

# Curriculum Vitae

## Zsófia Varga-Szilay

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## Education

- 09/2020 – 08/2024: **Biological studies (Ph.D.)**  
Doctoral School of Biology, Institute of Biology, ELTE Eötvös Loránd University, Budapest, Hungary (<https://doi.org/10.15476/ELTE.2025.153>)
- 09/2018 – 06/2020: **Degree in Hydrobiology (M.Sc.)**  
Department of Hydrobiology, Faculty of Sciences, PTE University of Pécs, Pécs, Hungary
- 09/2012 – 06/2016: **Degree in Biology (B.Sc.)**, supraindividual specialization  
Faculty of Sciences, University of Pécs, Pécs, Hungary

## Work experience

- 02/2025 – recent: **Assistant research fellow** (part-time position), HUN-REN-PE Evolutionary Ecology Research Group, University of Pannonia, Veszprém, Hungary
- 2025: **Consultant** for the ‘Pollinator Conservation in Tropical Production Landscapes’ project, International Union for Conservation of Nature (IUCN)
- 09/2016 – 07/2018: **Research assistant**, Laboratory of the Central-Transdanubian Water Management Directorate, Székesfehérvár, Hungary

## Traineeship

- 01/09/2022 – 28/02/2023 and 01/06/2023 – 31/10/2023: **Erasmus+ mobility**, Azorean Biodiversity Group at the University of Azores, Terceira, Portugal

## Grants and awards

- **09/2025:** University Research Scholarship Programme (EKÖP)
- **09/2024:** ITC Conference Grant (InsectAI COST action, CA22129)
- **09/2023:** ÚNKP-23-3 New National Excellence Program of the Ministry for Innovation and Technology, Hungary
- **08/2023:** Conference Participation Fund (CPF) Grant of the Royal Entomological Society
- **09/2020:** ÚNKP-20-3 New National Excellence Program of the Ministry for Innovation and Technology, Hungary
- **11/2019:** Grant for Women in Science, Hungary
- **09/2019:** ÚNKP-19-2 New National Excellence Program of the Ministry for Innovation and Technology, Hungary
- **04/2019:** Grant for Women in Science, Hungary

## Scientific publications

- **Varga-Szilay, Z.,** Barsevskis, A., Benedek, K., Bevk, D., Jojczyk, A., Kristin, A., Ruzickova, J., Jelaska, L. S., Veromann, E., Vilumets, S., Fetyko, K., Szovenyi, G., & Pozsgai, G. (2025). Improving biodiversity in Central and Eastern European gardens needs regionally scaled strategies. *Urban Forestry & Urban Greening*, 113(129074). <https://doi.org/10.1016/j.ufug.2025.129074>
- **Varga-Szilay, Z.,** Szovenyi, G., & Pozsgai, G. (2025). Anthropogenic noise can decrease tomato reproductive success by hindering bumblebee-mediated pollination. *Basic and Applied Ecology*, 87, 11-19. <https://doi.org/https://doi.org/10.1016/j.baae.2025.05.008>
- **Varga-Szilay, Z.,** Szovenyi, G., & Pozsgai, G. (2024). Flower visitation through the lens: Exploring the foraging behaviour of *Bombus terrestris* with a computer vision-based application. *Insects*, 15(9), 729. <https://doi.org/10.3390/insects15090729>
- Boieiro, M., **Varga-Szilay, Z.,** Costa, R., Crespo, L., Leite, A., Oliveira, R., Pozsgai, G., Rego, C., Calado, H., Teixeira, M., Lopes, D., Soares, A., & Borges, P. (2024). New findings of terrestrial arthropods from the Azorean Islands. *Biodiversity Data Journal*, 12, e136391. <https://doi.org/10.3897/BDJ.12.e136391>
- **Varga-Szilay, Z.,** Fetyko, K. G., Szovenyi, G., & Pozsgai, G. (2024). Bridging biodiversity and gardening: Unravelling the interplay of socio-demographic factors, garden practices, and garden characteristics. *Urban Forestry & Urban Greening*, 97, 128367. <https://doi.org/https://doi.org/10.1016/j.ufug.2024.128367>
- **Varga-Szilay, Z.,** Barsevskis, A., Benedek, K., Bevk, D., Jojczyk, A., Kristin, A., Ruzickova, J., Jelaska, L. S., Veromann, E., Vilumets, S., Fetyko, K., Szovenyi, G., & Pozsgai, G. (2024). Improving biodiversity in Central and Eastern European domestic gardens needs regionally scaled strategies. *bioRxiv (preprint)*. <https://doi.org/10.1101/2024.07.12.603327>

- Boieiro, M., Leite, A., Rego, C., **Varga-Szilay, Z.**, & Borges, P. A. V. (2023). Two alien insect species are new records at the family-level to the Azores archipelago (Portugal). *BioInvasions Records*, 12(2), 535–543.  
<https://doi.org/https://doi.org/10.3391/bir.2023.12.2.16>
- **Varga-Szilay, Z.**, & Pozsgai, G. (2022). Plant growers' environmental consciousness may not be enough to mitigate pollinator declines: a questionnaire-based case study in Hungary. *Pest Management Science*, 79(4), 1284–1294.  
<https://doi.org/10.1002/ps.7277>
- **Varga-Szilay, Z.**, & Tóth, Z. (2022). Is acetamiprid really not that harmful to bumblebees (Apidae: *Bombus* spp.)? *Apidologie*, 53(1), 2.  
<https://doi.org/10.1007/s13592-022-00909-6>

