

Přehled publikací pracoviště v odborných journalích za rok 2011

1. **Bimova B.V., Macholan M., Baird S.J., Munclinger P., Dufkova P., Laukaitis C.M., Karn R.C., Luzynski K., Tucker P.K., Pialek J.** (2011): Reinforcement selection acting on the European house mouse hybrid zone. **Mol. Ecol.**, 20:2403-2424. **(IF 6,457)**.
2. **Bohlen J., Slechtova V.** (2011): A new genus and two new species of loaches (Teleostei: Nemacheilidae) from Myanmar. **Ichthyol. Expl. Freshw.**, 22:1-10. **(IF 0,828)**.
3. **Bohlen J., Slechtova V.** (2011): *Nemacheilus paucimaculatus*, a new species of loach from the southern Malay Peninsula (Teleostei: Nemacheilidae). **Raffles B. Zool.**, 59:201-204. **(IF 1,456)**.
4. **Bohlen J., Slechtova V., Tan H.H., Britz R.** (2011): Phylogeny of the Southeast Asian freshwater fish genus *Pangio* (Cypriniformes; Cobitidae). **Mol. Phylogenet. Evol.**, 61:845-865. **(IF 3,889)**.
5. Czauderna M., Kowalczyk J., **Marounek M.** (2011): The simple and sensitive measurement of malondialdehyde in selected specimens of biological origin and some feed by reversed phase high performance liquid chromatography. **J. Chromatogr. B Analyt. Technol. Biomed. Life. Sci.**, 879:2251-2258. **(IF 2,971)**.
6. Czauderna M., Kowalczyk J., **Marounek M.,** Michalski J.P., Rozbicka-Wieczorek A.J., Krajewska K.A. (2011): A new internal standard for HPLC assay of conjugated linoleic acid in animal tissues and milk. **Czech J. Anim. Sci.**, 56:23-29. **(IF 1,190)**.
7. Devine M.J., Ryten M., **Vodicka P.,** Thomson A.J., Burdon T., Houlden H., Cavaleri F., Nagano M., Drummond N.J., Taanman J.W., Schapira A.H., Gwinn K., Hardy J., Lewis P.A., Kunath T. (2011): Parkinson's disease induced pluripotent stem cells with triplication of the α -synuclein locus. **Nat. Commun.**, 2011 Aug 23;2:440. doi: 10.1038/ncomms1453. **(IF 0)**.
8. Dorn A., Ng'oma E., **Janko K.,** Reichwald K., Polačik M., Platzer M., Cellerino A., Reichard M. (2011): Phylogeny, genetic variability and colour polymorphism of an emerging animal model: The short-lived annual *Nothobranchius* fishes from southern Mozambique. **Mol. Phylogenet. Evol.**, 61:739-749. **(IF 3,889)**.
9. **Dostal J., Hrdlicova A., Horak P.** (2011): Progressive rod-cone degeneration (PRCD) in selected dog breeds and variability in its phenotypic expression. **Vet. Med.**, 56:243-247. **(IF 0,594)**.
10. Dufresne F., **Marková S.,** Vergilino R., Ventura M., **Kotlík P.** (2011): Diversity in the Reproductive Modes of European *Daphnia pulex* Deviates from the Geographical Parthenogenesis. **PLoS One**, 6(5):e20049. **(IF 4,411)**.

