

# Curriculum vitae

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## Personal information

First and last name: **Jaroslav Vadlejch**  
Gender: Male  
Nationality: Czech  
Date and place of birth: March 30, 1979, Strakonice (South Bohemia)

Current position: **Associate Professor**, Research group leader  
Work address: **Czech University of Life Sciences Prague,**  
Faculty of Agrobiology, Food and Natural Resources,  
Department of Zoology and Fisheries,  
Kamýcká 129, 165 00 Prague – Suchdol, Czech Republic  
Staff e-mail: [vadlejch@af.czu.cz](mailto:vadlejch@af.czu.cz)  
Private e-mail: [jaroslavvadlejch@centrum.cz](mailto:jaroslavvadlejch@centrum.cz)  
Phone number: +420 224 383 451  
Cell phone number: **+420 604 953 122**

## Education

2014 **Habilitation**, Czech University of Life Sciences Prague (ČZU) – Assoc. Prof.  
Habilitation thesis: Gastrointestinal nematodes in small ruminants

2008 **Ph.D. thesis defence**  
Ph.D. thesis: Biochemical determination of peptidases in gastrointestinal nematode  
*Trichostrongylus colubriformis*

2002 – 2005 **Ph.D. study**  
Institution: Czech University of Life Sciences Prague (ČZU), Faculty of Agrobiology, Food and  
Natural Resources (FAFNR)  
Field of study, Specialization: Animal Production, Parasitology

2001 **Extraordinary study**  
Institution: Charles University, Faculty of Science  
Field of study, Specialization: Special biology, Parasitology

1997 – 2002 **Undergraduate study – Ing.**  
Institution: ČZU, FAFNR  
Field of study: Animal production  
Diploma thesis: Effect of *Trichostrongylus colubriformis* (Nematoda: Trichostrongylidae) infectious  
doses on endogenous development in domestic rabbits (*Oryctolagus cuniculus* f.  
*domestica*)

## Professional and academic experience

- 2015 – present **Associate Professor of Applied Zoology**, Czech University of Life Sciences Prague
- 2008 – 2015 **Assistant Professor**, Czech University of Life Sciences Prague
- 2006 – 2008 **Technician**, Czech University of Life Sciences Prague

## Teaching

- **Zoology** (in Czech) – course supervisor, the majority of lectures/topics
- **Parasitology** (in Czech) – lectures (Parasites in ruminants and Parasites in swine)
- **Food hygiene and safety** (in Czech) – lecture (Foodborn parasites)
- **Parasitology** (in English) – course supervisor, the majority of lectures and practices
- **Zoology** (in English) – lectures and practices (Porifera, Cnidaria, Platyhelminthes, Nematoda)
- **Veterinary parasitology for farmers** (PhD course)

## Supervision of undergraduate & Ph.D. students

- 2008 – present: **70 bachelor thesis** at the Czech University of Life Sciences Prague, Faculty of Agrobiology, Food and Natural Resources, Faculty of Environmental Sciences and Faculty of Tropical AgriScience
- 2008 – present: **31 master thesis** at the Czech University of Life Sciences Prague, Faculty of Agrobiology, Food and Natural Resources, Faculty of Environmental Sciences and Faculty of Tropical AgriScience
- **Jana Nápravníková**, 2023: "Control of strongyle infections at horse breeding in the Czech Republic" – Ph.D. thesis
- **Jan Magdálek**, 2022: "Diagnosis, pathology and epidemiology of ashworthiosis" – Ph.D. thesis
- **Iveta Angela Kyriánová**, 2019: "Gastrointestinal nematodes and lungworms in intensive breeding of domestic and wild ruminants" – Ph.D. thesis

## Reviewer of Ph.D. theses

- Charles University, First Faculty of Medicine (Czech Republic)
- University of South Bohemia in České Budějovice, Faculty of Agriculture (Czech Republic)
- Czech University of Life Sciences Prague, Faculty of Tropical AgriScience (Czech Republic)
- University of Veterinary Medicine and Pharmacy in Košice, Dept. of Epizootiology, Parasitology and Protection of One Health (Slovakia)

## Peer-reviewer of research manuscripts

- For more information visit **Web of Science** (<https://www.webofscience.com/wos/author/record/1603644>)

## Guest editor of special issues

- **Pathogens** „Epidemiology of gastrointestinal nematode infections in livestock and Wildlife“

## Research topics

**Parasitology**, nematodes of veterinary importance, epidemiology of gastrointestinal nematodes of domestic and wild ruminants, nematode survival strategies (arrested development), control (including alternative approaches) and prevention of parasitic gastroenteritis, anthelmintic resistance in trichostrongylids in ruminants, parasite biomolecules and their role in parasitic lifestyle

## Memberships

Czech Society for Parasitology – Czech Republic  
World Association for the Advancement of Veterinary Parasitology (WAAVP) – USA



## Research projects

2023 – 2025 **Czech Science Foundation**, GA ČR 23-07811S: Interaction of parasites and metal(oids) in small terrestrial mammals

2023 – 2027 **Ministry of Education, Youth and Sports** INTER-EXCELLENCE, INTER-ACTION LUAUS23050: Development of new chemotherapeutics against human and veterinary parasitic infections

2022 – 2024 **Technology Agency of the Czech Republic**, TA ČR SS05010070: Spread of invasive parasite species and their devastating effects on the biodiversity of native ruminant species

2020 – 2022 **Ministry of Education, Youth and Sports**, INTER-EXCELLENCE, INTER-ACTION LTAUSA19109: Novel strategies for designing antiparasitic molecules as human and veterinary drugs

