 I’m Guest Editor for Insects (ISSN: 2075-4450, IF: 2.7) and Agronomy (ISSN: 2073-4395, IF: 2.603)
- 2009: I have been invited in Smithsonian and Ottawa Museum to cooperate in the project of North American *Chrysotoxum*, both taxonomy and phylogeny. I visited the two Museums in July and August 2009 thank to Willinston fund and Canacoll support.
- 2009: I visited, thanks to a financial support in Synthesys project, Natural History Museum in London to continue the project about *Chrysotoxum* (Diptera, Syrphidae) taxonomy with particular reference to North American species.
- 2008: I spent a period of 2 weeks in Mali to evaluate the impact of agriculture on entomological biodiversity, with a focus on the relationship between aphid-ant-hoverfly and parasitoid. The project has been financially supported by Bologna University thank to a coopertation between Italy and Mali.
- 2005: I participated to Synthesys project for exchange of person between different Institutions. Thank to this project I spent 10 days in Natural History Museum in Paris to study the genus *Chrysotoxum* (Diptera, Syrphidae).
- 2000: December: I spent a week in Zoological Museum in Amsterdam to study *Paragus* and *Chrysotoxum* specimens preserved in the Museum; the trip was necessary to complete the mapping of Italian Syrphinae.
- 1994: December: I participated to an expedition in Venezuela (Puerto Ayacucho area) to evaluate the effect of different agricultural management on biodiversity. The expedition has been organized by prof. M.G. Paoletti, Padova University.
- 1994: I spent 2 weeks in Torum University under the direction of A. Czarnecki to improve my knowledge of Collembola. The project was included in personal exchange between Padova and Torum University.

## PUBLICATIONS

Scopus h-index: 16; total citations: 934 (accessed 27.7.2024)