11. Dufkova P., **Macholan M.**, Pialek J. (2011): Inference of selection and stochastic effects in the house mouse hybrid zone. **Evolution**, 65:993-1010. (IF 5,659).
12. Duskova J., Tishchenko G., Ponomareva E., **Simunek J.**, **Koppova I.**, Skalova T., Stepánková A., Hasek J., **Dohnalek J.** (2011): Chitinolytic enzymes from bacterium inhabiting human gastrointestinal tract - critical parameters of protein isolation from anaerobic culture. **Acta Biochim. Pol.**, 58:261-263. (IF 1,234).
13. Fabian D., **Juhas S.**, Bukovska A., Bujnakova, D., Gresakova L., Koppel J. (2011): Anti-inflammatory effects of chamomile essential oil in mice. **Slovak J.Anim.Sci.**, 44:111-116. (IF 0).
14. Fadda A., **Markova S.**, **Kotlik P.**, Luglie A., Padedda B., Buscarinu P., Sechi N., Manca M. (2011): First record of planktonic crustaceans in Sardinian reservoirs. **Biologia.**, 66:856-865. (IF 0,609).
15. Fijarczyk A., Nadachowska K., Hofman S., Litvinchuk S.N., Babik W., Stuglik M., Gollmann G., **Choleva L.**, Cogălniceanu D., Vukov T., Džukić G., Szymura J.M. (2011): Nuclear and mitochondrial phylogeography of the European fire-bellied toads *Bombina bombina* and *Bombina variegata* supports their independent histories. **Mol. Ecol.**, 20:3381-3398. (IF 6,457).
16. **Chlastakova I.**, **Lungova V.**, Wells K., Tucker A.S., Radlanski R.J., **Misek I.**, **Matalova E.** (2011): Morphogenesis and bone integration of the mouse mandibular third molar. **Eur. J. Oral Sci.**, 119:265-274. (IF 1,890).
17. Hornak M., Jeseta M., Musilova P., **Pavlok A.**, **Kubelka M.**, **Motlik J.**, Rubes J., **Anger M.** (2011): Frequency of aneuploidy related to age in porcine oocytes. **Plos One**, 6:e18892. (IF 4,411).
18. **Jarkovska K.**, **Kupcova Skalnikova H.**, Halada P., **Hrabakova R.**, Moos J, Rezabek K., Gadher S.J., **Kovarova H.** (2011): Development of ovarian hyperstimulation syndrome: interrogation of key proteins and biological processes in human follicular fluid of women undergoing in vitro fertilisation. **Mol. Hum. Reprod.**, 17:679-692. (IF 3,506).
19. **Janko K.**, Drozd P., Eisner J. (2011): Do clones degenerate over time? Explaining the genetic variability of asexuals through population genetic models. **Biol. Direct.**, 6:17. (IF 3,737).
20. **Janko K.**, Marshall C., **Musilova Z.**, Van Houdt J., Couloux A., Cruaud C., Lecointre G. (2011): Multilocus analyses of an Antarctic fish species flock (Teleostei, Notothenioidei, Trematominae): Phylogenetic approach and Test of the early-radiation event. **Mol. Phylogenet. Evol.**, 60:305-316. (IF 3,889).

