

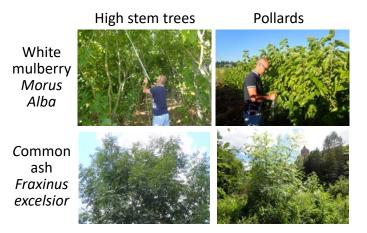
Ruminal degradability of leaves of Morus alba or Fraxinus excelsior managed as pollards or high stem trees

Rémy DELAGARDE 1, Philippe LAMBERTON 1, Sandra NOVAK 2, Jean-Claude EMILE 2

¹INRA PEGASE, 35590 Saint-Gilles, France; ²INRA FERLUS, 86600 Lusignan, France

Objective

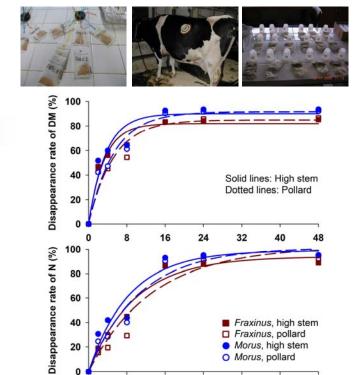
To determine the effect of tree management on ruminal effective degradability of dry matter (EDDM) and nitrogen (EDN) in leaves of two high-quality forage tree species.



Materials and methods

- Collection of leaves: August 2016, France, Fraxinus from Lusignan, Morus from Le Pradel. Trees pollarded since 2 years (Fraxinus) or 12 years (Morus).
- Ruminal degradability: November 2016, in situ leaves degradation in nylon bags, replicated on 3 dry Holstein cows, after 2, 4, 8, 16, 24 and 48 h of incubation.

Results Morus **Fraxinus** excelsior alba High **Pollard** High **Pollard** stem stem 326 439 395 DM (g/kg) 321 129 177 CP (g/kg DM) 164 156 70.8 70.0 66.3 **EDDM (%)** 75.8 66.1 61.5 59.2 55.4 EDN (%) DM: dry matter CP: crude protein



16

24

Time of ruminal incubation (h)

Conclusions

- ▶ Good nutritive value of the leaves of the two species whatever tree management.
- ▶ No interaction between species and management on effective degradability of leaves (P>0.10).
- ▶ **Greater** effective degradability on *Morus alba* than on *Fraxinus excelsior* leaves (P<0.001).
- ▶ Greater effective degradability of leaves on high stem trees than on pollards (P<0.01).









Morus, pollard

40

48

32