### Papers in peer reviewed journals

- Maritano U., Bianco L., **Sommaggio** D. (2024) Not all woods are equal: local, rather than landscape, factors are important to conserve a xylosaprophagous hoverfly. *Journal of Insect Conservation*. <https://doi.org/10.1007/s10841-024-00610-2>
- Henriques Martins C.A., Azpiazu C., Bosch J., Burgio G., Dindo M.L., Francati S., **Sommaggio** D., Sgolastra F., 2024. Different Sensitivity of Flower-Visiting Diptera to a Neonicotinoid Insecticide: Expanding the Base for a Multiple-Species Risk Assessment Approach. *Insects* 2024, 15, 317. <https://doi.org/10.3390/insects15050317>
- Lorenzato L., Fantinato E., **Sommaggio** D., Favarin S., Buffa G., 2024. Pollinator abundance, not the richness, benefits from urban green spaces in intensive agricultural land. *Urban Ecosystems* (2024). <https://doi.org/10.1007/s11252-024-01565-7>
- Tu B.N., Khelidj N., Cerretti P., de Vere N., Ferrari A., Paone F., Polidori C., Schmid J., **Sommaggio** D., Losapio G., 2024. Glacier retreat triggers changes in biodiversity and plant–pollinator interaction diversity. *Alpine Botany* (2024). <https://doi.org/10.1007/s00035-024-00309-9>
- Favarin S., **Sommaggio** D., Fantinato E., Masiero M., Buffa G., 2024. Ecological intensification: multifunctional flower strips support beneficial arthropods in an organic apple orchard. *Plant Ecology*, 225: 499-509. <https://doi.org/10.1007/s11258-024-01402-z>
- Reverté S, Miličić, M, Ačanski J, Andrić A, Aracil A, Aubert M, Balzan MV, Bartomeus I, Bogusch P, Bosch J, Budrys E, Cantú-Salazar L, Castro ,S, Cornalba M, Demeter I, Devalez J, Dorchin A, Dufrêne E, Đorđević A, Fisler L, Fitzpatrick Ú, Flaminio S, Földesi R, Gaspar H, Genoud D, Geslin B, Ghisbain G, Gilbert F, Gogala A, Grković A, Heimbürg H, Herrera-Mesías F, Jacobs M, Janković MM, Janssen K, Jensen J-K, Ješovnik A, Józán Z, Karlis G, Kasperek M, Kovács-Hostyánszki A, Kuhlmann M, Le Divelec R, Leclercq N, Likov L, Litman J, Ljubomirov T, Madsen HB, Marshall L, Mazánek, L, Milić D, Mignot M, Mudri-Stojnić S, Müller A, Nedeljković Z, Nikolić P, Ødegaard F, Patiny S, Paukkunen J, Pennards G, Pérez-Bañón C, Perrard A, Petanidou T, Pettersson LB, Popov G, Popov S, Praz C, Prokhorov A, Quaranta M, Radchenko VG, Radenković S, Rasmont P, Rasmussen C, Reemer M, Ricarte A, Risch S, Roberts SPM, Rojo S, Ropars L, Rosa P, Ruiz C, Sentil A, Shparyk V, Smit J, **Sommaggio** D, Soon V, Ssymank A, Ståhls G, Stavrínides M, Straka J, Tarlap P, Terzo M, Tomozii B, Tot T, van der Ent L-J, van Steenis J, van Steenis W, Varnava A, Vereecken NJ, Veselić S, Vesnić A, Weigand A, Wisniowski B, Wood T, Zimmermann D, Michez D, Vujić A, 2023. National records of 3000 European bee and hoverfly species: A contribution to pollinator conservation. *Insect Conservation and Diversity*.
- Lami F., Bugrio G., Magagnoli S., **Sommaggio** D., Horváth R., Nagy D.D., Masetti A., 2023. Ground-dwelling arthropods as biodiversity indicators in maize agroecosystems of Northern Italy., *Ecological Indicators*, 152: 110352
- Tondini E., **Sommaggio** D., Monteforti G., Petacchi R., 2023 Shedding Light on *Dasineura oleae* Parasitoids: Local and Landscape Effects. *Agronomy*, 13: 667.
- Sommaggio** D., Zanotelli L., Vettorazzo E., Burgio G., Fontana P., 2022. Different distribution patterns of hoverflies (Diptera: Syrphidae) and bees (Hymenoptera: Anthophila) along altitudinal gradients in Dolomiti Bellunesi National Park (Italy). *Insects*, 13(3): 293.
- Jeanneret P., Lüscher G., Schneider M. K., Pointereau P., Arndorfer M., Bailey D., Balázs K., Báldi A., Choisis J.P., Dennis P., Diaz M., Eiter S., Elek Z., Fjellstad W, Frank T., Friedel J.K., Garchi S., Geijzendorffer I., Gillingham P., Gomiero T., Jerkovich G., Jongman R.H.G., Kainz M., Kovács-Hostyánszki A., Moreno G., Nascimbene J., Oschatz M.-L. Paoletti M.G., Sarthou J.-P., Siebrecht N., **Sommaggio** D., Wolfrum S., Herzog,

