



# MiteControl



A European research project to develop effective and sustainable treatment approaches to control PRM infestation using an integrated pest management (IPM) approach. The project is divided into three main work packages.

Interreg   
North-West Europe  
MiteControl  
European Regional Development Fund



## 1. Developing an automated monitoring and decision support system

**Why monitor?** Routine monitoring of any pest species is key to guiding pest control decisions and monitoring the efficacy of these measures. Visually monitoring red mite however is challenging as the mites hide in cracks and crevices. Often if the mites can be seen, their numbers are already too high and it may be too late to treat them effectively.

**Why automated?** Current monitoring methods (traps) can be time consuming and challenging for farmers to fit around other husbandry tasks.

**How?** Mite infestations can make the hens become restless and agitated during the night. This altered behaviour can be measured by sensors (cameras) at night which will indicate the degree of mite infestation in the hen house depending on the state of agitation.



## 2. Improvement of non-chemical treatment uses

**Why?** Traditionally farmers have relied on chemical methods to control red mite. The use of preventative measures and non-chemical treatment approaches offer an alternative which is more environmentally friendly and less prone to the development of resistance.

**How ?** By conducting trials to improve existing treatments, test new treatments, evaluate resistance development and evaluate the benefits and advantages of combining several treatments.

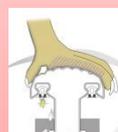
### What treatments?



Predatory mites



Vaccines



Electrified perches  
*\*under the perch*



Feed additives

### 3. Developing and trialing Integrated Pest Management (IPM) strategies

Why? Red mites are prone to developing resistance to chemical treatment products and there are only limited number of chemical treatment products available to farmers to control red mite. An IPM approach offers a sustainable and environmentally friendly method of controlling red mite.

How ?: Using the results of the non-chemical treatment trials and evidence collected on red mite control practices currently used on farms across North West Europe, IPM strategies will be developed and trialed on commercial farms in Belgium, France and England.

The IPM strategy works in 5 steps :

- 1. Prevention :** Biosecurity measures to avoid mite introductions and preventive non-chemical treatments to prevent growth of mite populations
- 2. Monitoring :** To inform treatment decisions and to evaluate treatments.
- 3. Non-chemical treatments :** Non-chemical treatments used if prevention is not enough (monitoring threshold reached)
- 4. Chemical treatments :** To apply ONLY if non chemical treatments are not effective enough. Products carefully and selectively used to minimize use and reduce the risk of resistance developing.
- 5. Evaluation :** Of the global control strategy. Adapt the strategy for following flock.

For more information:

Contacts :

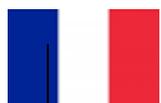


Nathalie Sleeckx

[nathalie.sleeckx@provincieantwerpen.be](mailto:nathalie.sleeckx@provincieantwerpen.be)

Eva Decru

[eva.decru@provincieantwerpen.be](mailto:eva.decru@provincieantwerpen.be)



Geoffrey Chiron

[chiron@itavi.asso.fr](mailto:chiron@itavi.asso.fr)

Lise Roy

[lise.roy@univ-montp3.fr](mailto:lise.roy@univ-montp3.fr)



Thomas Norton

[tomas.norton@kuleuven.be](mailto:tomas.norton@kuleuven.be)



Vere Leybaert

[vere.leybaert@kuleuven.be](mailto:vere.leybaert@kuleuven.be)



Jon Walton

[jon.walton@adas.co.uk](mailto:jon.walton@adas.co.uk)

Federica Monte

[Fede.Monte@adas.co.uk](mailto:Fede.Monte@adas.co.uk)

The project website-: <http://www.nweurope.eu/projects/project-search/mitecontrol-ensuring-food-safety-animal-health-and-welfare-standards/>

