

1. Raziskovalna organizacija:

Univerza v Ljubljani, Biotehniška fakulteta

2. Ime in priimek mentorja:

Alenka Levart

3. Področje znanosti iz šifranta ARRS:

4.02 Živalska produkcija in predelava / Animal production

4. Kontaktni e-naslov mentorja:

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5. Kratak opis programa usposabljanja:

SI: Usposabljanje mladega raziskovalca/ke (MR) bo potekalo na Katedri za prehrano Oddelka za zootehniko Biotehniške fakultete Univerze v Ljubljani v okviru programske skupine Prehrana in mikrobna ekologija prebavil (P4-0097 (C)).

Področje raziskav bo usklajeno z raziskavami v okviru programske skupine. MR se bo predvsem posvečal/a raziskavam uporabe sekundarnih rastlinskih metabolitov v prehrani živali, ki predstavljajo alternativo za antibiotike in druge krmne dodatke, nekateri delujejo kot antioksidanti in posledično predstavljajo zanimivo komponento živil živalskega izvora s funkcionalnimi lastnostmi. Delovanje sekundarnih rastlinskih metabolitov bo MR raziskoval/a v celotni verigi: krma (oksidativna stabilnost krme) – žival (produktivnost, zdravje - oksidativni stres, izkoristljivost hranil) – živalski proizvodi (tehnološka in prehranska kakovost svežih in skladiščenih proizvodov), kar je do sedaj slabo raziskano.

Metode dela:

- kabinetne raziskave
- eksperimentalne raziskave:
 - o na živalih: izvajanje prehranskih / bilančnih poskusov
 - o v laboratoriju: uporaba *in vitro* tehnik, izvajanje kemijskih analiz in fizikalnih meritev v vzorcih, pridobljenih v *in vivo* in *in vitro* raziskavah

ENG: The young researcher will be trained at Chair for Nutrition of the Animal Science Department of the Biotechnical Faculty of the University of Ljubljana within the framework of the research programme Nutrition and microbial ecology of gastrointestinal tract (P4-0097 (C)).

The main research area will be integrated in the current research activities of the research programme. The young researcher will study the use of secondary plant metabolites in animal nutrition, which represent an alternative to antibiotics, some act as antioxidants and are therefore interesting components of food of animal origin with functional properties. The role and mode of action of secondary plant metabolites will be researched in the whole cycle: animal feed (effects on oxidative stability of feeds) – animal health (animal productivity, oxidative stress, digestibility and bioavailability of nutrients) – animal products (effects on technological and nutritional quality of fresh and stored animal products), which was not well researched until now.

Research methods:

- desk research
- experimental research
 - o animal trials: carrying-out (under supervision) nutrition and balance experiments
 - o laboratory research: use of *in vitro* techniques, chemical analyses, physical measurements in samples, obtained in *in vivo* and *in vitro* trials