2019 – 2021 **Ministry of Education, Youth and Sports**, INTER-EXCELLENCE, INTER-COST LTC19018: Pilot strategic plan of combating against the resistant strains of parasitic worms in the populations of Czech farm ruminants

2018 – 2021 **European Cooperation in Science and Technology**, COST CA16230: Combatting anthelmintic resistance in ruminants, Management committee member

2018 – 2019 **University internal grant agency ČZU**, CIGA 20182005: Morphological identification and molecular-genetic analysis of variability of parasitic nematodes of the genus *Setaria* detected in ungulates in the Czech Republic

2017 – 2019 **Technology Agency of the Czech Republic**, TA ČR TJ01000009: Assessing the risk of the invasive parasite *Ashworthius sidemi* to cloven-hoofed animals in Czech game reserves; ashworthiosis control and prevention

2016 – 2018 **Czech Science Foundation**, GA ČR 16-07441S: Long-term impact of different types of fertilization on soil biota with emphasis on the effect of organic pollutants associated with human activity

2016 – 2017 **University internal grant agency ČZU**, CIGA 20162012: Risk factors for the development of gastrointestinal nematode resistance to benzimidazole anthelmintics in goat farming in the Czech Republic

2015 – 2018 **National Agency for Agricultural Research**, NAZV QJ1510038: Use of plant extracts as bioantiparasitics in livestock

2011 – 2014 **National Agency for Agricultural Research**, NAZV QI111A199: Effective system for parasitic infection control in sheep farming

2011 – 2012 Celouniverzitní grantová agentura ČZU v Praze, **CIGA 20112008**: Detekce a charakterizace proteinů se vztahem k hypobioze u larev gastrointestinální hlístice *Teladorsagia circumcincta*; spoluřešitel

2011 – 2012 University internal grant agency ČZU, CIGA 20112010: Lead transport and accumulation in the host-parasite system

2007 Internal grant agency FAFNR ČZU, IGA 21260/1312/213108: Proteolytic activity of *Teladorsagia circumcincta* hypobiotic larvae

2006 Internal grant agency FAFNR ČZU, IGA 21260/1312/3168: *Teladorsagia circumcincta* – inducing factors for hypobiosis

## Scientific identifiers

- ResearcherID: M-1189-2018
- ORCIDiD: orcid.org/0000-0002-5958-7606
- Scopus Author ID: 8924083600

## Research papers

- 81 papers in international peer-reviewed journals, 758 citations without self-citation, h-index = 15 (Web of Science, March 2023)

1. Magdálek, J., Bourgoin, G., **Vadlejch, J.** 2022. Non-native Nematode *Ashworthius sidemi* Currently Dominates the Abomasal Parasite Community of Cervid Hosts in the Czech Republic. *Frontiers in Veterinary Science*, 9, 862092.
2. Nápravníková, J., Váradý, M., **Vadlejch, J.** 2022. Total Failure of Fenbendazole to Control Strongylid Infections in Czech Horse Operations. *Frontiers in Veterinary Science*, 9, 833204.
3. Ptáček, M., Kyriánová, I.A., Nápravníková, J., Ducháček, J., Husák, T., Chay-Canul, A.J., Zaragoza-Vera, C., Cruz-Bacab, L., **Vadlejch, J.** 2021. Do Live Weight, Body Condition Score, Back Muscle or Back-Fat Reserves Create the Suspicion of Goats Infected with Eimeria or Trichostrongylids? *Animals*, 11 (12), 3591.
4. Babják, M., Königová, A., Dolinská, M.U., Kupčinská, T., **Vadlejch, J.**, von Samson-Himmelstjerna, G., Petkevičius, S., Váradý, M. 2021. Does the in vitro egg hatch test predict the failure of benzimidazole treatment in *Haemonchus contortus*? *Parasite*, 28, 62.
5. Reslová, N., Škorpíková, L., Kyriánová, I.A., **Vadlejch, J.**, Höglund, J., Skuce, P., Kašný, M. 2021. The identification and semi-quantitative assessment of gastrointestinal nematodes in faecal samples using multiplex real-time PCR assays. *Parasites & Vectors*, 14 (1), 391.
6. Lanková, S., Vejl, P., Melounová, M., Čílová, D., **Vadlejch, J.**, Miklisová, D., Jankovská, I., Langrová, I. 2021. *Setaria cervi* (Filarioidea, Onchocercidae) undressing in ungulates: altered morphology of developmental stages, their molecular detection and complete sequence cox1 gene. *Parasitology*, 148 (5), 598 – 611.