21. Juhasova J., Juhas S., Klima J., Strnadel J., Holubova M., Motlik J. (2011): Osteogenic differentiation of miniature pig mesenchymal stem cells in 2D and 3D environment. **Physiol.Res.**, 60:559-571. (IF 1,646).
22. Kalous L., Knytl M. (2011): Karyotype diversity of the offspring resulting from reproduction experiment between diploid male and triploid female of silver prussian carp, *Carassius gibelio* (Cyprinidae, Actinopterygii). **Folia Zool.**, 60:115-121. (IF 0,548).
23. Karabinova P., Kubelka M., Susor A. (2011): Proteasomal degradation of ubiquitinated proteins in mammalian oocyte meiosis and fertilization in mammals. **Cell Tissue Res.**, 346:1-9. (IF 2,804).
24. Killer J., Kopecny J., Mrázek J., Koppová I., Havlík J., Benada O., Kott T. (2011): *Bifidobacterium actinocoloniiforme* sp. nov. and *Bifidobacterium bohemicum* sp. nov., two new bifidobacteria from the bumblebee digestive tracts. **Int. Syst. Evol. Microbiol.** 61:1315-1321. (IF 1,930).
25. Killer J., Marounek M. (2011): Fermentation of mucin by bifidobacteria from rectal samples of humans and rectal and intestinal samples of animals. **Folia Microbiol.**, (Praha), 56:85-89. (IF 0,977).
26. Kovarova H., Gadher S.J., Wollscheid B. (2011): Focus on stem cell proteomics. **Proteomics.**, 11:3943-3945. (IF 4,815).
27. Kverka M., Zakostelska Z., Klimesova K., Sokol D., Hudcovic T., Hrnčíř T., Rossmann P., Mrázek J., Kopecny J., Verdu E.F., Tlaskalova-Hogenova H. (2010): Oral administration of *Parabacteroides distasonis* antigens attenuates experimental murine colitis through modulation of immunity and microbiota composition. **Clin.Exp.Immunol.**, 163:250-259. (IF 3,134).
28. Lajbner Z., Linhart O., Kotlik P. (2011): Human-aided dispersal has altered but not erased the phylogeography of the tench. **Evol.Appl.**, 4:545-561. (IF 5,145).
29. Lajbner Z., Kotlik P. (2011): PCR-RFLP assays to distinguish the Western and Eastern phylogroups in wild and cultured tench *Tinca tinca*. **Mol. Ecol. Resources**, 11:374-377. (IF 1,631).
30. Lungova V., Radlanski R.J., Tucker A.S., Renz H., Misek I., Matalova E. (2011): Tooth-bone morphogenesis during postnatal stages of mouse first molar development. **J. Anat.**, 218:699-716. (IF 2,410).
31. Maciak S., Janko K., Kotusz J., Choleva L., Boron A., Juchno D., Kujawa R., Kozłowski J., Konarzewski M. (2011): Standard Metabolic Rate (SMR) is inversely related to erythrocyte and genome size in allopolyploid fish of the *Cobitis taenia* hybrid complex. **Funct. Ecol.**, 25:1072-1078. (IF 4,645).
32. Macholan M., Baird S.J., Dufkova P., Munclinger P., Bimova B.V., Pialek J. (2011): Assessing multilocus introgression patterns: A case study on the

- mouse X chromosome in Central Europe. **Evolution**, 65:1428-1446. (IF 5,659).
33. **Marounek M.**, Bubancova I., Podsednicek M., Lukesova D., Ramadan M. A. (2011): Activity of phytate dephosphorylation in cereals, legumes and oilseeds determined by colourimetric and isotachophoretic method. **J.Anim.Feed Sci.**, 20:472-479. (IF 0,659).
34. **Masopust M.**, Vykoukalova Z., Knoll A., Bartenschlager H., Mileham A., Deeb N., Rohrer G.A., **Cepica S.** (2011): Porcine insulin receptor substrate 4 (IRS4) gene: cloning, polymorphism and association study. **Mol. Biol. Rep.**, 38:2611-2617. (IF 1,875).
35. **Matalova E.**, **Buchtova M.**, Tucker A.S., Bender T.P., **Janeckova E.**, Lungova V., **Balkova S.**, Smarda J. (2011): Expression and characterization of c-Myb in prenatal odontogenesis. **Dev. Growth Differ.**, 53:793-803. (IF 2,284).
36. **Matousek J.** (2011): Ribonucleases, nucleases and antiangiogenins in antiproliferative activities. **Curr.Signal.Transd.Ther.**, 6:363-382. (IF 0,682).
37. **Moravec J.**, Kratochvil L., Amr Z.S., Jandzik D., Smid J., **Gvozdik V.** (2011): High genetic differentiation within the Hemidactylus turcicus complex (Reptilia: Gekkonidae) in the Levant, with comments on the phylogeny and systematics of the genus. **Zootaxa**, 2894:21-38. (IF 0,853).
38. **Nagyova E.**, Camaioni A., Scsukova S., Mlynarcikova A., **Prochazka R.**, **Nemcova L.**, Salustri A. (2011): Activation of cumulus cell SMAD2/3 and epidermal growth factor receptor pathways are involved in porcine oocyte-cumulus cell expansion and steroidogenesis. **Mol. Reprod. Dev.**, 78:391-402. (IF 2,395).
39. **Pokorna M.**, Kratochvil L., Kejnovsky E. (2011): Microsatellite distribution on sex chromosomes at different stages of heteromorphism and heterochromatinization in two lizard species (Squamata: Eublepharidae: Coleonyx elegans and Lacertidae: Eremias velox). **BMC Genet.**, 12:90. (IF 2,489).
40. **Pokorna M.**, Giovannotti M., Kratochvil L., Kasai F., Trifonov V.A., O'Brien P.C.M., Caputo V., Olmo E., Ferguson-Smith M.A., Rens W. (2011): Strong conservation of the bird Z chromosome in reptilian genomes is revealed by comparative painting despite 275 million years divergence. **Chromosoma**, 120:455-468. (IF 4,196).
41. **Prochazka R.**, **Petlach M.**, **Nagyova E.**, **Nemcova L.** (2011): Effect of epidermal growth factor-like peptides on pig cumulus cell expansion, oocyte maturation and acquisition of developmental competence in vitro: Comparison with gonadotropins. **Reproduction.**, 141:425-435. (IF 3,049).

