



CONTROL OF SHEEP MYIASIS WITH A NATURAL PRODUCT STOPMYIASIS®

Mage C, Corre M

Mage Consultant- Santé Animale - France

M. C. Consulting - Annecy - France

There are more and more breeding sheep with myiasis flies and in some cases sheep die due to lack of daily supervision of the herd.

In France 87.6% of breeding sheep are infested with myiasis (Institut de l'Elevage 2002). The frequency of myiasis varied according to the areas from 37.5% to more than 80%, even 100% in some areas with high density of sheep. It is caused by two types of flies: *Lucilia sericata*, *Wohlfartia magnifica*. These types of flies can be found on the hooves and ears.

This is a study of a natural product which is an alternative to a chemical product with a lack of residues in milk and meat. This product is also safe for the environment. This product is a repellent applied on the sheeps' back through Pour On (very easy to apply), i.e. Géraniol+ PMD- Stopmyiasis®.

Study objective. The activity and duration of action of insect repellent called Stopmyiasis® Pour On was measured for two consecutive years (2010-2011) on a ewe herd which was sensitive to myiasis flies every year in the past. The study was made according to good clinical practices.

Method. Control group: No prevention treatment against the myiasis on 401 ewes. Positive group: All ewes were treated three times with Stopmyiasis® Pour On on the ewes' back during the risk period: 374 ewes.

- First application at beginning of infestation period mid-June 2010-2011.
- Second application six weeks after first one beginning August 2010-2011.
- Third application five weeks after the second one beginning September 2010-2011.

All ewes are from Charolais breed (pure or cross breeding). All sheep were shorn during spring time around 3-4 weeks before the first application of Stopmyiasis®. The length of the wool was around 0.3cm to allow a better contact of the product on

the sheep skin to improve the insect repellent effect.

Each group of ewes were maintained in the same grazing area but separated by a hedge.

The individual controls were made every week by the investigator from June to mid October (diagnosis of myiasis lesions)

- inspection of body of sheep, back, side auditory canal, anus and vulva
- number of lesions and surface of lesions are identified, measured and notified
- height of the wool was measured around the myiasis lesions
- inspection of feet in case of lameness between the hooves of each foot

Results. Efficacy of Stopmyiasis® on myiasis attacks. The first cases on back of ewes were observed on July in the control group. All the cases were diagnosed in control group during summer time up to middle of October. There were 7.17% of ewes with myiasis in 2010 and 5% in 2011. Some ewes had myiasis between the hooves which creates some lameness.

There are no myiasis cases in the positive group using Stopmyiasis® (Géraniol + PMD) from June to October during the two years of studies.

The myiasis lesions were on average, sized around 10 - 20cm in length and diameter. There is loss of wool and skin with dark colour on the maggot place on the animal. The density of myiasis larvae was very important with around 20 to 80 larvae under the skin. The flies *LUCILIA sericata* were present on the sheep.

Conclusion. The product Stopmyiasis® allowed the control of myiasis development during the risk period during two consecutive years. The three applications that were made during summer time (from June to September) created an absence of myiasis on ewes reared on grazing areas.