

Incidence of winter feeding, parasitism, and housing on growth performances of dairy heifers in Wallonia

P. Picron, A. Turlot, E. Froidmont, N. Bartiaux-Thill

CRA- W
Walloon Agricultural Research Centre (Belgium)
Animal Productions and Nutrition Department



Partners :

L. Fabry, Association Wallonne de l'Elevage
G. de Munck, Direction Générale wallonne de l'Agriculture

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1. Introduction and objectives



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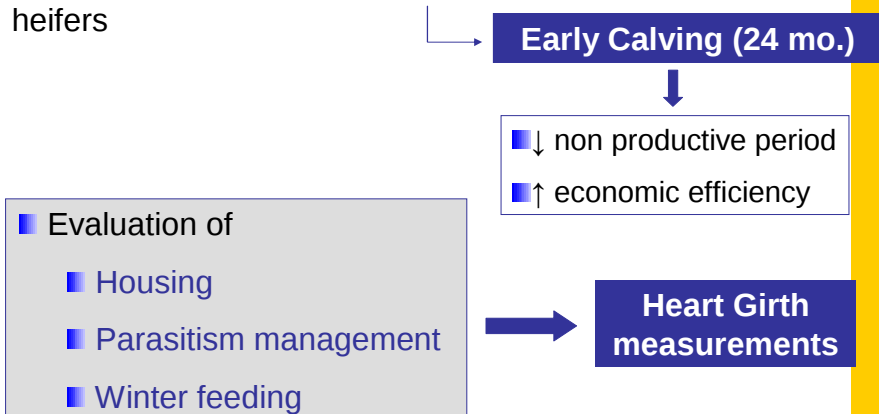


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1. Introduction and Objective

■ Determine the incidence of heifers' management in Wallonia (Belgium) on **Growth Performances** of dairy heifers



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2. Material and Methods

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2. Material and Methods

■ Animals

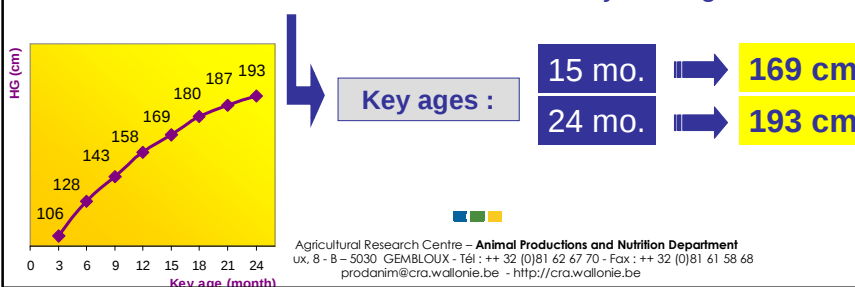
- 704 Holstein heifers (30 farms)

■ Heart Girth measurements (HG)

- 4 x / year during 2 years
- French Reference (Institut de l'Elevage) :



↓
HG recommendations for an early calving



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2. Material and Methods

■ Housing

- Surface
- Volume
- Ventilation

■ Parasitism

- **Practices** : Breeder's Survey
 - Grazing periods
 - Anthelmintics treatments : Molecules and frequencies
- **Parasite pressure** : blood serum pepsinogen measurements back to barn, before any curative treatment (arsia, 2007)

Objectives :

Stimulate immune system
without deleterious effects
on growth performances

Level of infestation recommended :

« Mean infestation »

■ Winter feeding

- Nutritive values (NIR)
- Feed intake (French Fill Unit System)
- Requirements : f (BW and growth rate)