## Conference participations

- Varga-Szilay, Z., Csíkvári, O., Horváth, K., Pipoly, I., & Seress, G. (2025). Állatgyógyászati rovarirtó szerek jelenléte városi és erdei széncinegefészkekben [Veterinary insecticide contamination in Great Tit (*Parus major*) nests across urban and forest habitats] 3. *Urbanizációs Ökológia Konferencia*, Pécs, Hungary.  
<https://doi.org/10.13140/RG.2.2.34493.12000>
- Varga-Szilay, Z., Barševskis, A., Benedek, K., Jójczyk, A., Krištín, A., Růžicková, J., Šeríc Jelaska, L., Veromann, E., Vilumets, S., Szövényi, G., & Pozsgai, G. (2024). Kertészkedés Közép- és Kelet-Európában a globális biodiverzitás csökkenés korában. *I. Rovartani Konferencia*, Budapest, Hungary.  
<https://doi.org/10.13140/RG.2.2.27266.90563>
- Varga-Szilay, Z., Szövényi, G., & Pozsgai, G. (2024). Buzzing under pressure: Investigating the effects of anthropogenic disturbance on the intraspecific behaviour of *Bombus terrestris* with computer vision-based application. *10<sup>th</sup> Congress of Apidology (EurBee10)*, Tallinn, Estonia
- Varga-Szilay, Z., Szövényi, G., & Pozsgai, G. (2024). Detecting differences in foraging behaviour of *Bombus terrestris* on three plant species using computer vision-based methods. *Student Conference on Conservation Science (SCCS)*, Balatonvilágos, Hungary
- Varga-Szilay, Z., Barsevskis, A., Benedek, K., Bevk, D., Jójczyk, A., Kristin, A., Ruzickova, J., Jelaska, L. S., Veromann, E., Vilumets, S., Fetyko, K., Szovenyi, G., & Pozsgai, G. (2024). Improving biodiversity in Central and Eastern European domestic gardens needs regionally scaled strategies. *ENTO24 (Royal Entomological Society)*, online
- Varga-Szilay, Z., Szövényi, G., & Pozsgai, G. (2024). Detecting differences in foraging behaviour of *Bombus terrestris* on three plant species using computer vision-based methods. *AI in Entomology (Royal Entomological Society)*, online.  
<https://doi.org/10.13140/RG.2.2.18301.37607>
- Varga-Szilay, Z., Benedek, K., Fetykó, K. G., Szövényi, G., & Pozsgai, G. (2024). Home gardening duality: Pollinator-friendly practices amidst widespread pesticide

use. 24. *Kolozsvári Biológus Napok*, Kolozsvár, Romania.

<https://doi.org/10.13140/RG.2.2.25092.13446>

- Varga-Szilay, Z., Szövényi, G., & Pozsgai, G. (2024). Buzz amidst noise: Investigating the anthropogenic noise on bumblebee-mediated pollination. 24. *Kolozsvári Biológus Napok*, Kolozsvár, Romania. <https://doi.org/10.13140/RG.2.2.35997.32486>
- Varga-Szilay, Z., Fetykó, K. G., Szövényi, G., & Pozsgai, G. (2024). Gardening for pollinators? Unveiling garden owners' awareness and their pollinator-friendly practices. Royal Entomological Society (RES) Student Forum 2024, online. <https://doi.org/10.13140/RG.2.2.21981.63204>
- Varga-Szilay, Z., & Pozsgai, G. (2023). Flower visitation through the lens: exploring bumblebees' behaviour with computer vision-based application. *XII European Congress of Entomology*, Heraklion, Crete, Greece. <https://doi.org/10.13140/RG.2.2.12857.75362>
- Varga-Szilay, Z., & Pozsgai, G. (2022). Data digging from photographs of Paraguayan moths (Lepidoptera) using deep-learning-based object detection. *58th Annual Meeting of the Association for Tropical Biology and Conservation (ATBC 2022)*, Columbia, Cartagena. <https://doi.org/10.13140/RG.2.2.24141.51684/1>
- Varga-Szilay, Z. (2021). Safe heavens or poisonous traps: pesticide use in bee-friendly gardens. *Royal Entomological Society (ENTO'21)*, online.
- Varga-Szilay, Z. (2021). Kerti poszméhlegelő [Bumblebeefriendly-gardens]. *879th meeting of the Hungarian Entomological Society*, Budapest, Hungary. <https://doi.org/10.6084/m9.figshare.14699877.v1>

## Book reviews

- Varga-Szilay, Z. (2025). Thinking like a bee. *Community Ecology*. <https://doi.org/10.1007/s42974-025-00259-0>
- Varga-Szilay, Z. (2023). Peter Kevan and D. Susan Willis Chan (Eds): Promoting pollination and pollinators in farming. *Community Ecology*. <https://doi.org/10.1007/s42974-023-00164-4>
- Varga-Szilay, Z. (2022). Jeff Ollerton: Pollinators & pollination: nature and society. *Community Ecology*. <https://doi.org/10.1007/s42974-022-00122-6>

## Professional memberships

- InsectAI COST action
- Royal Entomological Society
- British Ecological Society
- Hungarian Entomological Society