

# Beef fattening on grazed leys: interest of tall fescue

Mosimann Eric<sup>1</sup>, Schmied Rudolf<sup>2</sup> and Thomet Peter<sup>2</sup>

<sup>1</sup>Research Station Agroscope Changins-Wädenswil (ACW), CH-1260 Nyon, Switzerland

<sup>2</sup>Swiss College of Agriculture (SHL), CH-3052 Zollikofen, Switzerland

## Introduction

Beef fattening on grazed grass-clover mixtures presents advantages, such as utilisation of existing infrastructures, positive effect of leys on soil fertility, enjoyment of having cattle and complementary income. New variety of tall fescue (*Festuca arundinacea* Schreb.) Belfine is described as adequate for grazing in dry conditions. Experiments were conducted in four sites from 2007 to 2009 to assess its use in a grass-clover mixture grazed by young cattle and to compare it with a mixture of perennial ryegrass (*Lolium perenne* L.) and white clover.



## Methods

Mixtures M1 and M2 (table 1) were sown side by side on 1.2 to 1.5 ha paddocks and continuously grazed by 10 young cattle from April to November.

Species (variety)	M1	M2
White clover (2/3 <i>Seminole</i> , 1/3 <i>Milo</i> )	3	4
Perennial ryegrass (1/2 <i>Alligator</i> , 1/2 <i>Arvella</i> )	16	3
Kentucky bluegrass ( <i>Compact</i> )	10	10
Timothy ( <i>Tiller</i> )	4	
Tall fescue ( <i>Belfine</i> )		15
Total (kg ha <sup>-1</sup> )	33	32

Table 1. Composition (kg ha<sup>-1</sup>) of both grass-legumes mixtures

Vegetation was monitored with following measurements:

- On the whole grazed area: botanical composition and grass height.
- On two fenced plots inside each paddock, alternatively cut every two weeks: grass growth and organic matter digestibility.

## Results

Regarding grass growth and organic matter digestibility, no differences could be measured between both mixtures during the first two years characterised by regular rainfall. Under dry conditions in 2009, M2 showed the best yielding capacity. In addition to its good summer growth, tall fescue appeared well adapted to grazing.

Figure 1. Botanical composition (%) of M1 and M2 (average of 3 sites)

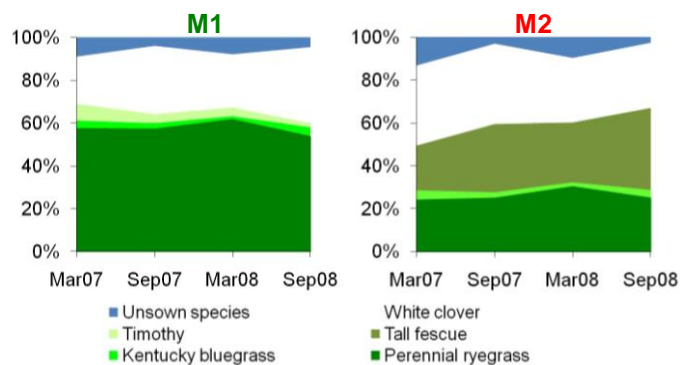


Figure 2. Grass height in Moudon (average of M1 and M2)

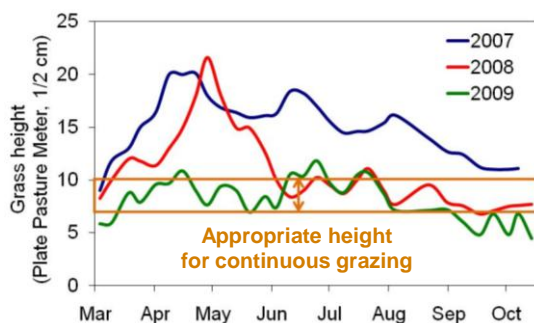


Figure 3. Grass growth of M1 and M2 in Moudon

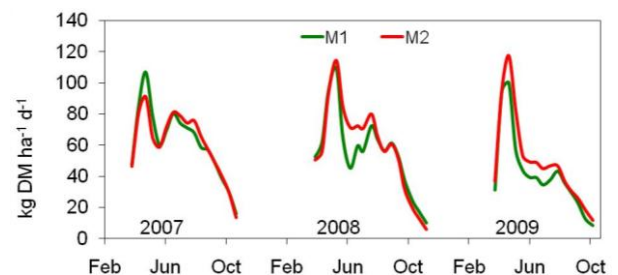
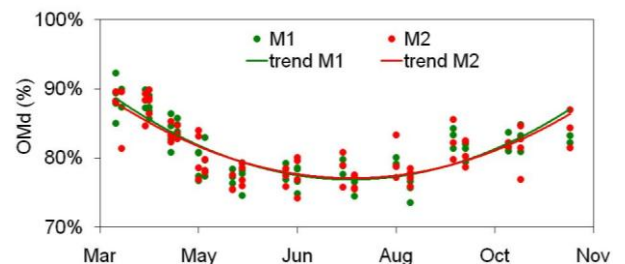


Figure 4. Organic matter digestibility (values 2007-08 of 3 sites)



## Conclusion

Tall fescue is appropriate as a component in grass-clover mixtures for grazing. In comparison with perennial ryegrass, it has the following advantages: higher yielding capacity in summer and better persistence over three years. No differences in terms of the digestibility of organic matter and of the cattle intake could be observed.



Schweizerische Eidgenossenschaft  
Confédération suisse  
Confederazione Svizzera  
Confederaziun svizra

Federal Department  
of Economic Affairs FDEA  
Agroscope Changins-Wädenswil  
Research Station ACW