7. Magdálek, J., Makovický, P., **Vadlejch, J.** 2021. Nematode-induced pathological lesions and alterations of mucin pattern identified in abomasum of wild ruminants. International Journal for Parasitology-Parasites and Wildlife, 14, 62 – 67.
8. **Vadlejch, J.**, Kyriánová, I.A., Várady, M., Charlier, J. 2021. Resistance of strongylid nematodes to anthelmintic drugs and driving factors at Czech goat farms. BMC Veterinary Research, 17 (1), 106.
9. Mravčáková, D., Sobczak-Filipiak, M., Váradyová, Z., Kucková, K., Čobanová, K., Maršík, P., Tauchen, J., **Vadlejch, J.**, Mickiewicz, M., Kaba, J., Várady, M. 2021. Effect of *Artemisia absinthium* and *Malva sylvestris* on Antioxidant Parameters and Abomasal Histopathology in Lambs Experimentally Infected with *Haemonchus contortus*. Animals, 11 (2), 462.
10. Vineer, H.R., Morgan, E.R., Hertzberg, H., Bartley, D.J., Bosco, A., Charlier, J., Chartier, C., Claerebout, E., de Waal, T., Hendrickx, G., Hinney, B., Höglund, J., Ježek, J., Kašný, M., Keane, O.M., Martínez-Valladares, M., Mateus, T.L., McIntyre, J., Mickiewicz, M., Muñoz, A.M., Phythian, C.J., Ploeger, H.W., Rataj, A.V., Skuce, P.J., Simin, S., Sotiraki, S., Spinu, M., Stuen, S., Thamsborg, S.M., **Vadlejch, J.**, Várady, M., von Samson-Himmelstjerna, G., Rinaldi, L. 2020. Increasing importance of anthelmintic resistance in European livestock: creation and meta-analysis of an open database. Parasite, 27 (69), 16.
11. Škorpíková, L., Reslová, N., Magdálek, J., **Vadlejch, J.**, Kašný, M. 2020. The use of high resolution melting analysis of ITS-1 for rapid differentiation of parasitic nematodes *Haemonchus contortus* and *Ashworthius sidemi*. Scientific Reports, 10 (1), 15984.
12. Albrechtová, M., Langrová, I., **Vadlejch, J.**, Špakulová, M. 2020. A revised checklist of *Cooperia* nematodes (Trichostrongyloidea), common parasites of wild and domestic ruminants. Helminthologia, 57 (3), 280 – 287.
13. Čadková, Z., Száková, J., Mukhtorova, D., Hlava, J., Pulkrábová, J., Balík, J., Tlustoš, P., **Vadlejch, J.** 2020. The response of soil nematode *Caenorhabditis elegans* on the sewage sludge-derived micropollutants. Journal of Hazardous Materials, 384, 121468
14. Mravčáková, D., Váradyová, Z., Kopčáková, A., Čobanová, K., Grešáková, L., Kišidayová, S., Babják, M., Dolinská, M.U., Dvorožnáková, E., Königová, A., **Vadlejch, J.**, Cieslak, A., Ślusarczyk, S., Várady, M. 2019. Natural chemotherapeutic alternatives for controlling of haemonchosis in sheep. BMC Veterinary Research, 15 (1), 302
15. Nápravníková, J., Petrtýl, M., Stupka, R., **Vadlejch, J.** 2019. Reliability of three common fecal egg counting techniques for detecting strongylid and ascarid infections in horses. Veterinary Parasitology, 272, 53 – 57.
16. Kyriánová I.A., Kopecký O., Šlosárová S., **Vadlejch J.** 2019. Comparison of internal parasitic fauna in dairy goats at conventional and organic farms in the Czech Republic. Small Ruminant Research, 175, 126 – 132.

17. Langrová, I., Chodová, D., Tůmová, E., Horáková, B., Krejčířová, R., Šašková, M., Švejstil, R., Jankovská, I., **Vadlejch, J.**, Čadková, Z., Knížková, I., Nechybová, S. 2019. Assessment of low doses of *Eimeria tenella* sporulated oocysts on the biochemical parameters and intestinal microflora of chickens. Turkish Journal of Veterinary and Animal Sciences, 43 (1), 76 – 81.
18. Váradiová Z., Pisarčíková, J., Babják, M., Hodges, A., Mravčáková, D., Kišidayová, S., Königová, A., **Vadlejch, J.**, Váradý, M. 2018. Ovicidal and larvicidal activity of extracts from medicinal-plants against *Haemonchus contortus*. Experimental Parasitology, 195, 71 – 77.
19. Nechybová, S., Vejl, P., Hart, V., Melounová, M., Čílová, D., Vašek, J., Jankovská, I., **Vadlejch, J.**, Langrová, I. 2018. Long-term occurrence of *Trichuris* species in wild ruminants in the Czech Republic. Parasitology Research, 117 (6), 1699 – 1708.
20. Babják, M., Königová, A., Dolinská, M.U., **Vadlejch, J.**, Váradý, M. 2018. Anthelmintic resistance in goat herds - *In vivo* versus *in vitro* detection methods. Veterinary Parasitology, 254, 10 – 14.
21. Knížková, I., Kunc, P., Langrová, I., **Vadlejch, J.**, Jankovská, I. 2018. Thermal profile of broilers infected by *Eimeria tenella*. In: 14<sup>th</sup> Quantitative InfraRed Thermography Conference, Quantitative Infrared Thermography, pp 9 – 12.
22. Kyrianová, I.A., Nápravníková, J., Váradiová, Z., Váradý, M., **Vadlejch, J.** 2018. The field efficacy of herbal plant mixture aqueous extracts against parasitic gastroenteritis in dairy goats. In: Kubík Š. & Barták M. (eds) 10<sup>th</sup> Workshop on biodiversity, Jevany, Česká zemědělská univerzita v Praze, pp 43 – 50.
23. Chodová, D., Tůmová, E., Sládková, K., Langrová, I., Jankovská, I., **Vadlejch, J.**, Čadková, Z., Krejčířová, R. 2018. Effects of subclinical *Eimeria tenella* infection on *Pectoralis major* muscle in broiler chickens. Italian Journal of Animal Science, 17(1), 18 – 21.
24. Hlava, J., Száková, J., **Vadlejch, J.**, Čadková, Z., Balík, J., Tlustoš, P. 2017. Long-term application of organic matter based fertilisers: Advantages or risks for soil biota? A review. Environmental Reviews, 25(4), 408 – 414.
25. Kyriánová, I.A., **Vadlejch, J.**, Kopecký, O., Langrová, I. 2017. Seasonal dynamics of endoparasitic infections at an organic goat farm and the impact of detected infections on milk production. Parasitology Research, 116(11), 3211 – 3219.
26. Vejl, P., Nechybová, S., Peřinková, P., Melounová, M., Sedláková, V., Vašek, J., Čílová, D., Rylková, K., Jankovská, I., **Vadlejch, J.**, Langrová, I. 2017. Reliable molecular differentiation of *Trichuris ovis* and *Trichuris discolor* from sheep (*Ovis orientalis aries*) and roe deer (*Capreolus capreolus*) and morphological characterisation of their females: morphology does not work sufficiently. Parasitology Research, 116(8), 2199 – 2210.

