Vets4Bees Pathway

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Veterinarians have an important role to play in ensuring the health, sustainability, and productivity of managed honeybee colonies as they do for other animal species

Bees are animals and biosensors of our ecosystem's health

(One Health)

Pollination – food production / biodiversity maintaining

Global trade

Transport



Export-import health certificates

Inspections of packages – live bees or apian products, medicines Prerogative right for proscribing recipes for veterinary medicines





Mapping the teaching of honeybee veterinary medicine in the European Union and European Free Trade Area

Despoina latridou ⁽⁾,^{1,2} Laura Pohl,³ Ivana Tlak Gajger,⁴ Nancy De Briyne,¹ Ana Bravo,⁵ Jimmy Saunders²

..."53 out of the 68 'Approved Vet. schools' offer training on honeybee veterinary medicine – 24 as a separate subject and 29 of them as part of other subjects..." (FVE / EAEVE, 2019)

...compulsory and elective study hours are allocated as follows: 1-10 h (18%); 11-25 h (32%); 26-40 h (18%), and 106 h (2%)... latridou D, et al. Vet Rec Open 2019;6:e000343.

doi:10.1136/vetreco-2019-000343

Due to continuing need to improve the education of veterinarians in honeybee health – the first International working group *Vet4Bees Int*. was established (2019)

Tlak Gajger, I., A.M. Mañes, G. Formato, M. Mortarino, J. Toporcak (2021): Veterinarians and beekeeping: What roles, expectations, and future perspectives? Vet. Arhiv 91, 4, 437-443. doi: 10.24099/vet.arhiv.1444

• Education of students

- Integrated undergraduate and graduate university study of Veterinary Medicine (Croatian, English)
- Doctoral study program
 Veterinary sciences
- Specialistic postgraduate study *Protection of honeybee health*
- Long life education of Veterinarians
- NRL APISIab diagnostic of honeybee diseases
- Research





Biology and Pathology of Beneficial Insects – field visit 1

- MOTIVATION
- EVOCATION-UNDERSTANDING-REFLEXION
- LABORATORY WORK
- APIARY WORK
- CONTINIOUS KNOWLEDGE
 CHECKING



The dynamic nature of veterinary medicine in beekeeping as a profession requires continuous monitoring of new expertise and adaptation of the program to emerging needs.

Educational-archive station for beekeeping VEF.UNIZG.HR





Permanent education

> Specialists courses:

Credits for attending of long learning courses provided by Croatian Veterinary Chamber

- Honey Bee Diseases
- Recognizing Honey Bee Diseases
- Official sampling in beekeeping
- Early detection of Aethina tumida
- Biosecurity measures at the apiary

Professional meetings of NRL representatives and official veterinarians at veterinary stations

(e.g. presentation of novelty in legislative annual regulation regarding HONEYBEE DISEASES)



Perspectives – adaptability/transferability

- Promotion and harmonization of veterinary medicine study curricula
- Postgraduate opportunities international Master studies
- Harmonised international study programs at the EU level
- Improving legislative framework
- Support for diagnostic laboratories
- Strenght of veterinary network organizations in the beekeeping sector

By implementing *One health* approach thru good educational, veterinary, beekeeping, and environmental practices the *Vet4Bees* work can guarantee the safety of apian products which present food for human consumption and sustainable apiculture

> Travelling-Teaching-Learning about BEES