42. Prosecka E., Rampichova M., Vojtova L., Tvrdik D., Melcakova S., **Juhasova J.**, Plencner M., Jakubova R., Jancar J., Necas A., Kochova P., Klepacek J., Tonar Z., Amler E. (2011): Optimized conditions for mesenchymal stem cells to differentiate into osteoblasts on a collagen/hydroxyapatite matrix. **J. Biomed. Mater. Res. A.**, 99A:307-315. (IF 3,044).
43. **Putnova I.**, Odehnalova S., **Horak V.**, Stehlik L., **Misek I.**, Lozanoff S., **Buchtova M.** (2011): Comparative morphology of normal and cleft minipigs demonstrates dual origin of incisors. **Arch. Oral Biol.**, 56:1624-1634. (IF 1,463).
44. Rada V., Nevoral J., Flajsmanova K., Rockova S., Krcmarova I., Grmanova M., Vlkova E., Novakova I., **Killer J.**, **Kopecny J.** (2011): Occurrence of bifidobacteria in human milk. **Milchwissenschaft**, 66:123-126. (IF 0,416).
45. Rockova S., Nevoral J., Rada V., Marsik P., Sklenar J., Hinkova A., Vlkova E., **Marounek M.** (2011): Factors affecting the growth of bifidobacteria in human milk. **Int. Dairy J.**, 21:504-508. (IF 2,181).
46. Ryska O., Martinek J., Dolezel R., Filipkova T., **Juhas S.**, **Juhasova J.**, Zavoral M., Tuckova I., Ryska M. (2011): Feasibility of a novel single loop-and-clip gastrotomy closure ('King's closure') after NOTES procedures in an experimental study | [Nový jednoduchý uzávěr gastrotomie typu loop-and-clip ("King's closure") využitelný při NOTES výkonech v experimentu]. **Ceska a Slovenska Gastroenterologie a Hepatologie**, 65:207-210. (IF 0).
47. Ryska O., Martinek J., Dolezel R., Filipkova, T., **Juhas S.**, **Juhasova, J.**, Zavoral, M., Ryska, M. (2011): Natural Orifice Transluminal Endoscopic Surgery (NOTES) - Current status and our own experience | [Natural Orifice Transluminal Endoscopic Surgery (NOTES) - současný stav, vlastní zkušenosti]. 65:264-271. (IF 0).
48. Ricanova S., Bryja J., Cosson J.-F., Gedeon C., **Choleva L.**, Ambros M., Sedlacek, F. (2011): Depleted genetic variation of the European ground squirrel in Central Europe in both microsatellites and the major histocompatibility complex gene: implications for conservation. **Conservation Genet.**, 12:115-129. (IF 1,255).
49. **Sery O.**, Stastny F., Zvolsky P., Hlinomazova Z., Balcar V.J. (2011): Association between Val66Met polymorphism of Brain-Derived Neurotrophic Factor (BDNF) gene and a deficiency of colour vision in alcohol-dependent male patients. **Neurosci. Lett.**, 499:154-157. (2,055).
50. **Skalnikova H.**, **Martinkova J.**, **Hrabakova R.**, Halada P., Dziechciarkova M., Hajduch M., Gadher S.J., Hammar A., Enetoft D., Ekefjard A., Forsstrom-Olsson O., **Kovarova H.** (2011): Cancer drug-resistance and a look at specific proteins: Rho GDP-Dissociation Inhibitor 2, Y-Box Binding Protein 1 and HSP70/90 Organising Protein in proteomics clinical application. **J. Proteome Res.**, 10:404-415. (IF 5,460).