27. **Vadlejch, J.**, Kyriánová, I.A., Rylková, K., Zikmund, M., Langrová, I. 2017. Health risks associated with wild animal translocation: a case of the European bison and an alien parasite. *Biological Invasions*, 19(4), 1121 – 1125.
28. Burešová, E., **Vadlejch, J.**, Langrová, I. 2017. Experimental infection of lambs with *Haemonchus contortus*. In: Kubík Š. & Barták M. (eds) 9<sup>th</sup> Workshop on biodiversity, Jevany, Česká zemědělská univerzita v Praze, pp 27 – 33.
29. Magdálek, J., Kyriánová, I.A., **Vadlejch, J.** 2017. *Ashworthius sidemi* in hunting areas (Cervidae) in the territory of the Czech Republic. In: Kubík Š. & Barták M. (eds) 9<sup>th</sup> Workshop on biodiversity, Jevany, Česká zemědělská univerzita v Praze, pp 66 – 71.
30. Nápravníková, J., **Vadlejch, J.** 2017. The distribution of family Strongylidae nematodes in Czech horse farms. In: Kubík Š. & Barták M. (eds) 9<sup>th</sup> Workshop on biodiversity, Jevany, Česká zemědělská univerzita v Praze, pp 86 – 92.
31. **Vadlejch, J.**, Makovický, P., Čadková, Z., Langrová, I. 2016. Efficacy and persistent activity of moxidectin against natural *Muellerius capillaris* infection in goats and pathological consequences of muelleriosis. *Veterinary Parasitology*, 218, 98 – 101.
32. Plachý, V., Litvinec, A., Langrová, I., Horáková, B., Sloup, V., Jankovská, I., **Vadlejch, J.**, Čadková, Z., Borkovcová, M. 2016. The effect of *Syphacia muris* on nutrient digestibility in laboratory rats. *Laboratory Animals*, 50, 39 – 44.
33. Burešová, E., **Vadlejch, J.**, Langrová, I. 2016. Anthelmintic activity of the methanol extracts of selected Czech plants using Egg hatch test. Proceedings Paper In: Kubík Š. & Barták M. (eds) 8<sup>th</sup> Workshop on biodiversity, Jevany, Česká zemědělská univerzita v Praze, pp 20 – 28.
34. Rylková, K., Tůmová, E., Brožová, A., Jankovská, I., **Vadlejch, J.**, Čadková, Z., Frýdlová, J., Peřinková, P., Langrová, I., Chodová, D., Nechybová, S., Scháňková, S. 2015. Genetic and morphological characterization of *Trichuris myocastoris* found in *Myocastor coypus* in the Czech Republic. *Parasitology Research*, 114 (11), 3969 – 3975.
35. **Vadlejch, J.**, Kotrba, R., Čadková, Z., Růžičková, A., Langrová, I. 2015. Effects of age, sex, lactation and social dominance on faecal egg count patterns of gastrointestinal nematodes in farmed eland (*Taurotragus oryx*). *Preventive Veterinary Medicine*, 121 (3 – 4), 265 – 272.
36. Scháňková, Š., Maršílek, M., Wagnerová, P., Langrová, I., Starostová, L., Stupka, R., Navrátil, J., Brožová, A., Kudrnáčová, M., Jankovská, I., **Vadlejch, J.**, Čadková, Z. 2015. Cyathostominae distribution in experimentally infected ponies. *Helminthologia*, 52 (2), 134 – 138.
37. Brožová, A., Jankovská, I., Miholová, D., Scháňková, Š., Truněčková, J., Langrová, I., Kudrnáčová, M., **Vadlejch, J.** 2015. Heavy metal concentrations in the small intestine of red fox (*Vulpes vulpes*) with and without *Echinococcus multilocularis* infection. *Environmental science and pollution research international*, 22 (4), 3175 – 3179.

