

**N.15 Tanniferous plants of the temperate zone as forage against gastro-intestinal nematodes in ruminants**

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On organic farms, gastro-intestinal nematode (GIN) infections of grazing cattle, sheep and goats can have a detrimental effect on animal health and are of substantial economic importance. The aim of our interdisciplinary project is to investigate the basic conditions for the implementation of a control strategy against GIN based on the use of tanniferous plants. The project combines research on plant growth and management, animal nutrition and parasitology. The first results, especially those from *Onobrychis viciifolia* (sainfoin), are encouraging. *O. viciifolia* has a consistently high concentration of condensed tannins (CT) throughout the growing season. Thus, the optimal time for harvest can be determined in relation to agronomic properties such as yield or digestibility and does not have to be related to a specific time period with high tannin concentration in the herbage. Despite its high CT content, sheep accepted *O. viciifolia* very well. Finally, the anti-parasitic properties of fresh CT-containing *O. viciifolia* were largely preserved in silage and hay, leading to a substantial decrease in worm egg excretion in faeces. The present findings are promising for a potential integration of the CT-approach into complementary control strategies against GIN in sheep.



# **COST Action 852**

**Quality Legume-Based Forage Systems  
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