- F., 2021. An increase in food production in Europe could dramatically affect farmland biodiversity. *Communications Earth & Environment*, 2: 183, (2021) 2:183 | <https://doi.org/10.1038/s43247-021-00256-x>
- Sforzi A., **Sommaggio D.**, 2021. Catalog of the Diptera types described by Camillo Rondani. *Zootaxa*, 4989: 1-438.
- Sommaggio D.**, Fusco G., Uliana M., Minelli A., 2021. Possible Epigenetic Origin of a Recurrent Gynandromorph Pattern in Megachile Wild Bees. *Insects*, 12, 437.
- Losapio G., Hasdav E.N., Espadaler X., Germann C., Ortiz-Sanchez F.J., Pont A., **Sommaggio D.**, Schöb C., 2021. Facilitation and biodiversity jointly drive mutualistic networks. *Journal of Ecology*, <https://doi.org/10.1111/1365-2745.13593>
- Losapio G., Schmid B., Bascompte J., Cerretti P., Germann C., Haenni J.-P., Neumeeyer R., Ortiz-Sanchez F.J., Pont A.C., Rouse P., Schmid J., **Sommaggio D.**, Schöb C., 2020. An experimental approach to assessing the impact of ecosystem engineers on biodiversity and ecosystem functions. *Ecology*, <https://doi.org/10.1002/ecy.3243>
- Depalo L., Burgio G., Magagnoli S., **Sommaggio D.**, Montemurro F., Canali S., Masetti A., 2020. Influence of Cover Crop Termination on Ground Dwelling Arthropods in Organic Vegetable Systems. *Insects*, 11(7): 1-14. <https://doi.org/10.3390/insects11070445>
- Parrilli M., **Sommaggio D.**, Tassini C., Di Marco S., Osti F., Ferrari F., Metruccio E., Masetti A., Burgio G., 2019. The role of *Trichoderma* spp. and silica gel in plant defence mechanisms and insect response in vineyard. *Bulletin of entomological Research*, 109: 771-780. <https://doi.org/10.1017/S0007485319000075>
- Losapio G., Fortuna M.G., Bascompte J., Schmid B., Michalet R., Neumeeyer R., Castro L., Cerretti P., Germann C., Haenni J.-P., Klopstein S., Ortiz-Sanchez F.J., Pont A., Rouse P., Schmid J., **Sommaggio D.**, Schöb C., 2019. Plant interactions shape pollination networks via nonadditive effects. *Ecology*, 100. <https://doi.org/10.1002/ecy.2619>
- Sommaggio D.**, Peretti E., Burgio G., 2018. The effect of cover plants management on soil invertebrate fauna in vineyard in Northern Italy. *BioControl*, 63: 795-806. <https://doi.org/10.1007/s10526-018-09907-z>
- Popov S., Miličić M., Diti I., Marko O., **Sommaggio D.**, Markov Z., A. Vujić, 2018. Phytophagous hoverflies (Diptera: Syrphidae) as indicators of changing landscapes. *Community Ecology*, 18: 287-294. <https://doi.org/10.1556/168.2017.18.3.7>
- Magagnoli S., Masetti A., Depalo L., **Sommaggio D.**, Campanelli G., Leteo F., Lövei G. Burgio G., 2018. Cover crop termination techniques affect ground predation within an organic vegetable rotation system. A test with artificial caterpillars. *Biological Control*, 117:109-114. <https://doi.org/10.1016/j.biocontrol.2017.10.013>
- Sommaggio D.**, 2017. The hoverfly fauna of the Berici Hills: an area of rich biodiversity in north-eastern Italy. *Bulletin of Insectology*, 70: 101-110.
- Marchini M., **Sommaggio D.**, Minelli A., 2017. Playing with Black and Yellow: The Evolvability of a Batesian Mimicry. *Evolutionary Biology*, 44: 100-112. <https://doi.org/10.1007/s11692-016-9397-0>
- Burgio G., Marchesini E., Reggiani N., Montepaone G., Schiatti P., **Sommaggio D.**, 2016. Habitat management of organic vineyard in Northern Italy: the role of cover plants management on arthropod functional biodiversity. *Bulletin of Entomological Research*, 106: 759-768. <https://doi.org/10.1017/S0007485316000493>
- Losapio G., Gobbi M., Marano G., Avesani D., Boracchi P., Compostella C., Pavesi M., Schöb C., Seppi R., **Sommaggio D.**, Zanetti A., Caccianiga M. 2016. Feedback effects between plant and flower-visiting insect communities along a primary succession gradient. *Arthropod-plant interaction*, 10 (6): 485-495. <https://doi.org/10.1007/s11829-016-9444-x>
- Fusaro S., Gavinelli F., **Sommaggio D.**, Paoletti M.G., 2016. Higher Efficiency in Organic than in Conventional Management of Biological Control in Horticultural Crops in North-Eastern Italy. *Biological Control*, 97: 89-101. <https://doi.org/10.1016/j.biocontrol.2016.03.002>