38. Scháňková, Š., Maršálek, M., Wagnerová, P., Langrová, I., Starostová, L., Stupka, R., Navrátil, J., Brožová, A., Truněčková, J., Kudrnáčová, M., Jankovská, I., **Vadlejch, J.**, Čadková, Z., Křivská, D. 2014. Arrested development of experimental Cyathostominae infections in ponies in Czech Republic. *Veterinary Parasitology*, 206 (3 – 4), 328 – 332.
39. **Vadlejch, J.**, Lukešová, D., Vašek, J., Vejl, P., Sedlák, P., Čadková, Z., Langrová, I., Jankovská, I., Salaba, O. 2014. Comparative morphological and molecular identification of *Haemonchus* species in sheep. *Helminthologia*, 51(2), 130 – 140.
40. Jankovská, I., Miholová, D., Romočuský, Š., Petrtýl, M., Langrová, I., Kalous, L., Sloup, V., Válek, P., **Vadlejch, J.**, Lukešová, D. 2014. Importance of fish gender as a factor in environmental monitoring of mercury. *Environmental science and pollution research international*, 21(9), 6239 – 6942.
41. **Vadlejch, J.**, Kopecký, O., Kudrnáčová, M., Čadková, Z., Jankovská, I., Langrová, I. 2014. The effect of risk factors of sheep flock management practices on the development of anthelmintic resistance in the Czech Republic. *Small Ruminant Research*, 117 (2 – 3), 183 – 190.
42. Čadková, Z., Száková, J., Miholová, D., Válek, P., Pacáková, Z., **Vadlejch, J.**, Langrová, I., Jankovská, I. 2013. Faecal Excretion Dynamic during Subacute Oral Exposure to Different Pb Species in *Rattus norvegicus*. *Biological Trace Element Research*, 152 (2), 225 – 232.
43. Salaba, O., **Vadlejch, J.**, Petrtýl, M., Válek, P., Kudrnáčová, M., Jankovská, I., Barták, M., Šuláková, H., Langrová, I. 2013. *Cephenemyia stimulator* and *Hypoderma diana* infection of roe deer in the Czech Republic over an 8-year period. *Parasitology Research*, 112 (4), 1661 – 1666.
44. Salaba, O., Rylková, K., **Vadlejch, J.**, Petrtýl, M., Scháňková, Š., Brožová, A., Jankovská, I., Jebavý, L., Langrová, I. 2013. The first determination of *Trichuris* sp. from roe deer by amplification and sequenation of the ITS1-5.8S-ITS2 segment of ribosomal DNA. *Parasitology Research*, 112 (3), 955 – 960.
45. Pastorková, E., Žáková, T., Landa, P., Nováková, J., **Vadlejch, J.**, Kokoška, L. 2013. Growth inhibitory effect of grape phenolics against wine spoilage yeasts and acetic acid bacteria. *International Journal of Food Microbiology*, 161 (3), 209 – 213.
46. **Vadlejch, J.**, Petrtýl, M., Lukešová, D., Čadková, Z., Kudrnáčová, M., Jankovská, I., Langrová, I. 2013. The Concentration McMaster Technique is Suitable for Quantification of Coccidia Oocysts in Bird Droppings. *Pakistan Veterinary Journal*, 33 (3), 291 – 295.
47. Lytvynets, A., Langrová, I., Lachout, J., **Vadlejch, J.** 2013. Detection of pinworm eggs in the dust of laboratory animals breeding facility, in the cages and on the hands of the technicians. *Laboratory Animals*, 47 (1), 71 – 73.

48. Lukešová, D., Langrová, I., **Vadlejch, J.**, Jankovská, I., Hlava, J., Válek, P., Čadková, Z. 2012. Endoparasites in European hares (*Lepus europaeus*) under gamekeeping conditions in the Czech Republic. *Helminthologia*, 49 (3), 159 – 163.
49. Jankovská, I., Kolihová, D., Miholová, D., Lukešová, D., Romočuský, Š., Válek, P., **Vadlejch, J.**, Kalous, L., Langrová, I., Petrtýl, M., Čadková, Z. 2012. Effect of *Acanthocephalus lucii* infection on total mercury concentrations in muscle and gonads of fish host (*Perca fluviatilis*). *Bulletin of environmental contamination and toxicology*, 88 (6), 967 – 970.
50. Jankovská, I., Bejček, V., Langrová, I., Válek, P., **Vadlejch, J.**, Čadková, Z. 2012. Black grouse in Czech Republic and its parasites. *Helminthologia*, 49 (2), 78 – 81.
51. Jankovská, I., Száková, J., Lukešová, D., Langrová, I., Válek, P., **Vadlejch, J.**, Čadková, Z., Petrtýl, M. 2012. Effect of lead in water on the absorption of copper, iron, manganese and zinc by sheep (*Ovis aries*) infected with sheep tapeworm (*Moniezia expansa*). *Experimental Parasitology*, 131(1), 52 – 56.
52. Langrová, I., Lukešová, D., Baruš, V., **Vadlejch, J.**, Válek, P., Jankovská, I., Petrtýl, M., Kubík, Š., Čadková, Z., Kudrnáčová, M. 2012. The initial discovery of thorny-headed worms in sheep. *Veterinary Parasitology*, 184 (2 – 4), 381 – 383.
53. Jankovská, I., Miholová, D., Lukešová, D., Kalous, L., Válek, P., Romočuský, Š., **Vadlejch, J.**, Petrtýl, M., Langrová, I., Čadková, Z. 2012. Concentrations of Zn, Mn, Cu and Cd in different tissues of perch (*Perca fluviatilis*) and in perch intestinal parasite (*Acanthocephalus lucii*) from the stream near Prague (Czech Republic). *Environmental Research*, 112, 83 – 85.
54. Kokoška, L., Urbanová, K., Klouček, P., Nedorostová, L., Polesná, L., Malík, J., Jiroš, P., Havlík, J., **Vadlejch, J.**, Valterová, I. 2012. Essential oils in the ranunculaceae family: chemical composition of hydrodistilled oils from *Consolida regalis*, *Delphinium elatum*, *Nigella hispanica*, and *N. nigellastrum* seeds. *Chemistry & Biodiversity*, 9 (1), 151 – 161.
55. Jankovská, I., Lukešová, D., Száková, J., Langrová, I., **Vadlejch, J.**, Čadková, Z., Válek, P., Petrtýl, M., Kudrnáčová, M. 2011. Competition for minerals (Zn, Mn, Fe, Cu) and Cd between sheep tapeworm (*Moniezia expansa*) and its definitive host sheep (*Ovis aries*). *Helminthologia*, 48 (4), 237 – 243.
56. **Vadlejch, J.**, Petrtýl, M., Zaichenko, I., Čadková, Z., Jankovská, I., Langrová, I., Moravec, M. 2011. Which McMaster egg counting technique is the most reliable? *Parasitology Research*, 109 (5), 1387 – 1394.
57. Nový, P., Urban, J., Leuner, O., **Vadlejch, J.**, Kokoška, L. 2011. In vitro synergistic effects of baicalin with oxytetracycline and tetracycline against *Staphylococcus aureus*. *The Journal of antimicrobial chemotherapy*, 66 (6), 1298 – 1300.
58. Jankovská, I., Miholová, D., Petrtýl, M., Romočuský, Š., Kalous, L., **Vadlejch, J.**, Čadková, Z., Langrová, I. 2011. Intestinal parasite *Acanthocephalus lucii*

