



# OCCURRENCE AND TREATMENT OF MASTITIS ON ORGANIC DAIRY FARMS

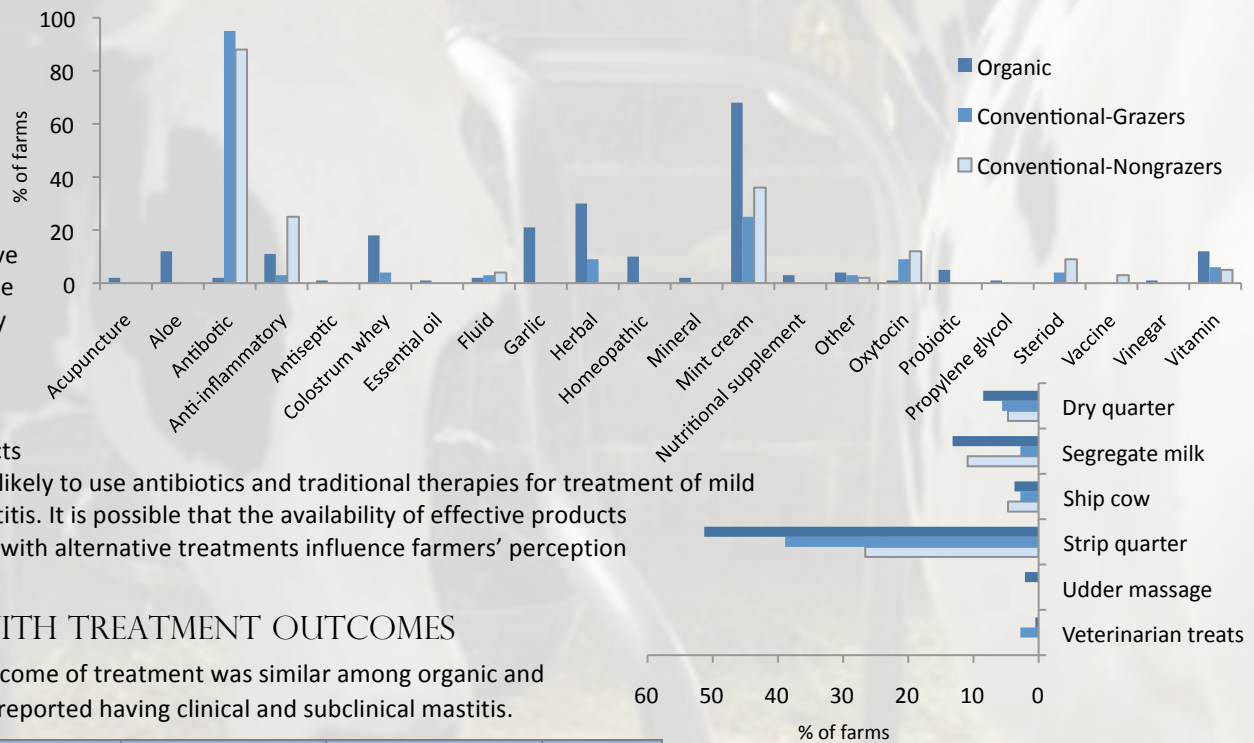
A recent study from the University of Wisconsin, Cornell and Oregon State University identified differences in risk factors, disease detection and treatment for mastitis on organic and similarly-sized conventional farms in the U.S.<sup>1</sup> Mastitis is generally considered the most common and costly disease of dairy cattle because of its long-term effect of chronic infections on total milk yields. Persistent long-term infections with contagious pathogens damage milk secretory cells and result in reduced milk production. In the study, conventional-nongrazing and conventional-grazing farms reported 1.5 and 1.9 times greater rates of clinical mastitis, respectively, compared to organic farms.

## DEFINITION AND DIAGNOSIS

The occurrence of less clinical mastitis among organic farms has been attributed to reduced milk production and improved cow cleanliness. However, it is difficult to determine how definition and perception of mastitis influence the incidence rate on farms. Results showed perception of the disease to be positively associated with the rate of clinical mastitis—which meant, farmers who listed abnormalities in milk or the udder as a primary symptom for identifying a potentially ill cow also indicated mastitis to be a significant health concern on their farm. However, this does not imply the direction of association. For example, farmers who routinely experience many cases of mastitis may perceive mastitis as problematic, just as farmers who perceive mastitis as important may identify more mastitis cases. Similarly, farmers who have a more sensitive definition and screening process for identifying mastitis may also report increased rates.

## PRODUCTS AND PROCEDURES USED TO TREAT MASTITIS

Organic and conventional farmers have different options available for treatment, which may also influence disease perception. Organic farmers were more likely to use alternative products and procedures and less likely to use antibiotics and traditional therapies for treatment of mild to moderate clinical mastitis. It is possible that the availability of effective products and previous experience with alternative treatments influence farmers' perception about disease control.

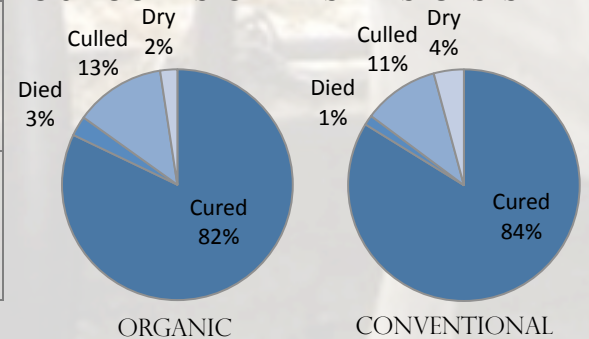


## SATISFACTION WITH TREATMENT OUTCOMES

Satisfaction with the outcome of treatment was similar among organic and conventional farms who reported having clinical and subclinical mastitis.

	ORGANIC	CONVENTIONAL GRAZERS	CONVENTIONAL NONGRAZERS	P-VALUE
<b>CLINICAL MASTITIS</b>				0.653
Very satisfied	14%	11%	13%	
Satisfied	40%	36%	52%	
Somewhat satisfied	40%	47%	30%	
Dissatisfied	6%	6%	5%	
<b>SUBCLINICAL MASTITIS</b>				0.811
Very satisfied	12%	7%	16%	
Satisfied	45%	48%	44%	
Somewhat satisfied	33%	31%	33%	
Dissatisfied	10%	14%	7%	

## OUTCOMES OF MASTITIS CASES



## DEFINITION OF CURE

Study results showed differences in definition of cure between organic and conventional farmers. Visual observation of normal milk was used to define cure by 75% of conventional farmers in contrast to only 43% of organic farmers. Organic farmers relied more heavily on other methods such as lowered somatic cell counts and negative California Mastitis Test results.

<sup>1</sup> K.E. Stiglbauer, K.M. Cicconi-Hogan, R. Richert, Y.H. Schukken, P.L. Ruegg, and M. Gamroth. 2013. Assessment of herd management on organic and conventional dairy farms in the United States. J. Dairy Sc. 96:1290-1300.