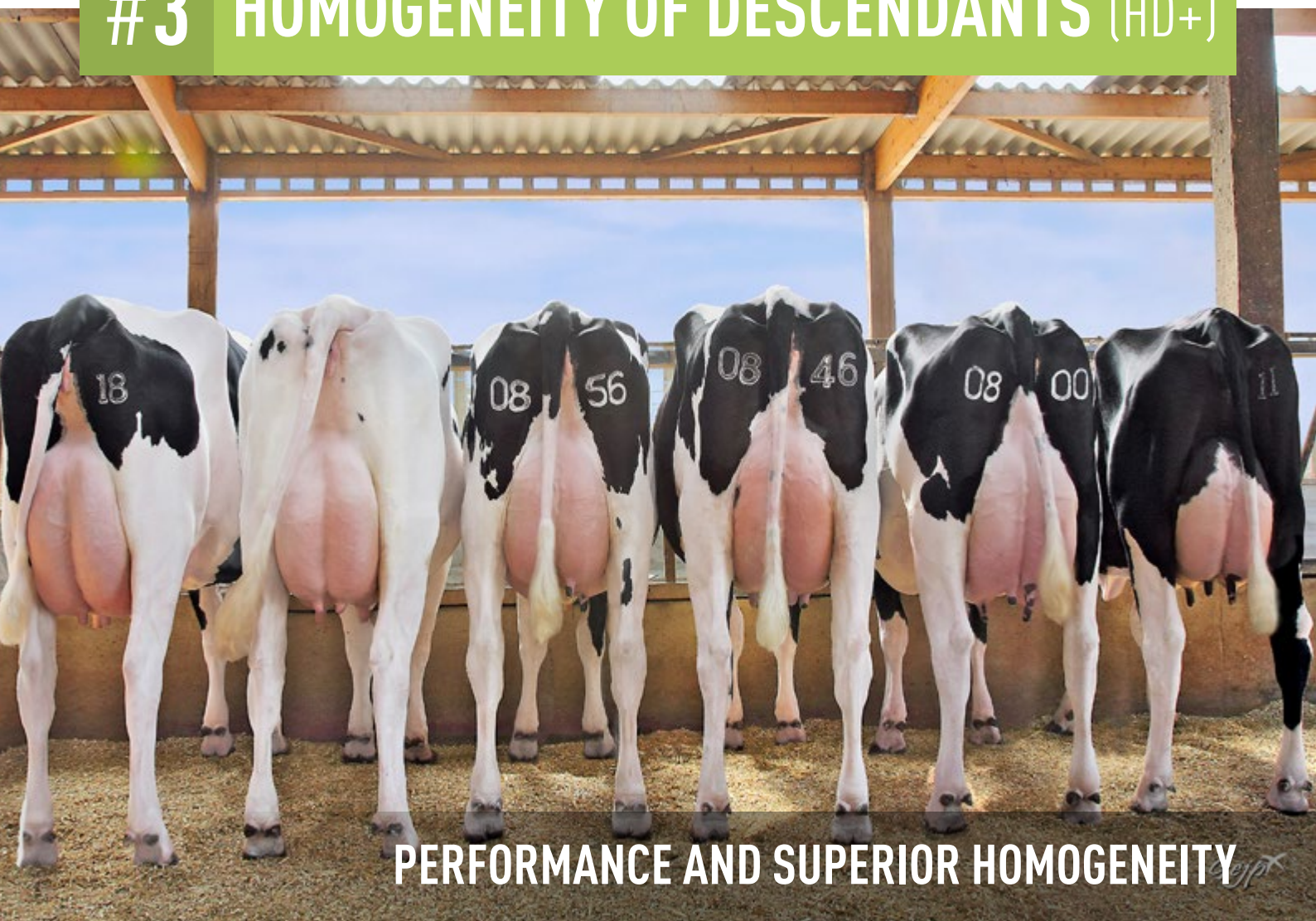


EVOLUTION
EXCLUSIVITY!

