UNIVERSITY OF HELSINKI

Production, Health and Culling in 109 Organic and 1226 Conventional Finnish Dairy Herds 1998 – 2002

CONCLUSIONS:

MILK YIELD: Organic herds produced 700 kg less per cow per year, and organic cows 2000 kg less during their life. Production system and year alone though, explained only 4% of the between herds variation.

REPRODUCTIVE EFFICIENCY: Organic herds used 0.09 fewer inseminations per calving, started to inseminate 4 days later after calving, and had 4 days longer calving interval.

TREATMENT INCIDENCES were lower in onganic herds, and **CULLING REASONS** similar in both production systems.

1.INTRODUCTION:

Organic production has considerably increased in recent decades. Management of organic herds differs from that of conventional, with potential influences on production and health.

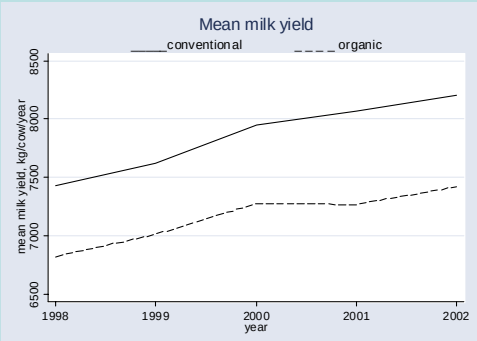
The objectives of this study were to

1) define herd level predictors for milk yield and fertility in organic and conventional dairy herds in Finland
2) explore the differences between the production systems
3) to describe treatment incidence and culling reasons

2. MATERIAL & METHODS:

- Data in the national herd health recording database, from the years 1998 to 2002
- All organic (n=109) and a stratified random sample of conventional (n=1226) dairy herds were included
- Production and fertility were modelled with a linear mixed model with herd as a random effect
- Treatment incidences were explored with descriptive statistics

3.RESULTS:



Treatment incidences, %

Disorder	Conv.	Org.
Acute mastitis	19.3	14.8
Foot and claw	3.1	2.8
Reproductive	19.1	11.5
Milk fever	7.3	5.4
Hypo-Mg	0.8	0.4
Calving diffic.	1.4	1.1

Differences in reproductive efficiency*

	Organic vs. conventional	P	95% CI
Calving interval, d	+4.2	0.048	0.04-8.36
Days from calving to first service, d	+4.0	0.004	1.28-6.75
Inseminations per calving, n:o	-0.9	<0.001	-0.14 - -0.04

*study year, housing and herd size taken into account as confounders

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