- (Acanthocephala) from European perch (*Perca fluviatilis*) as a bioindicator for lead pollution in the stream "Jevanský potok" near Prague, Czech Republic. Bulletin of environmental contamination and toxicology, 86 (3), 342 – 346.
59. Tesařová, H., Svobodová, B., Kokoška, L., Maršík, P., Přibylová, M., Landa, P., **Vadlejch, J.** 2011. Determination of oxygen radical absorbance capacity of black cumin (*Nigella sativa*) seed quinone compounds. Natural product communications, 6 (2), 213 – 216.
  60. Lytvynets, A., Langrová, I., Lachout, J., **Vadlejch, J.**, Fučíková, A., Jankovská, I. 2010. Drinking water ivermectin treatment for eradication of pinworm infections from laboratory rat colonies. Helminthologia, 47 (4), 233 – 237.
  61. Jankovská, I., **Vadlejch, J.**, Száková, J., Miholová, D., Kunc, P., Knížková, I., Čadková, Z., Langrová, I. 2010. Experimental studies on the cadmium accumulation in the cestode *Moniezia expansa* (Cestoda: Anoplocephalidae) and its final host (*Ovis aries*). Experimental Parasitology, 126(2), 130 – 134.
  62. **Vadlejch, J.**, Lytvynets, A., Jankovská, I., Langrová, I. 2010. Peptidases of pinworms *Syphacia muris* and *Passalurus ambiguus*. Experimental Parasitology, 126 (2), 156 – 160.
  63. **Vadlejch, J.**, Knížková, I., Makovcová, K., Kunc, P., Jankovská, I., Janda, K., Borkovcová, M., Langrová, I. 2010. Thermal profile of rabbits infected with *Eimeria intestinalis*. Veterinary Parasitology, 171 (3 – 4), 343 – 345.
  64. Jankovská, I., **Vadlejch, J.**, Száková, J., Miholová, D., Kunc, P., Knížková, I., Langrová, I. 2010. Experimental studies on the lead accumulation in the cestode *Moniezia expansa* (Cestoda: Anoplocephalidae) and its final host (*Ovis aries*). Ecotoxicology, 19 (5), 928 – 932.
  65. Jankovská, I., Miholová, D., Bejček, V., **Vadlejch, J.**, Šulc, M., Száková, J., Langrová, I. 2010. Influence of parasitism on trace element contents in tissues of red fox (*Vulpes vulpes*) and its parasites *Mesocestoides* spp. (Cestoda) and *Toxascaris leonina* (Nematoda). Archives of environmental contamination and toxicology, 58 (2), 469 – 477.
  66. Jankovská, I., Miholová, D., Langrová, I., Bejček, V., **Vadlejch, J.**, Kolihová, D., Šulc, M. 2009. Influence of parasitism on the use of small terrestrial rodents in environmental pollution monitoring. Environmental pollution, 157 (8 – 9), 2584 – 2586.
  67. Svobodová, B., Polesná, L., Orsák, M., Lachman, J., **Vadlejch, J.**, Kokoška, L. 2009. Evaluation of *in vitro* antioxidant activity of selected Peruvian medicinal plants. Planta Medica, 75 (9), 940 – 941.
  68. Nový, P., Ontl, V., **Vadlejch, J.**, Linhart, J., Kokoška, L. 2009. Additive growth inhibitory effect of epigallocatechin-gallate and baicalin with doxycycline,

