

# Development and nutritive value of three varieties of sainfoin compared to lucerne during primary growth.



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## INTRODUCTION

Sainfoin is a temperate legume with few references on its nutritive value, containing condensed tannins (CT). CT are able to bind proteins and thus to reduce their degradation in the rumen.

**Aim of this study:** Evolution of agronomical and nutritive value of three sainfoin varieties in comparison with lucerne in the course of the first vegetation cycle

## MATERIAL and METHODS

### Forages

**Sainfoin:** Variety Ambra, Villahoz, Esparcette

**Lucerne** Var Aubigny

**Location:** INRA Theix (63122) FRANCE

**First vegetation cycle:** 5 harvest dates



Code	Stage name
1	Early vegetative
2	Mid vegetative
3	Late vegetative
4	Late vegetative
5	Early bud
6	Late bud
7	Early flower
8	Late flower
9	Early seed pod

### Measurements:

Phenological stage on 50 plants (Borreani et al., 2003)

Morphological composition (leaves to whole plant ratio)

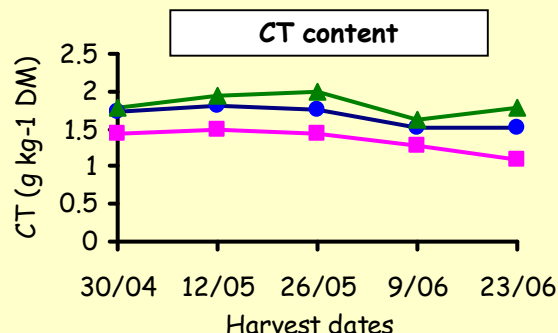
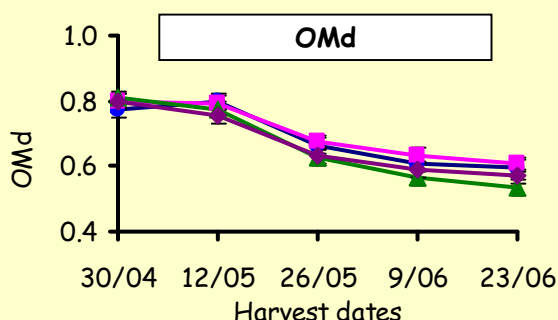
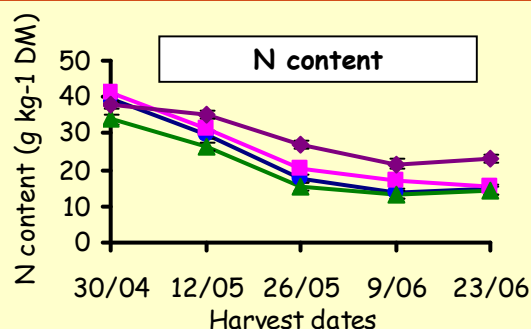
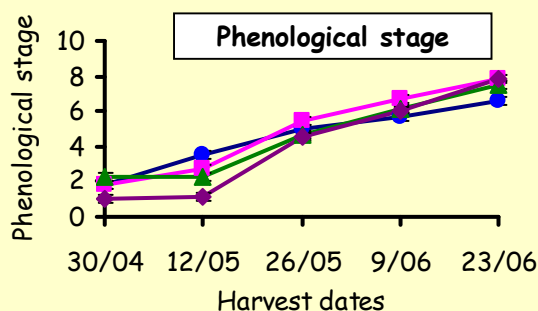
Nitrogen content

Pepsin-cellulase digestibility

CT content (HCL butanol method)

Stage classification system

## RESULTS



## CONCLUSION

Villahoz had the highest OMD, N content and the lowest CT content. Although N content was lower in sainfoin than lucerne, the OMD was similar. Sainfoin could be a valuable alternative forage to lucerne.

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