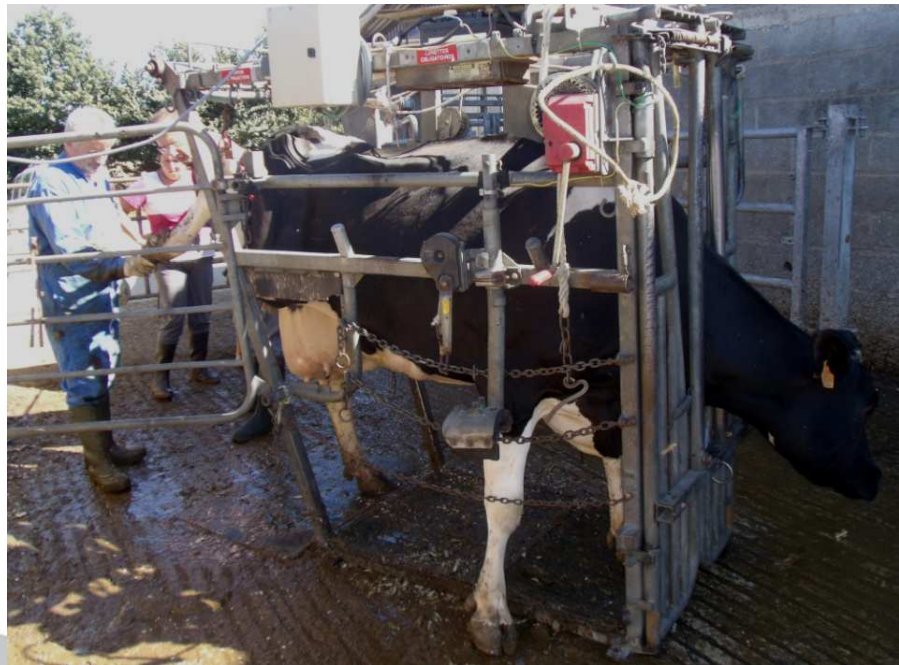


PARABOV & GénoPedix

Registration on hoof disorders in France



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Hélène Leclerc

May 2014



2 projects since 3 years ...

Years 2011 and 2012 : PARABOV Project.

- Define and test a **method to collect** data in cattle herds, **simple and efficient**,
- Define a **data system**.

Since 2013 : GenoPedix Project

- Genetic evaluation,
- Develop the advice to breeders.

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PARABOV : Method.

- ▶ Defined and tested by a working group of 14 members.
 - ▶ Collect 12 lesions and their severity degrees;
 - ▶ 2 types of intervention: Curative or preventive;
 - ▶ Hoof trimmers trained to collect;
 - ▶ Completed by information known in national data base: Birth date, sex, breed...

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PARABOV : Method.

► **Claw lesions collected :**

► Digital Dermatitis

4 stages : M1 = Early stage , M2 = Acute stage, M3 = Healing stage, M4 = Chronic stage.

► Sole Ulcer

► Keloid (ulcer with protruding mass of granulation tissue)

► White line disease

► Double sole

► Diffuse sole haemorrhage

► Limited sole haemorrhage

► Heel horn erosion

► Interdigital hyperplasia

► Screw claw (rotation)

► Toe necrosis

► Horizontal or vertical wall fissure

3 gravity degrees :

1 = benign, 2 = moderate, 3 = severe

PARABOV : results.

Lesion frequency - Hind legs

Test phase : 12458 cows		Cows with at least 1 lesion - number and %.	
Lésion	Number	%	
Double sole	910	7,3 %	
White line disease	2522	20,2 %	
Diffuse sole haemorrhage	4243	34,1 %	
Limited sole haemorrhage	1770	14,2 %	
Sole ulcer	605	4,9 %	
Keloid	759	6,1 %	
Heel horn erosion	4246	34,1 %	
Interdigital hyperplasia	1001	8,0 %	
Horizontal or vertical wall fissure	572	4,6 %	
Toe necrosis	93	0,7 %	
Screw claw (rotation)	512	4,1 %	
Digital dermatitis	2005	16,1 %	

- Subacute laminitis - Typical lesions.
- Lesions linked at subacute laminitis or at interdigital dermatitis.
- Interdigital dermatitis - Typical lesions.