- oxytetracycline and cefamandole against various strains of *Staphylococcus aureus*. *Planta Medica*, 75 (9), 1058 – 1058.
69. Kokoška, L., Flesar, J., Halamová, K., **Vadlejch, J.** 2009. The growth-inhibitory effect of thymohydroquinone and thymoquinone on oral pathogenic bacteria *in vitro*. *Planta Medica*, 75 (9), 1059 – 1059.
  70. Makovcová, K., Jankovská, I., **Vadlejch, J.**, Langrová, I., Vejl, P., Lytvynets, A. 2009. The contribution to the epidemiology of gastrointestinal nematodes of sheep with special focus on the survival of infective larvae in winter conditions. *Parasitology Research*, 104 (4), 795 – 799.
  71. Lapačková, J., Malík, J., Van Damme, P., Kouyate, A., **Vadlejch, J.**, Linhart, J., Kokoška, L. 2009. Antioxidant Activity of Malian Medical Barks. *Annals of Nutrition and Metabolism*, 55, (1), 291 – 291.
  72. Jankovská, I., Langrová, I., Bejček, V., Miholová, D., **Vadlejch, J.**, Petrtýl, M. 2008. Heavy metal accumulation in small terrestrial rodents infected by cestodes or nematodes. *Parasite*, 15, (4), 581 – 588.
  73. Makovcová, K., Langrová, I., **Vadlejch, J.**, Jankovská, I., Lytvynets, A., Borkovcová, M. 2008. Linear distribution of nematodes in the gastrointestinal tract of tracer lambs. *Parasitology Research*, 104 (1), 123 – 126.
  74. Langrová, I., Makovcová, K., **Vadlejch, J.**, Jankovská, I., Petrtýl, M., Fechtner, J., Keil, P., Lytvynets, A., Borkovcová, M. 2008. Arrested development of sheep strongyles: onset and resumption under field conditions of Central Europe. *Parasitology Research*, 103 (2), 387 – 392.
  75. Langrová, I., Zouhar, M., **Vadlejch, J.**, Borovský, M., Jankovská, I., Lytvynets, A. 2008. *Trichostrongylus colubriformis* rDNA polymorphism associated with arrested development. *Parasitology Research*, 103 (2), 401 – 403.
  76. Langrová, I., Jankovská, I., **Vadlejch, J.**, Libra, M., Lytvynets, A., Makovcová, K. 2008. The influence of desiccation and UV radiation on the development and survival of free-living stages of cyathostomins under field and laboratory conditions. *Helminthologia*, 45 (1), 32 – 40.
  77. Dubná, S., Langrová, I., Nápravník, J., Jankovská, I., **Vadlejch, J.**, Pekár, S., Fechtner, J. 2007. The prevalence of intestinal parasites in dogs from Prague, rural areas, and shelters of the Czech Republic. *Veterinary Parasitology*, 145 (1 – 2), 120 – 128.
  78. Dubná, S., Langrová, I., Jankovská, I., **Vadlejch, J.**, Pekár, S., Nápravník, J., Fechtner, J. 2007. Contamination of soil with *Toxocara* eggs in urban (Prague) and rural areas in the Czech Republic. *Veterinary Parasitology*, 144 (1 – 2), 81 – 86.
  79. **Vadlejch, J.**, Langrová, I., Sedmíková, M., Jankovská, I., Fechtner, J., Lytvynets, A. 2006. Enzymatic and protein differences of infective larvae of *Trichostrongylus colubriformis* conditioned to hypobiosis. *Helminthologia*, 43 (2), 64 – 68.

80. Jankovská, I., Langrová, I., Bejček, V., **Vadlejch, J.**, Borovský, M. 2005. Comparison of helminth fauna of shrew (*Sorex araneus* and *Sorex minutus*) in ecosystems transformed and non-transformed by industrial immissions. *Helminthologia*, 42 (2), 77 – 81.

## Conferences/Workshops/Symposia

**Vadlejch, J.**: Will anthelmintic resistance threaten the sustainability of small ruminant production in the Czech Republic? (Invited talk), 27<sup>th</sup> Helminthological days, 8 – 12. 5. 2023, Deštné v Orlických horách, Czech Republic

Škorpíková, L., Ilgová, J., **Vadlejch, J.**, Magdálek, J., Plhal, R., Drimaj, J., Mikulka, O., Kašný, M., Reslová, N.: Monitoring of alien parasites *Ashworthius sidemi* and *Fascioloides magna* in wild ruminants in the Czech Republic using real-time PCR. 27<sup>th</sup> Helminthological days, 8 – 12. 5. 2023, Deštné v Orlických horách, Czech Republic

Škorpíková, L., **Vadlejch, J.**, Reslová, N., Ilgová, J., Kyriánová, I.A., Magdálek, J., Sajdáková, S., Kašný, M. Prevalence of strongyle gastrointestinal nematodes in sheep in the Czech Republic. 13<sup>th</sup> European Multicolloquium of Parasitology, 12. – 16. 10. 2021, Belgrade, Serbia.

Škorpíková, L., Reslová, N., **Vadlejch, J.**, Kašný, M. Detection and semi-quantitative evaluation of gastrointestinal nematodes in faecal matrices using multiplex real-time PCR assays. 26<sup>th</sup> Helminthological Days, 20. – 24. 9. 2021, Deštné v Orlických horách, Czech Republic

Várady, M., Mravčáková, D., Babjáka, M., Königová, A., Dolinská, M.U., Komáromyová, M., **Vadlejch, J.**, Váradypová, Z. Can use of medicinal plants in lambs' nutrition influence their parasitological status? Joint COMBAR-ACSRPC meeting: "Anthelmintic Resistance in ruminants: Who cares?", 27. – 29. 8. 2019, Ghent, Belgium

Mravčáková, D., Váradypová, Z., **Vadlejch, J.**, Königová, A., Komáromyová, M., Várady, M. Effect of herbal mixtures in lambs with endoparasite infection. Joint COMBAR-ACSRPC meeting: "Anthelmintic Resistance in ruminants: Who cares?", 27. – 29. 8. 2019, Ghent, Belgium

Ilgová, J., Reslová, N., Škorpíková, L., Roudnický, P., Vorel, J., Pecková, R., **Vadlejch, J.**, Kyriánová, I.A., Čadková, Z., Kašný, M. Strategic plan for control of resistant gastrointestinal helminths in grazing ruminants in the Czech Republic. Joint COMBAR-ACSRPC meeting: "Anthelmintic Resistance in ruminants: Who cares?", 27. – 29. 8. 2019, Ghent, Belgium

Škorpíková, L., Reslová, N., Ilgová, J., Sajdáková, S., **Vadlejch, J.**, Kašný, M. 2019. High Resolution Melting Assay: a powerful method usable for species differentiation as well as for detection of polymorphisms associated with anthelmintic resistance.

