# How to use BMR sorghum silage to feed dairy cows and heifers?



B. Rouillé<sup>1</sup>, J-M. Lamy<sup>2</sup>, D. Plouzin<sup>3</sup>, P. Brunschwig<sup>4</sup>

<sup>1</sup>Institut de l'Elevage, Monvoisin, BP 85225, 35652 Le Rheu Cedex, France

# AIM OF THE STUDY

Evaluate the interest of Brown Mid Rib (BMR) sorghum silage on both dairy cows and heifers performances

### MATERIALS AND METHOD

I experimental farm located in Pays-de-Loire 5 trials on dairy cows and 3 trials on dairy heifers / reference diet is based on maize silage Measurements of milk production, milk solids, body weight and body score condition, and individual intake for cows (photo) and twice a week for groups of heifers



			COWS				HEIFERS	
Trial	CI	C2	C3	C4	C5	HI	H2	H3
Lactation status	Mid lactation	Early lactation	Mid lactation	Mid lactation	Mid lactation	-	-	-
Number of animals	2 × 16	2 × 19	2 × 16	2 × 16	2 × 21	2 × 15	2 × 15	2 × 15
Forage share of sorghum silage*	50%	50%	65%	100%	50%	100%	100%	100%
Forage share of maize silage*	50%	50%	35%	0%	50%	0%	0%	0%

<sup>\*:</sup> all diets were complemented with rapeseed meals and maize grains to fit the needs of the different groups of animals

## RESULTS

Main conclusions for cows:

- Standardised milk production is maintained while intake significantly decreased
- Fat content strongly and steady decreased (-2.6 to -4.4 g/kg)
- Beyond 65% of BMR sorghum silage in the forages, performances decreased

# Main conclusions for heifers:

- The growth objectives have been reached (450 to 480 kg at the end of winter)
- The goal of 24-months calving have also been reached

### CONCLUSION

This study shows that BMR sorghum silage is well adapted for feeding dairy herds. These results give important skills to use this forage in an optimal way. There are still some agronomical researches under process to improve the knowledge.



<sup>&</sup>lt;sup>2</sup>Chambre d'Agriculture du Maine-et-Loire, 14 avenue Jean Joxé, 49006 Angers Cedex 01, France

<sup>&</sup>lt;sup>3</sup>Chambre d'Agriculture du Maine-et-Loire, Ferme expérimentale des Trinottières, 49140 Montreuil-sur-Loire, France <sup>4</sup>Institut de l'Elevage, 9 rue André Brouard, 49000 Angers, France