- Burgio G., **Sommaggio D.**, Marini M., Puppi G., Chiarucci A., Landi S., Fabbri R., Pesarini F., Genghini M., Ferrari R., Muzzi E., van Lenteren J.C., Masetti A., 2015. The influence of vegetation and landscape structural connectivity on Butterflies (Lepidoptera: Papilionoidea and Hesperidae), Carabids (Coleoptera: Carabidae), Syrphids (Diptera: Syrphidae) and Sawflies (Hymenoptera: Symphyta) in Northern Italy Farmland. *Environmental Entomology* 44: 1299-1307. <https://doi.org/10.1093/ee/nvv105>
- Schneider M. K., Lüscher G., Jeanneret P., Arndorfer M., Ammari Y., Bailey D., Balázs K., Báldi A., Choisis J.P., P. Dennis, S. Eiter, Fjellstad W., Fraser M.D., Frank T., Friedel J.K., Garchi S., Gejzendorffer I., Gomiero T., Gonzales-Bomay G., Hector A., Jerkovich G., Jongman R.H.G., Kakudidi E. Kainz M., Kovács-Hostyánszki A., Moreno G., Nkwiine C., Opio J., Oschatz M.-L. Paoletti M.G., Pointereau P., Pulido F.J., Sarthou J.-P., Siebrecht N., **Sommaggio D.**, Tumbull L.A., Wolfrum S., Herzog, F., 2014. Gains to species diversity in organically farmed fields are not propagated at the farm level. *Nature Communications*, 5 (4151) <https://doi.org/10.1038/ncomms5151>
- Sommaggio D.**, Burgio G., 2014. The use of Syrphidae (Diptera) as functional bioindicator to compare vineyards with different managements. *Bulletin of Insectology*, 67: 147-156.
- Sommaggio D.**, Burgio G., Guerrieri E., 2014. The impact of agricultural management on the parasitization of aphidophagous hoverflies (Diptera Syrphidae). *Journal of Natural History*, 48: 301-315. <https://doi.org/10.1080/00222933.2013.791953>
- Pujade-Villar J., **Sommaggio D.**, Ros-Farrè P., 2011. Datos sobre la biología de *Callaspidia notata* (Boyer de Fonscolombe, 1832) y *Callaspidia defonscolombi* Dahlbom, 1842 (Hym., Figitidae, Aspicerinae). *Boln. Asoc. esp. Ent.*, 35 (3-4): 487-488.
- Velli A., **Sommaggio D.**, Maccagnani B., Burgio G., 2010. Evaluation of environment quality of a protected area in Northern Italy using Syrph the Net method. *Bulletin of Insectology*, 63 (2): 217-224.
- Speight M.C.D., **Sommaggio D.**, 2010. On the presence in Switzerland of *Microdon myrmicae* Schonrogge et al., 2002, *Xanthogramma dives* (Rondani, 1857) and *X. Stackelbergi*, 1975 (Diptera: Syrphidae). *Entomo Helvetica*, 3: 139-145
- Sommaggio D.**, 2010. Hoverflies in the “Guido Grandi Collection” of DiSTA, University of Bologna. *Bulletin of Insectology*, 63: 99-114.
- Paoletti M.G., D’Incà A., Tonin E., Tonon S., Migliorini C., Petruzzelli G., Pezzarossa B., Gomiero T., **Sommaggio D.**, 2010. Soil Invertebrates as Bio-indicators in a Natural Area Converted from Agricultural Use: The Case Study of Valvecchia-Lugugnana in North-Eastern Italy. *Journal of Sustainable Agriculture*, 34: 38-56. <https://doi.org/10.1080/10440040903396698>
- Burgio G., **Sommaggio D.**, 2007. Diptera Syrphidae as landscape bioindicators in Italian agoecosystems. *Agriculture Ecosystems and Environment*, 120: 416-422. <https://doi.org/10.1016/j.agee.2006.10.021>
- Burgio G., Puppi G., Genghini M., **Sommaggio D.**, De Geronimo G., Malavolta C., 2006. Landscape management as a “sustainable agriculture” tool: the role of local administration and research in the Emilia-Romagna region (northern Italy). *IOBC Bulletin* 29: 21-24.
- Masetti A., Lucchetti A., **Sommaggio D.**, Burgio G., Mantovani B., 2006. Phylogeny of *Chrysotoxum* species (Diptera, Syrphidae) inferred from morphological and molecular characters. *European Journal of Entomology*: 103: 459-467. <https://doi.org/10.14411/eje.2006.059>
- Sommaggio D.**, Burgio G., 2003. Rule of Diptera Syrphidae as landscape bioindicators: analysis of some case studies in North Italy. *IOBC Bulletin*, 26 (4): 145-150.
- Sommaggio D.**, 2002. *Paragus gorgus* Vujic et Radenkovic, 1999: a junior synonym of *P. majoranae* Rondani, 1857, and reinstatement of *Paragus pecchiolii* Rondani, 1857 (Syrphidae, Diptera). *Volucella*, 6: 53-56

