

“Gate of Innovations” - The Centre for knowledge accumulation, transfer, development of agricultural technologies and their demonstration

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**A MOBILE TECHNOLOGY LINE FOR PREVENTIVE HEALTH CARE
OF SHEEP**

This methodology of innovation research includes data of the farm

A mobile technology line



Figure 1. Smart scales.



Figure 2. Disinfection stall with a tub.



Figure 3. Sheep bonitization machine.



Figure 4. Mobile reversible sheep hoof care tool.

The photos below illustrate how sheep bonitization, as well as hoof care and treatment procedures are performed.



Figure 5. Weighing of sheep.

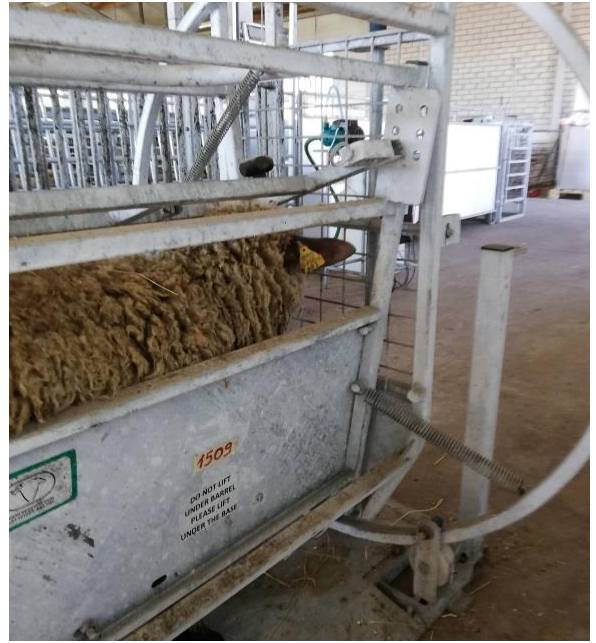


Figure 6. Bonitization of sheep.



Figure 7. Sheep hoof trimming and examination.



Figure 8. Putting the sheep into a disinfection stall.

Research data and interpretation (discussion)

Number of Lithuanian Black-headed sheep that suffered from hoof diseases on the farm:

Table 1. Number of affected sheep in 2015-2018.

Year	Affected sheep, units
2015	177
2016	147
2017	150
2018	78

Considering the importance of the investment and the impact of the equipment, the attention should be paid to the improving health of sheep in relation to the condition of their hooves. Special equipment is used to restrain the sheep, preventing it from moving, tossing, and trying to escape the person performing the procedure. Now this procedure takes less time than before and sheep do not suffer from prolonged stress, which improves their health.

Table 2. Labor and time costs for sheep hoof care in 2015-2018.

Practice in 2015-2016		Using the technology line, 2017-2018	
Number of people working on hoof care	Average time to handle hooves of one sheep, min.	Number of people working on hoof care	Average time to handle hooves of one sheep, min.
5	20	3	10

Using the sheep bonitization machine, 465 sheep were evaluated in 2018, and 511 sheep in 2017. Meanwhile, 279 sheep were evaluated in 2016, and 141 sheep in 2015.



Figure 10. Specialized sheep exhibition "Avis aprens ir pamaitins 2018".



Figure 11. Seminar "Breeding practices in sheep breeding".

Conclusions

1. Sheep morbidity (in 2015-2018) decreased by 56 percent following the acquisition of the technology line.
2. The time spent on sheep hoof care, handling and shearing has been reduced twice, and the need for workers to perform procedures decreased by two persons following the acquisition of the technology line.
3. The number of bonitized sheep increased three times (compared 2015-2018) following the acquisition of the technology line.
4. The organized events had a positive impact on the development of breeding in Lithuania and the popularization of sheep breeding.