Energy and
Protein Supplies

HG

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3. Results and discussion



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3. Results and discussion

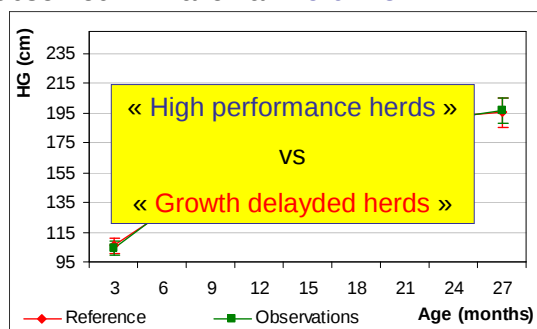


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► Heifers' growth performances

- Early Calving (24 mo) possible over 83,4 % of the herds followed in this study (regarding HG at 15 and 24 mo.)
- Mean age at first calving
 - observed in this study : **27,1 mo**
 - observed in Wallonia : **29.0 mo**



3. Results and discussion

► Heifers' management aspects : **Housing**

- Static Volume (m³/animal) : **Good**
- Surface area (m²/animal) : **Good**
- Ventilation : **Not efficient : 43 %**



Heifers are often accommodated in less adapted barns

No differences in occurrence bw «high-performance heifers» and « delayed heifers » barns

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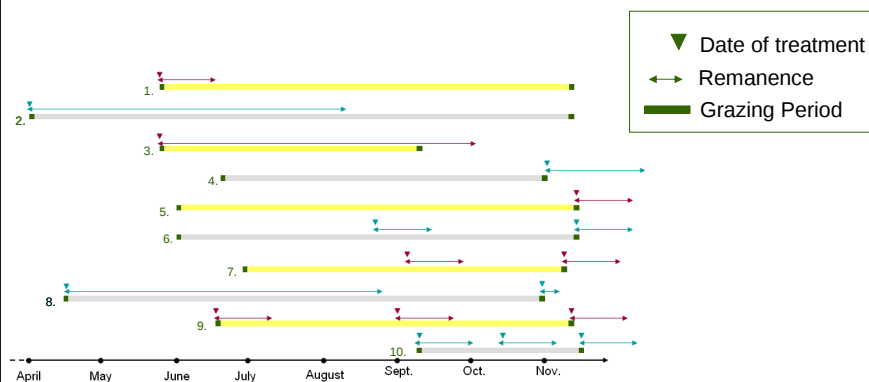


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3. Results and discussion

► Heifers' management aspects : **Parasitism management**



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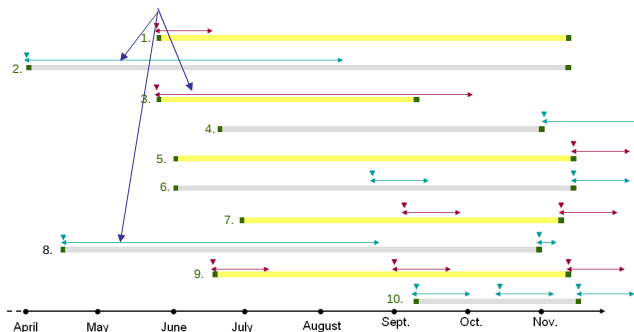
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3. Results and discussion

Heifers' management aspects : Parasitism management

Long remanent treatments
(bolus) : Expensive



Cost/animal :

- 21 €
- 21 €
- 19.4 €

Level of
infestation :

Low/negative

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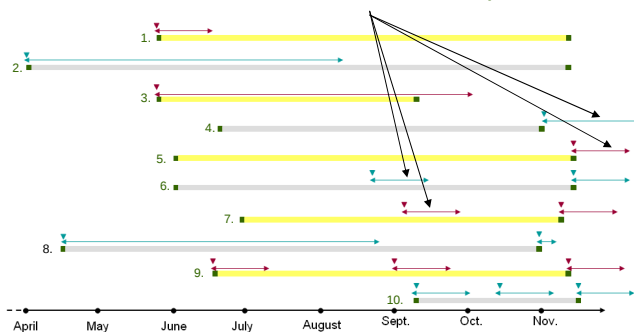
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3. Results and discussion