- Burgio G., **Sommaggio D.**, 2002. Diptera Syrphidae caught by Malaise trap in Bologna province and new record of *Neoscia interrupta* (Meigen) in Italy. *Bulletin of Insectology*, 55: 43-47
- Sommaggio D.**, 1999. Syrphidae: can they be used as environmental bioindicators? *Agriculture, Ecosystems & Environment*, 74: 343-356. <https://doi.org/10.1016/B978-0-444-50019-9.50019-4>
- Paoletti M.G., **Sommaggio D.**, Favretto M.R., Petruzelli G., Pezzarossa B., Barbafieri M., 1998. Earthworms as useful bioindicators of agroecosystem sustainability in orchards and vineyards with different inputs. *Applied Soil Ecology*, 10: 137-150. [https://doi.org/10.1016/S0929-1393\(98\)00036-5](https://doi.org/10.1016/S0929-1393(98)00036-5)
- Paoletti M.G., Boscolo P., **Sommaggio D.**, 1997. Beneficial insects in fields surrounded by hedgerows in North Eastern Italy. *Entomological Research in Organic Agriculture. Biological Agriculture and Horticulture*, 15 (1-4): 311-323. <https://doi.org/10.1080/01448765.1997.9755206>
- Paoletti M.G., **Sommaggio D.**, Bressan M., Celano V., 1996. Can sustainable agricultural practices affect biodiversity in agricultural landscapes? A case study concerning orchards in Italy. *Acta Jutlandica*, 71:241-254
- Sommaggio D.**, Paoletti M.G., Ragusa S., 1995. The effects of microhabitat conditions, nutrients and predators on the abundance of herbivores on stinging nettles (*Urtica dioica* L.). *Acta Oecologica*, 16: 671-686.
- Paoletti M.G., **Sommaggio D.**, Petruzzelli G., Pezzarossa B., Barbafieri M., 1995. Soil invertebrates as monitoring tools for agricultural sustainability. *Polskie Pismo Entomologiczne*. 64: 113-122.

#### Chapters in books (in English)

- Sommaggio D.**, 2005. Insecta Diptera Syrphidae (Syrphinae, Syrphini). **In** Ruffo S., Stoch F. (eds). Checklist and distribution of Italian fauna. *Memorie del Museo Civico di Storia Naturale di Verona*. 2Serie. Sezione Scienze della Vita, 16
- Sommaggio D.**, Burgio G., 2004. Hoverflies: indicators of sustainable farming and potential control of aphids. **In** Pimentel D. (Ed.): *Encyclopedia of Pest management*. Volume II. Dekker Publication, 247-250.
- Paoletti M.G., **Sommaggio D.**, 1996. Invertebrate biodiversity indicators to monitor sustainability of rural policies. **In** Rob Jongman (Ed): *Ecological and landscape consequences of land use change in Europe*, 64-81
- Paoletti M.G., **Sommaggio D.**, 1996. Biodiversity indicators for sustainability assessment of rural landscapes. **In** Straalen NM van e Krivolutsky DA (eds): *Bioindicator Systems for Soil Pollution*, 123-140

#### Paper in Italian journals

- Sommaggio D.**, Vettorazzo E., Burgio G., 2024. I Sirfidi (Diptera: Syrphidae) Del Parco Nazionale Delle Dolomiti Bellunesi. *Frammenti*, 13: 5-28.
- Pesarini F., **Sommaggio D.**, 2020. Ecology of the sawfly coenosis of Berici Hills (Veneto, NE Italy), with notes on taxonomy and distributional data of selected species (Hymenoptera). *Quaderni del Museo Civico di Storia Naturale di Ferrara*, 8: 45-66.
- Maritano U., **Sommaggio D.**, 2020. Hoverfly diversity in Mareschi alluvial alder forest (Piedmont, Italy), and “Syrph the Net” ecological analysis (Diptera: Syrphidae). *Fragmenta Entomologica*, 52: 101-112.
- Paoletti M.G., **Sommaggio D.**, Fusaro S., 2013. Proposta di Indice di Qualità Biologica del Suolo (QBS-e) basato sui Lombrichi e applicato agli Agroecosistemi. *Biologia Ambientale*, 27: 25-43.
- Corazza C., **Sommaggio D.**, 2012. Checklist e atlante cartografico dei Sirfidi della provincia di Ferrara. *Quaderni Stazione di Ecologia Museo civico di Storia Naturale di Ferrara*, 20: 151-155.
- Bertollo S., **Sommaggio D.**, 2012. Riconoscere i Sirfidi: la chiave dicotomica ai generi italiani. *Quaderni Stazione di Ecologia Museo civico di Storia Naturale di Ferrara*, 20: 101-145.