51. Skalnikova H., Motlik J., Gadher S.J., Kovarova H. (2011): Mapping of the secretome of primary isolates of mammalian cells, stem cells and derived cell lines. **Proteomics**, 11:691-708. (IF 4,815).
52. Tishchenko G., Simunek J., Bartonová H., Dusková J., Dohnalek J., Ponomareva E., Tennikova T. (2011): Sample preparation in separation of the extracellular chitinolytic enzymes of the human intestinal bacterium *Clostridium paraputrificum* J4 from the culture fluids. **J. Chromatogr. B Analyt. Technol. Biomed. Life Sci.**, 2011 Jul 15;879(22):2175-8. (IF2,971).
53. Tishchenko G., Simunek J., Brus J., Netopilik M., Pekarek M., Walterova Z., Koppova I., Lenfeld J. (2011): Low-molecular-weight chitosans: Preparation and characterization. **Carbohydrate Polym.**, 86:1077-1081. (IF 3,463).
54. Vackova I., Novakova Z., Krylov V., Okada K., Kott T., Fulka H., Motlik J. (2011): Analysis of Marker Expression in Porcine Cell Lines Derived from Blastocysts Produced In Vitro and In Vivo. **J. Reprod. Dev.**, 57:594-603. (IF 1,637).
55. Vannucci L. (2011): Cancer immunology and colorectal cancer recurrence. **Frontiers in Bioscience**, S3: 1421-1431. (IF 0).
56. Vergilino R., Markova S., Ventura M., Manca M., Dufresne F. (2011): Reticulate evolution of the *Daphnia pulex* complex as revealed by nuclear markers. **Mol. Ecol.**, 20:1191-1207. (IF 6,457).
57. Vodickova Kepkova K., Vodicka P., Toralova T., Lopatarova T., Cech S., Dolezel R., Havlicek V., Besenfelder U., Kuzmany A., Sirard M-A., Laurincik J., Kanka J. (2011): Transcriptomic analysis of in vivo and in vitro produced bovine embryos revealed a developmental change in *cullin 1* during maternal-to-embryonic transition. **Theriogenology**, 75:1582-1595. (IF 2,045).
58. Zakostelska Z., Kverka M., Klimesova K., Rossmann P., Mrazek J., Kopecny J., Hornova M., Srutkova D., Hudcovic T., Ridl J., Tlaskalova-Hogenova H. (2011): Lysate of Probiotic *Lactobacillus casei* DN-114 001 Ameliorates Colitis by Strengthening the Gut Barrier Function and Changing the Gut Microenvironment. **PLoS One**. 2011;6(11):e27961. Epub 2011 Nov 22. (IF 4,411).
59. Zalesna A., Choleva L., Ogielska M., Rabova M., Marec F., Rab P. (2011): Evidence for Integrity of Parental Genomes in the Diploid Hybridogenetic Water Frog *Pelophylax esculentus* by Genomic in situ Hybridization. **Cytogenet. Genome Res.**, 134:206-212. (IF 1,783).
60. Wang L., Luzynski K., Pool J.E., Janousek V., Dufkova P., Vyskocilová M.M., Teeter K.C., Nachman M.W., Munclinger P., Macholan M., Pialek J.,

Tucker P.K. (2011): Measures of linkage disequilibrium among neighbouring SNPs indicate asymmetries across the house mouse hybrid zone. **Mol.Ecol.**, 20:2985-3000. (*IF 6,457*).

61. Weisz F., Urban T., Chalupová P., **Knoll A.** (2011): Association analysis of seven candidate genes with performance traits in Czech Large White pigs. **Czech J.Anim.Sci.**, 56:337-344. (*IF 1,190*).