COLOSS: “prevention of honey bee COLony LOSSes”

Peter Neumann
on behalf of the COLOSS association

Institut für Bienengesundheit, Universität Bern
www(bees.unibe.ch; peter.neumann@vetsuisse.unibe.ch
Main priorities of COLOSS

Factors for honey bee health

- Nutrition
- Pesticides
- Environmental stresses
- Beekeeping
- Pests & Pathogens
- Genetic diversity

Improve the health of honey bees internationally by:

a. coordinating honey bee monitoring and research, including the development of standard methods

b. disseminating knowledge and providing training related to improving the well-being of honey bees
COLOSS network
“prevention of honey bee COlony LOSSes”

1049 members from 95 countries (11/2017)

President: P Neumann (Switzerland)

Vice presidents: P Chantawannakul (Thailand), G Williams (USA)

Executive Committee: M Bouga (GR), R Brodschneider (AT), K Crailsheim (AT), N Carreck (UK), R Dall’Olio (IT), V Dietemann (CH), G Formato (IT), A Gajda (PL), P Kristiansen (SE), F Mondet (FR), CWW Pirk (RSA), A Özkirim (Turkey), V Soroker (Israel),

1. South America
   K Antúnez (Uruguay)

2. North America
   G Williams (USA)

3. Australia, New Zealand
   A McLean

4. Asia
   P Chantawannakul (Thailand)

5. Africa
   CWW Pirk & H Human (RSA)

Core projects

1. Monitoring Colony losses
   R Brodschneider (AT), A Gray (UK)

2. BEEBOOK
   V Dietemann (CH), N Carreck (UK), J Ellis (USA), P Neumann (CH)

3. B-RAP
   (Bridging Research and Practice)
   P Kristiansen (SE), F Vejsnæs (DK),

Task forces

1. Varroa - control

2. Apitox

3. CSI Pollen

4. Sustainable Bee Breeding

5. Small hive beetle

6. Vespa velutina

7. Viruses

8. Survivors
1. Networking and capacity building

- 13 Conferences
- >50 workshops
- >50 Short Term Scientific Missions
- 5 Training Schools

COLOSS expertise
COLOSS expertise

1. Networking and capacity building

2. Coordinated monitoring and large-scale experiments

Established and stable network of national monitoring programs (~30 countries, 10 years of experience). Standardized estimates via active involvement of ~20’000 beekeepers. Inspired other programs (i.e. BIP).

For example:

CSI Pollen with 700 individual citizen scientists across Europe (Brodschneider et al. In prep.)
COLOSS expertise

1. Networking and capacity building

2. Coordinated monitoring and large-scale experiments

3. Updated standards for research and monitoring

1st international standards and practical guidelines in honey bee research and monitoring (37 chapters, 234 authors, >1700 protocols). All open access at www.coloss.org financed by COST.
4. Dissemination of results to various stakeholders for bee health

1. Networking and capacity building

2. Coordinated monitoring and large-scale experiments

3. Updated standards for research and monitoring

COLOSS expertise
### COLOSS expectations

1. Full stakeholder/partner/advisor, whenever honeybee issues are discussed (e.g. monitoring, pests, pesticides)

2. Integration of ongoing standardized COLOSS monitoring into EU efforts
   (10 years of experience, ~30 countries, ~20’000 beekeepers)

3. Integration of COLOSS research into EU efforts, e.g. development of standard methods and protocols for monitoring pest and diseases

4. Avoidance of redundancies and instead foster mutual enrichment
Acknowledgements

Prof. Peter Neumann, Institut für Bienengesundheit, Universität Bern
www(bees.unibe.ch; peter.neumann@vetsuisse.unibe.ch