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#### **Books and chapters in books (in Italian)**

- Sommaggio D.**, Paoletti M.G., 2018. Gli invertebrati terrestri come indicatori di paesaggio sostenibile. Libreriauniversitaria, Padova,

- Burgio S, **Sommaggio** D, Birtele D, 2015. I Sirfidi (Dittei): biodiversità e conservazione. Manuale operativo. ISPRA, Manuali e Linee Guida 128/2015, 182 pp.
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- Sommaggio** D., Boscolo P., Favretto M.R., Paoletti M.G., 1992. L'Ortica: pianta utile negli agroecosistemi. **In** Paoletti MG, Favretto MR, Nasolini T, Scaravelli , Zecchi G. (eds): Biodiveristà negli agroecosistemi. Osservatorio Agroambientale, 105-116. (Translation: *Nettles as useful plants in agroecosystems*)

### Invited lecturers - international conferences

VII European Congress of Conservation Biology (Bologna- Italy); Giugno 2024.

**Sommaggio** D.: "Know to conserve hoverfly communities: the case study of Dolomiti Bellunesi National Park"

Workshop Nazionale di Spoke 3 NBFC (Siena- Italy); Aprile 2024.

**Sommaggio** D.: "Syrphidae d'Italia": un database per accogliere dati storici e nuove segnalazioni

Center for Systematic Entomology Annual Conference, 2024.

**Sommaggio** D.: "Old data, new information: the "Syrphidae of Italy" project (Diptera)".

VI International Symposium on Syrphidae, Glasgow (Scotland); August 2011.

**Sommaggio** D.: The impact of parasitoids on aphidophagous hoverflies.

I Biodiversity Day: "Agroecosystems and Biodiversity Conservation", Vicenza (Italy), May 2008

**Sommaggio** D.: "Entomological biodiversity and sustainability in rural landscape"

IV International Symposium on Syrphidae, Helsinki (Finland); June 2007.

**Sommaggio** D., Burgio G.: Biodiversity at different scale landscape: a multi-sampling system approach using Syrphidae and other bioindicators.

XV National Symposium for Environmental Evaluation: "Environmental Evaluation in Italy: the use of bioindicators" . Milan (Italy), March 2004.

**Sommaggio** D. and Corazza C.: "Hoverflies as biondicators of biodiversity"

II International Symposium on Syrphidae, Alicante (Spain); June 2003;

**Sommaggio** D. et al.: The genus *Chrysotoxum*: problems and advance in its taxonomy+.

I Meeting IOBC Study Group "Landscape Management for Functional Biodiversity", Bologna (Italy), May 2003.

**Sommaggio** D. and BurgioG.: Soil invertebrates as monitoring tools for agricultural ustainability.

IV Seminar on Apterygota Bialowieza (Poland), September 1994.