PARABOV : Results.

Lesion frequency and severity degrees - Hind legs - Digital dermatitis lesions.

Test phase : 12458 cows

Lesion	Cows with at least 1 lesion - number and %		Lesion percentage by development stage			
	Number	%	M1	M2	M3	M4
Digital Dermatitis	2005	16,1	26,6%	44,9%	13,0%	15,5%

M1 : Early lesion

M2 : Classical ulcer

M3 : Scab formation after topical treatment

M4 : Dyskeratosis and proliferation

70 % cows with at least 1 of
those 12 lesions on hind legs.
Cows with lesions have in
average 2 different lesions.

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GenoPedix Project

- ▶ Genetic evaluation on hoof health with 5 genetic assessment organizations and the 3 main breeds (Holstein, Montbéliarde, Normande).
- ▶ Improve advice on claw health : Statistical references, Typological study in some farms...
- ▶ A network with a great number of agents to collect information on claw health.
- ▶ Harmonize the detection of lesions: training agents



Genopedix Project : 123 000 cows / year

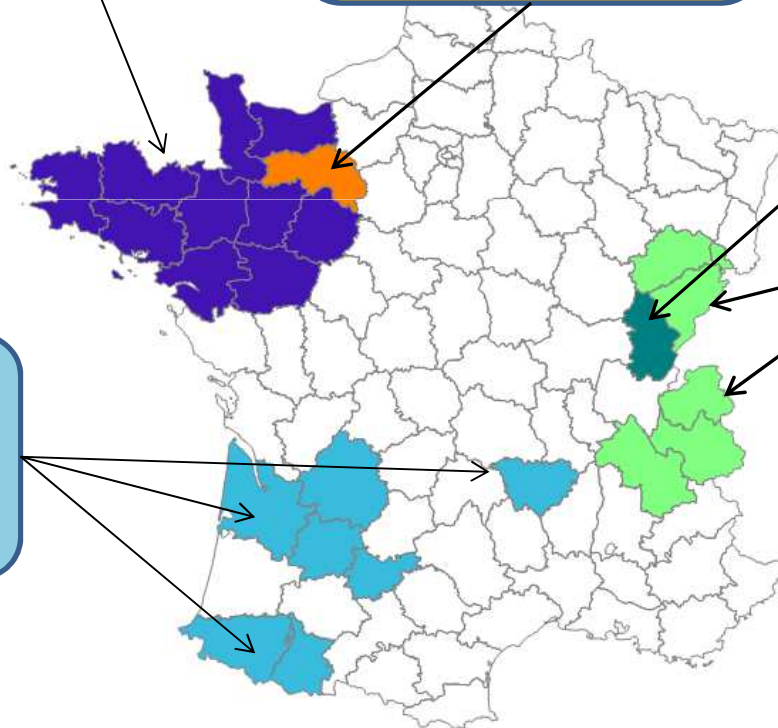
57000 cows / year
1500 Montbéliarde
8500 Normande
47000 Holstein

16000 cows / year
100 Montbéliarde
6000 Normande
9900 Holstein

8000 cows / year
7900 Montbéliarde
100 Holstein

19000 cows / year
15000 Montbéliarde
4000 Holstein

23000 cows / year
3400 Montbéliarde
200 Normande
19400 Holstein



- Umotest - 6 hoof trimmers
- Jura-Betail - 2 hoof trimmers
- Midatest - 6 hoof trimmers
- Evolution - 15 hoof trimmers
- Origen+ - 4 hoof trimmers

Performed with Cartes & Données





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