4 INNOVATIONS SUPPORTING GENETIC EFFICIENCY

#3 HOMOGENEITY OF DESCENDANTS (HD+)



« THE RIGHT DNA TRANSMITTED »



WE GIVE YOU TOOLS TO MOVE FORWARD RIGHT NOW:

< Our bulls are evaluated

Find them on the bulls sheets:
www.evolution-xy.fr

Vitalité à la naissance	93	<div style="width: 93%;"></div>
Vitalité au vêlage	96	<div style="width: 96%;"></div>
CDH	Non porteur	
Homogénéité de descendance	MA ME LAIT TP TS	



PRODUCT SHEET: UNDERSTAND AND USE THIS INNOVATION IN YOUR HERD


EVOLUTION
International

#3

HOMOGENEITY OF DESCENDANTS (HD+)



HERDS CONTEXT
AND CHALLENGES

HOMOGENEITY OF DESCENDANTS CHALLENGES:

To obtain the best possible offspring in relation to the dam.

- > When mating a female, one of the main objectives is to obtain a significantly improved progeny on one or more criteria
- > The choice of the bull aims to have a strong impact on this criteria. 50% of the sire's genes are transmitted, adding to the 50% of the dam's inheritance
- > The genetic value of the offspring fluctuates around the average of the sire and the dam

The challenge of homogeneity of descendants is to be able to obtain a higher and more homogeneous level on a strategic criteria.



PRINCIPLE OF EVOLUTION
INNOVATION

WHAT IS HD+ ?

HD+ is the bull capacity to transmit a quality more regularly to his offspring. This is observed on a specific criteria.

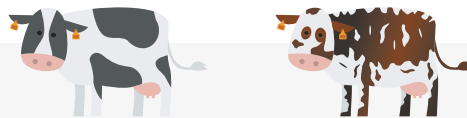
Method: the knowledge of the bulls' DNA has made possible to project more than 500 random descendants and to measure the distribution of their genetic level.

Thus, HD+ bulls are not only very improving on one criteria, but «tested» for their ability to transmit this quality in a more homogeneous way:

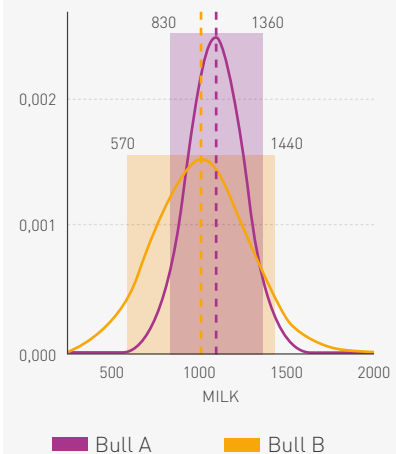
- > To be labelled HD+, the bull must be in the top quarter in genetic level and in the top quarter in homogeneity of transmission to its offspring (standard deviation of transmission)
- > For HD+ bulls, less than 5% of the offspring will be less than 1 genetic standard deviation

Examples :

Bull	LIWAY SIL	NARADJA
Proof	+2,0 Feet & Legs	+1081 Milk
Population standard deviation	+/- 0,3	+/- 300
HD+ bull effect	+25% of homogeneity	+13% of homogeneity



Bull A transmits its genetics potential more homogeneously than bull B



BENEFITS FOR
THE BREEDER

WHAT BENEFITS FOR THE BREEDERS ?

By using HD+ bulls on a female with a significant defect, it will be corrected in a more homogeneous way : the probability having an insufficiently corrected female goes from 17 to 12%.

For example, a female negative in Udder Health [-1.3] mated with NEEKENS HD+ bull in Udder Health [+2.7], the calf will be positive in somatic cells at 88%, against 83% for the average bulls.

For a 100 dairy cows herd with a genetic issue in somatic cells on 20 females, to mate the sensitive female with a bull HD+ in Udder Health, it is 1 to 2 females with 1 more lactation or 600 € savings per year.

The breeder will earn 10% perfectly satisfactory female rate on HD+ couplings.