**Sommaggio** D. and Paoletti M.G.: Soil invertebrates as monitoring tools for agricultural sustainability.

### Service as reviewer

I served as reviewer for the following international journals:

#### 2024

- ⤴ *Environments (MDPI) (1 articolo)*
- ⤴ *Biodiversity Data Journal (1 articolo)*

#### 2023

- ⤴ *Insects (MDPI) (3 papers)*
- ⤴ *Agronomy (MDPI) (1 paper)*
- ⤴ *Journal of Insect Conservation (1 paper)*
- ⤴ *Ecology and Evolution (1 paper)*
- ⤴ *Agriculture (MDPI) (1 paper)*
- ⤴ *Phytoparasitica (1 paper)*
- ⤴ *Insect Science (1 paper)*
- ⤴ *Journal van Syrphidae (1 paper)*
- ⤴ *Bulletin of Insectology (2 papers)*
- ⤴ *Soil and Tillage Research (1 paper)*
- ⤴ *Journal of Applied Entomology (1 paper)*
- ⤴ *Onychium (1 paper)*

#### 2022

- ⤴ *Insects (MDPI) (4 papers)*
- ⤴ *Forests (MDPI) (1 paper)*
- ⤴ *Plants (MDPI) (2 papers)*
- ⤴ *Animals (MDPI) (1 paper)*
- ⤴ *International Journal of Molecular Sciences (MDPI) (1 paper)*
- ⤴ *Agronomy (MDPI) (1 paper)*
- ⤴ *Bulletin of Insectology (1 paper)*
- ⤴ *Journal of Tropical Zoology (1 paper)*
- ⤴ *Italian Journal of Zoology (1 paper)*
- ⤴ *Zootaxa (1 paper)*

#### 2021

- ⤴ *Sustainability (MDPI) (2 papers)*
- ⤴ *Antioxidants (MDPI) (1 paper)*
- ⤴ *Bollettino della Società ticinese di scienze naturali (1 paper)*
- ⤴ *Bulletin of Insectology (1 paper)*
- ⤴ *Insects (2 papers)*
- ⤴ *Biology (MDPI) (1 paper)*
- ⤴ *Forests (MDPI) (2 papers)*
- ⤴ *Forest Ecology and Management (1 paper)*
- ⤴ *Journal of Entomological and Acarological Research (1 paper)*
- ⤴ *Journal of Insect Conservation (1 paper)*
- ⤴ *Ekologian (1 paper)*
- ⤴ *Plants (MDPI) (1 paper)*

#### 2020

- ⤴ *Diversity (MDPI) (1 paper)*
- ⤴ *Journal of Insect Conservation (1 paper)*
- ⤴ *Biology (MDPI) (1 paper)*
- ⤴ *Soil Applied Ecology (1 paper)*
- ⤴ *Insects (9 papers)*
- ⤴ *Organic Diversity and Evolution (1 paper)*
- ⤴ *Agronomy (1 paper)*
- ⤴ *Agriculture Ecosystem and Environment (1 paper)*

#### 2019

- ♣ *Soil Applied Ecology* (1 paper)
- ♣ *Insects* (7 papers)
- ♣ *Journal of Chemical Ecology* (1 paper)
- ♣ *Plants* (1 paper)
- ♣ *Invertebrate Systematic* (1 paper)
- ♣ *Agriculture Ecosystem and Environment* (1 paper)

#### **2018**

- ♣ *Science of the Total Environment* (1 paper)
- ♣ *Environmental Entomology* (1 paper)
- ♣ *Bulletin of Insectology* (1 paper)

#### **2017**

- ♣ *Insects* (1 paper)
- ♣ *Bulletin of Insectology* (1 paper)
- ♣ *Journal of Insect Biodiversity* (1 paper)
- ♣ *Canadian Entomologist* (1 paper)
- ♣ *Agriculture Ecosystem and Environment* (1 paper)
- ♣ *Bonn Zoological Bulletin* (1 paper)

#### **2016**

- ♣ *Biological conservation* (1 paper)
- ♣ *Bulletin of Insectology* (1 paper)
- ♣ *Neotropical Entomology* (1 paper)
- ♣ *PLOSone* (1 paper)

#### **2015**

- ♣ *Sustainability* (1 paper)
- ♣ *Bulletin of Insectology* (2 papers)
- ♣ *Onychium* (1 paper)

#### **2014**

- ♣ *Urban Forestry & Urban Greening* (1 paper)
- ♣ *Acta Advances in Agricultural Sciences* (1 paper)

#### **2013**

- ♣ *Bulletin of Insectology* (2 papers)

#### **2012**

- ♣ *Bollettino Società Entomologica Italiana* (1 paper)

#### **2011**

- ♣ *Bulletin of Insectology* (1 paper)

27.July.2024