Heifers' management aspects : Parasitism management

Curative treatments :
remanence not adapted



Cost/animal :

- 8.3 €
- 5.2 €
- 6.7 €
- 2.0 €

Level of
infestation :

Low

Low/negative

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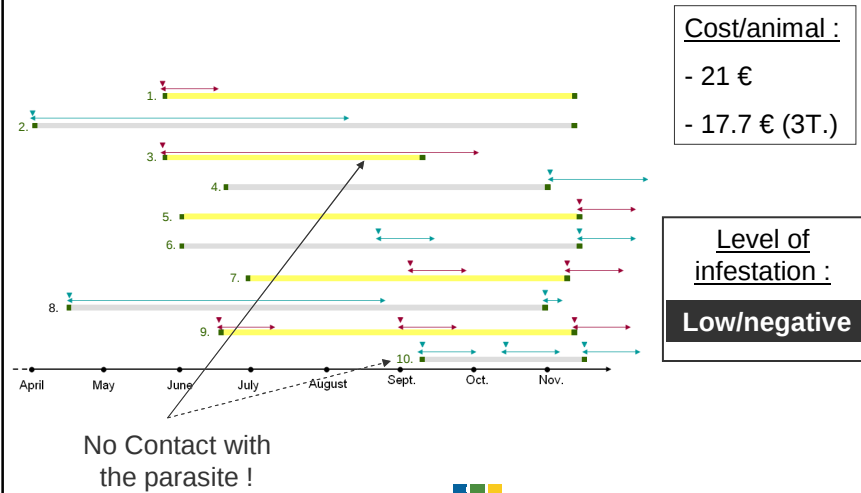


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3. Results and discussion

► Heifers' management aspects : Parasitism management



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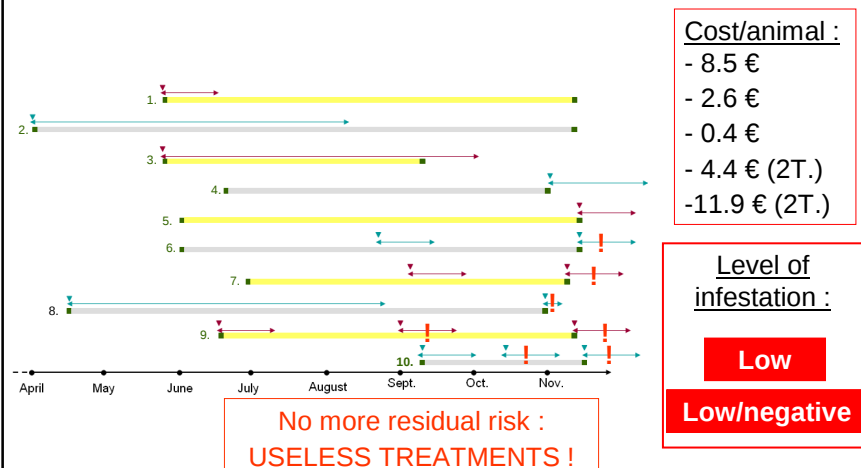


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3. Results and discussion

► Heifers' management aspects : Parasitism management



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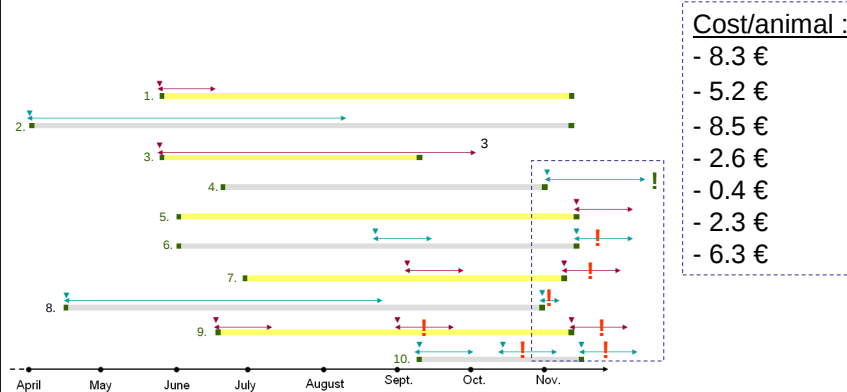