Joint COMBAR-ACSRPC meeting: "Anthelmintic Resistance in ruminants: Who cares?", 27. – 29. 8. 2019, Ghent, Belgium

Mravčáková D., Babják M., Königová A., Pisarčíková J., Kišidayová S., **Vadlejch J.**, Váradý M., Váradiová Z. *In vitro* and *in vivo* effect of medicinal plants in lambs with endoparasite infection. 14<sup>th</sup> International scientific conference Animal Physiology, 13. – 15. 6. 2018, Kraków, Poland

**Vadlejch, J.**, Burešová, E., Váradý, M., Váradiová, Z. To feed or to develop? Evaluation of anthelmintic properties of six plant extracts using two *in vitro* tests. 2<sup>nd</sup> COMBAR Working Groups Meeting – Anthelmintic Resistance: Past, Present and Future, 26. – 27. 9. 2018, León, Spain

Váradý, M., Babják, M., Königová, A., Dolinská, M., Kupčinská, T., **Vadlejch, J.**, von Samson-Himmelstjerna, G. Does In vitro Egg Hatch Test Predict the Clinical Failure of Benzimidazole Treatment? 2<sup>nd</sup> COMBAR Working Groups Meeting – Anthelmintic Resistance: Past, Present and Future, 26. – 27. 9. 2018, León, Spain

Magdálek, J., Čadková, Z., **Vadlejch, J.** Quo vadis *Ashworthius sidemi*? Current Status of a Non-Native Parasite in the Czech Republic. XIII<sup>th</sup> Slovak and Czech parasitological days. Parasites in the Heart of Europe 2, 21. – 25. 5. 2018, Košice, Slovensko

Čadková, Z., Svrčková, M., Široká, K., Száková, J., **Vadlejch, J.** Gastrointestinal Nematodes of Small Terrestrial Mammals from two Post-Mining Area in the Czech Republic – Potential Effect of Risk Element Contamination. XIII<sup>th</sup> Slovak and Czech parasitological days. Parasites in the Heart of Europe 2, 21. – 25. 5. 2018, Košice, Slovensko

Jankůjová, M., Potěsil, D., Zdráhal, Z., Demko, M., Oppelt, J., Kašný, M., **Vadlejch, J.** Analysis of gene expression and protein synthesis related to hypobiosis of *Teladorsagia circumcincta*. The 26<sup>th</sup> International Conference of the World Association for the Advancement of Veterinary Parasitology, 4. – 8. 9. 2017, Kuala Lumpur, Malaysia

**Vadlejch, J.**, Kyriánová, I.A., Rylková, K., Čadková, Z. Size matters – the bigger ones sucks more blood. The 26<sup>th</sup> International Conference of the World Association for the Advancement of Veterinary Parasitology, 4. – 8 . 9. 2017, Kuala Lumpur, Malaysia

**Vadlejch, J.**, Čadková, Z., Langrová, I. Benzimidazole and Macrocylic Lactone Drugs Efficacy and Persistence Activity Against Gastrointestinal Nematodes at Sheep Farms in the Czech Republic. V4 Parasitological Meeting – Parasites in the heart of Europe. 25. – 30. 5. 2014, Stará Lesná, Slovakia

**Vadlejch J.**, Kotrba R., Čadková Z., Růžičková A.: Effect of age, sex and lactation on seasonal dynamics of gastrointestinal nematodes in captive eland (*Taurotragus oryx*). 20<sup>th</sup> Helminthological Days, 13. – 17. 5. 2013, Štědrnín u Orlíku, Česká republika

Paya, L., Nováková, J., **Vadlejch, J.**, Kokoška, L. In vitro anticlostridial effect of naturally occurring quinones. 14<sup>th</sup> Australian Food Microbiology Conference and 2nd IAFP Asian Pacific Symposium of Food Safety, 26. – 28. 9. 2011, Melbourne, Australia

Lytvynets, A., Langrová, I., **Vadlejch, J.** Oxyurida in the Colonies of Laboratory Rodents and Lagomorphs. Proceeding of the Tenth Conference about Laboratory Animals held at Kamenice nad Lipou, 1. 1. 2007, Kamenice nad Lipou, Česká republika

Lytvynets, A., Mikeš, L., **Vadlejch, J.** Helminths detection in laboratory rodents and Lagomorphs in the Czech Republic. 15<sup>th</sup> Helminthological Days, 1. – 5. 5. 2007, Ředkovec, Česká republika

Lytvynets, A., Langrová, I., **Vadlejch, J.** Long-term eradication of Pinworm Infections from Laboratory Rat Colonies Using Ivermectin. XIII. scientific and practical parasitological conference, 20. – 23. 9. 2005, Laspi, Ukraine

**Vadlejch, J.**, Langrová, I., Sedmíková, M., Jankovská, I. Excretory/secretory products of nematode *Trichostrongylus colubriformis* conditioned to hypobiosis. 43<sup>rd</sup> Annual Society of Nematologists meeting, 7. – 11. 8. 2004, Estes Park, USA

**Vadlejch, J.**, Sedmíková, M., Langrová, I., Jankovská, I. Enzymatická aktívita hlístice *Trichostrongylus colubriformis*. 6. České a slovenské parazitologické dny, 17. – 21. 5. 2004, Ostravice, Česká republika

**Vadlejch, J.**, Sedmíková, M., Langrová, I., Jankovská, I. Excretory/secretory profile of nematode *Trichostrongylus colubriformis*. Sustain Life Secure Survival II., 22. – 26. 9. 2004, Prague, Česká republika

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Jaroslav Vadlejch