

Mixed grazing in the Jura Mountains

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Mixed grazing is defined as the use of a pasture by different species of animals, simultaneous or separately in time.

Mixed grazing helps to...

- ✓ Reduce the infestation of gastrointestinal parasites (roundworms);
- ✓ Improve animal performances (daily weight gain);
- ✓ Favour the botanical composition (more complete use of the forage resource).

Materials and methods

The trial was conducted during three years, with two groups of animals: the first one (Ctrl) was composed only of ewes and lambs, whereas the second one (MI) consisted of suckler cows, calves, ewes and lambs. The stocking rate of the groups was the same (1.7 LU/ha). Coprological examinations took place at the end of each rotation. Body weight and growth performance were also assessed to this time. The grass on offer (estimated with a rising plate meter) was very similar for the two groups, except in 2009 (fig.1 and 2).

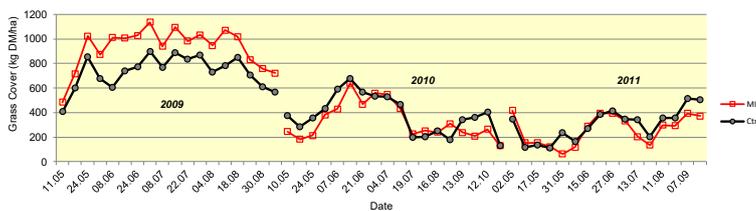


Fig. 1 (left). Evolution of the grass cover, years 2009, 2010 and 2011.



Fig. 2 (right). Rising plate meter.

Main results

- The lambs of the MI group showed less gastrointestinal parasites than those of the Ctrl group (fig. 3).
- In line with the parasitology test results, the weight gains of the lambs of the MI group ($261 \text{ g} \cdot \text{day}^{-1}$) were higher significantly compared to those of the Ctrl group ($221 \text{ g} \cdot \text{day}^{-1}$; average over three years).

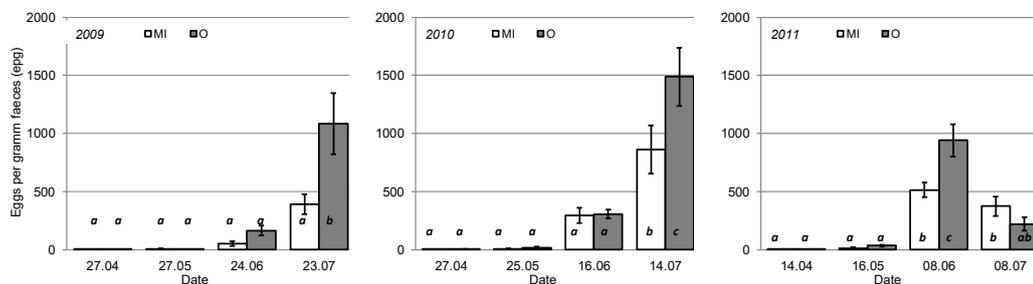


Fig. 3. Evolution of the eggs per gramm by the lambs, years 2009, 2010 and 2011.

Different letters stand for significant difference at $p < 0.05$.

Conclusions

- Mixed grazing can largely contribute to improve the health and performance of sheep.
- The factor group (MI or Ctrl) had no effect on the botanical composition during the three years of trial.
- Lamb meat represents a niche market in Switzerland. Moreover, the production of lamb in traditional dairy farming areas is still affected by a negative image, which lessens the development of mixed grazing systems.