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3. Results and discussion

► Heifers' management aspects : **Parasitism management**



Systematic treatments back to barn :

No one necessary

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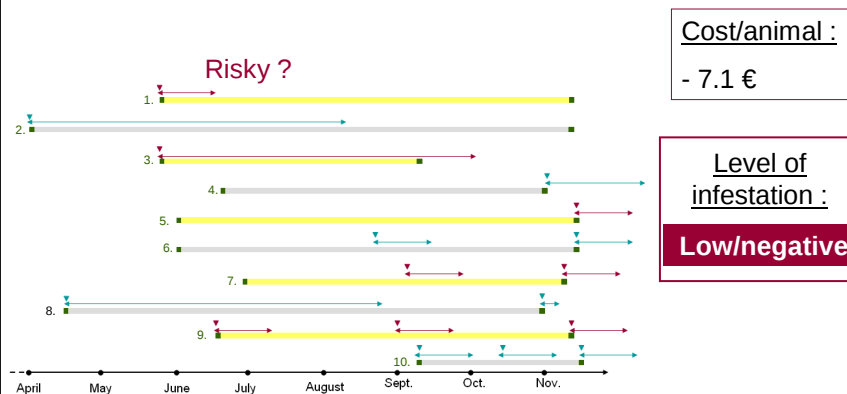


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3. Results and discussion

► Heifers' management aspects : **Parasitism management**



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3. Results and discussion

► Heifers' management aspects : **Parasitism management**

■ Conclusions

- Inappropriate practices
 - Expensive (up to 21 €/animal)
 - No immune protection at the end of the 1st grazing period → new treatments the 2nd yr

Same constations for all the farms

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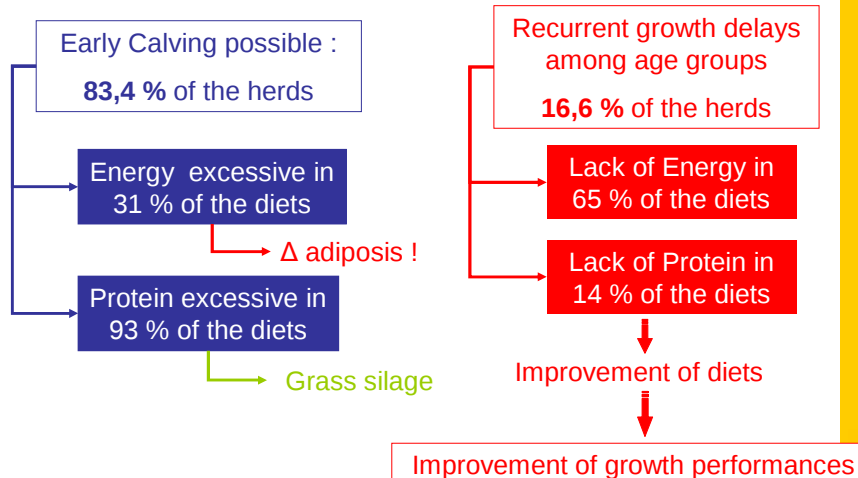
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3. Results and discussion

► Heifers' management aspects : **Winter Feeding**

■ Energy and Protein supplies vs. requirements



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4. Conclusions



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4. Conclusions

- **Early Calving possible** for 83,4 % of the herds
- **Improving energy level** could help for 65 % of the growth delayed age-groups
- **Ventilation** is not efficient in 43 % of the barns but was not correlated to observed growth delays
- **Systematic** parasitism management
 - no immune stimulation
 - no economic efficiency



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Thanks for your attention



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