Workshop on repellents, Vienna 22-23 June 2016

Organised by: Ministry for Agriculture, Forestry, Environment and Water Management

Results of the Workshop

The following findings were drafted by Outi Priha, ECHA. The content of this document was shown via beamer in the plenary of the workshop, was discussed, amended and agreed.

PT18 AND PT19 GUIDANCE

• In the future revision PT 18 and PT 19 guidance should be separated (either two separate documents or separate parts of the same document)
• The guidance should be structured by target organisms
• Treated articles should be described in the guidance (e.g. rodent proof cables; plastic coating blended with an adverse agent)
• Borderline cases should be considered: PT21 antifouling agents, molluscs

MOSQUITOES

• All three genera should be tested for efficacy for a general mosquito protection (e.g. Aedes aegypti, Culex quinquefasciatus, Anopheles gambiae / European species); if justification provided, different species can be accepted
• Also species/genus specific protection accepted (e.g. Aedes+Culex)
• A national decision whether the applicant may choose to have all of them with different protection times claimed, or indicating the shortest time with a general claim; to be discussed
• Arm-in-cage test
  o The worst case for mosquitoes, always needed
  o Field tests not mandatory, can be provided as additional information
  o To be decided in the guidance revision: dose, exposure time, no of test persons, whether rabbits can be used as test subjects instead of human volunteers, negative controls, protection time, cage size, no of mosquitoes, whether experimental huts can be used, how CPT (complete protection time) is calculated
  o Clarification needed: whether landings, probing or bites are recorded

TICKS

• Relevant species for Europe: Ixodes ricinus, Dermacentor reticulatus, Hyalomma marginatum, Rhipicephalus sanguineus
  o Insectiside results with american ticks (Ixodes scapularis) might be extrapolated to European species, needs to be confirmed
• Development stages to be tested: preferably adults and nymphs
• Testing procedures for repellent efficacy against ticks should be included in the guidance
  o Pre-testing: animal hair in petri dish, filter paper with different concentrations of the repellent
  o No standard methods available for biocidal products, read-across from veterinary test methods should be checked
ANTS

- Alternative test methods
  - Laboratory two choice test vs. no-choice tests, no-choice is typically the worst case
  - Simulated-use test
  - Should field-test be required? Extremely difficult to perform
  - Residual effect of the repellent has to be recorded under standardised aging conditions
  - Porous and non-porous surfaces should be considered
  - Minimum required protection time should be discussed

- Target organisms
  - Black garden ants (*Lasius niger*)
  - Pharaoh ants (*Momonorium pharaonis*)
  - Tapinoma ants (*Tapinoma melanocephalum*) (Erratic ants?, naming should be verified)

- General claims (to be discussed):
  - Garden ants (*Lasius niger*)
  - Tropical ants (Pharaoh ant and Argentine ant)

- Level of required efficacy has to be discussed (90% proposed)
- Should be indicated whether indoor/outdoor use

OTHER INSECTS

- No guidance, should be developed: sand flies, wasps, bedbugs, head lice, spiders, midges

REPELLENTS AGAINST MAMMALS

- Repellents against mammals should be included in the guidance
- No guidance (only EPPO for repellents against de-barking of trees and for seed repellents)
  - Tests probably cannot be standardised, but criteria for assessment should be defined
  - PPP guidelines should be checked for possible read-across
- An inventory of target organisms should be made (IND, CG):
  - E.g. rabbits and hares, beech martens, dogs, cats, moles, deer, reptiles, etc.
- Within one species one might have to consider
  - Different breeds (at least dogs)
  - Males/females

REPELLENTS AGAINST BIRDS

- No guidance, not many groups being able to do tests
- Swiss Prof Daniel Haag-Wackernagel, Uni Basel, specialising in pigeons can be contacted
- Requirements for testing:
  - Normally field trials on relevant sites should be required
  - Paying attention to bird/nest counts
  - Proper negative controls
  - Duration of testing critical (long protection times expected)
- Read-across of test protocols from avicides should be done if possible (eCA IT may have evaluated avicides and could be consulted)

REPELLENTS ON HORSES
• For target organism species expert opinion has to be searched
• Testing requirements need to be discussed (lab, field, no of animals, colour of animals)
• Variable size has to be considered in dosing instructions#

REPELLENTS ON DOGS
• For target organism species expert opinion has to be searched (ticks, mosquitoes…)
• Dosing instructions can be according to body weight (e.g. small, medium, big)

EFFICACY LEVEL
• Q: Can 90% level be accepted even with justification? A: Depends on the target organism and test conditions
• Mosquitoes and sand flies: 100% (CPT)
• For the other species: to be decided in the guidance revision process

SPC VERSUS LABEL CLAIMS
• Discussion, no agreements
• Topics discussed: which data in SPC and which data in the label; whether label claims should be harmonised or not, how dosing instructions should be phrased on the label
• Product families: variation in CPT a problem, should be addressed in the guidance

OTHER TOPICS DISCUSSED
• Efficacy versus risk assessment issue should be followed
• In the guidance both mosquito repellents on skin and on textiles have to be considered
• For textiles the kind of textile has to defined (worst-case)
• The need to report non-desired effects (e.g. morbidity, mortality) on target organisms (depending on target organisms) should be discussed
• Consideration should be given to the need for statistical analysis
• Proposal (NL): collecting PT 19 claims already been made
  o WG EFF to take initiative; Cefic can be consulted
• Proposal (DE): WG for PT 19 for mammals, birds and reptiles, molluscs, leeches