

# Program: Bedding Management and Low-risk Methods for the Sustainable Control of Insect and Mite Pests and Diseases in Livestock Production



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## In Partnership With Organic Dairy Producers

### Objective:

Control or repel arthropod parasites and pest insects using biological and low-risk methods that are economically beneficial to farmers, and develop/improve recommendations within a sustainable external parasite control program.

### Project Summary:

The organic livestock sector has significant opportunities for incremental growth. An on-farm survey of transitioning dairy farmers in Ontario showed that milk yields for transitioning dairy farms decrease by 9.8% between their last conventional year and their first organic year. Production techniques that will improve organic yields and animal health are desperately required. Also, because of the financial cost, health, food and environmental concerns over the use of pesticides, efforts should be made to identify and develop reduced-risk strategies for external pest management, mostly centered on preventative methods. The project will assess much needed low-risk technologies for the management of insect and mite pests to reduce the risks associated with pesticide use for the animals, humans and the environment. The effect of the methods on animal health will be evaluated, as well as the economic and environmental benefits.

Availability of low-risk pest control materials is very limited in animal production. Several promising materials, technologies and methods will be tested, at various livestock facilities in Ontario and Quebec, to manage pest insects in livestock production and reduce the incidence of vector-transmitted diseases, such as pink-eye. It is expected that vector-borne diseases transmitted to animals and humans will be on the rise in Canada due to global warming. Research is also planned in biodiversity management and manure management in pasture as ways to promote pest control and economic services to farmers



### Support Appreciated from:



Agriculture and  
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**Community Benefits Include:** More effective ways to manage pests, reduced cost of pesticides, reduce danger to environment and human health