

GENETIC
EFFICIENCY



DIVERSITY



EXCELLENCE



RELIABILITY



Evolution International's Normande : the dairy cow that provides to farmers the highest added value of milk and meat, autonomy, and secured incomes.



TOP NEWS from August proof run of Evolution genetics

Evolution genetics TOP 10 bulls available

N°2 : PRESTIGE	172 ISU
N°3 : OBERLIN	171 ISU
N°6: PLACEBO	166 ISU
N°7 : POGBA	163 ISU
N°8 : OPIUM	162 ISU
N°9 : PONDICHERY	161 ISU
N°9 : OMEGA PY	161 ISU

- ❖ New TOP Proven bull : **LOCO**
- ❖ **15** bulls in the TOP 20 of the breed
- ❖ A diversity of bulls available in **Sexed**

DAIRY CROSSBREEDING NEW STUDY: Normande crossbreds are the most economically competitive



- ❖ World unique scientific modelization of dairy crossbreeding
- ❖ Diversity of crossbreeding modelled : 7 breeds, 17 genetic combinations, 3 levels of farm intensity
- ❖ The Normande is present in all TOP dairy crossbreedings
- ❖ Technical & Economical results of dairy crossbreeding

Normande : the most universally competitive breed in dairy crossbreeding #2

From a 3 years collaboration between INRA French Official Research Institute, ESA Angers (Agricultural University) and Evolution, first results in Dairy Crossbreeding arrive. **7 breeds** on economical and technical criteria were modelled in 17 dairy crossbreedings, pure, 2 or 3 ways, rotative (ROT) or by absorption (ABSP), in **3 different Holstein systems** : Intensive, Extensive and Medium. This assessment was made **over 20 years with the ECOMAST simulation model** (Dezetter et al., 2017) and under 2 objectives of constant volume of milk sold or constant number of cows.



GAMBAS

(Normande Sire on Holstein Dam)

6 lactation finished =

- 66 848 kg of milk produced
- 4.67% Fat and 3.97% Protein
- 3 126 kg Fat & 2 528 kg Protein
- 1 calf / year

GAEC LAVAL DREAMS (FR – 35)

You can find hereafter few technical and economic results of Normande in crossbreeding in extensive system when the farmers decided to keep stable the volume of milk sold.

	Economical Results			Technical Results			
	Gross margin € / 1 000 L	Costs € / 1 000 L	Income € / 1 000 L	Prot %	Fat %	Milk kg	Renewal %
Ho x No Absp	323,2	134,8	424	3.76	4.40	6 157	22,7
Ho x No Rot	322,8	124,4	415	3.66	4.36	6 647	21,9
Ho x No x Fl	322,2	125,7	415	3.61	4.36	6 545	22,1
Ho x No x Je	320,6	128,2	425	3.70	4.60	6 445	21,9
Ho x No x Bs	320,1	123,6	412	3.63	4.30	6 717	22,9
Ho x Je x No	318,7	130,2	415	3.70	4.57	6 342	21,7
Ho x Mo x No	316,9	122,2	409	3.57	4.29	6 747	22,4
Ho Ref	314,8	132,1	413	3.50	4.28	7 082	36,8
Ho x Mo x Vr	313,6	119,4	402	3.50	4.28	6 899	22,0
Ho x Je x Bs	310,0	128,8	413	3.66	4.53	6 421	22,3
Ho x Je Rot	295,6	130,9	395	3.67	4.68	6 352	23,1

HO : Holstein; NO : Normande; Mo : Montbeliarde,; VR : Viking Red; FL : Fleckvieh; BS : Brown Swiss; JE : Jersey
Modelled results after 20 years of crossbreeding and genetic improvement extracted of the study.

Excellence of our genetics in new proofs

LOCO (153 ISU, BB & A2A2): The TOP type proven bull

The daughters of LOCO are very beautiful with an exceptional type +1.8, with high +2.8, well balanced +1.1 and strong rear attached +1.0 udders. The frame is impressive with a high stature +1.3 and chest width +1.1. Loco's daughters have functional Feet & Legs with a very good foot angle +1.2. Loco has to be used only on cows because of calving ease.

HD+ TY & Ud



HD+ Prot & Ud & UH



PRESTIGE (172 ISU, AB & A2A2): The TOP ISU bull, available in sexed semen only

PRESTIGE brings quantities of protein +0.19% and fat +0.23% with a good milk production +577 kg and beef value +1.2. About the type, the daughters will be balanced on all criteria : Type +1.5, Udder +1.4, Feet & Legs +1.1. The frame will be composed of a moderate size -0.5 and widths +0.4. PRESTIGE brings Udder Health +1.8, Food efficiency +2.0 and Feet Health +0.5. He can be used on heifers and cows, with a calving ease at 90.

HD+ Prot TY F&L Beef & Repro



PLACEBO (166 ISU, BB & A2A2): The TOP healthy bull available in sexed semen only

PLACEBO brings an exceptional health +0.9 with a high resistance to ketosis +0.8, to mastitis +1.2, to feet lesions infectious or not +0.5, and fertility +0.8. He transmits a protein production in milk +0.11% and in beef value +1.6. The type is perfect +1.6 with beautiful udders +1.2 and Feet & Legs +1.1 adapted to many systems. He can be used only on cows.

HD+ Milk



PARADIS (150 ISU, BB & A2A2): The TOP dairy bull, available in sexed semen only

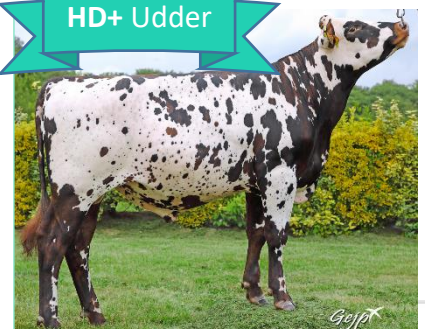
PARADIS brings a high milk production +1 095 kg with good rates in Protein +0.03% and Fat +0.06%. A dairy complete type bull with a high stature +1.8, feet adapted to intensive systems +1.1 in foot angle, resistance to ketosis +1.1 and complete udders for producing milk +0.4.

PARADIS has an exceptional rate milk production / Reproduction +0.8, with heifers and cows fertile ! He can be used on heifers and cows.

PANTHEON (161 ISU, AB & A2A2): The TOP grazing bull

PANTHEON brings milk production +722 kg with Protein +0.10 % and Fat +0.08 % rates. He transmits a grazing type with a small size -0.7, very good Feet & Legs +1.8 which excellent leg angle +1.1 and fluid locomotion +1.5 and a high food efficiency +1.3. Udders will be high +0.7, balanced +1.5 and strong attached +1.5. He transmits also health +0.6 with an exceptional udder health +1.6. PANTHEON can be used on heifers and cows because of a calving ease at 91.

HD+ Udder



Excellence of our genetics in new proofs #2

POPAYAN (152 ISU, BB & A1A2): The TOP Type bull

POPAYAN brings an incredible type +3.0 ! Daughters will have magnificent udders +2.6, wide body +1.3 with a basic stature +0.9 and an exceptional foot angle +1.3. POPAYAN transmits beef abilities to males +2.4. He has to be used on cows only because of calving ease at 89.

HD+ TY & Ud



PARBLEUDOR (154 ISU, BB & A1A2): The dual purpose bull

PARBLEUDOR brings milk quality, Fat +0.21% and Protein +0.07% with milk production of 533 kg, and beef ability +2.4. The daughters will have exceptional type +1.8, a frame with widths +1.3 and a basic stature +0.8, Feet & Legs +1.6 with top angles +1.9 in leg and +1.7 in foot and high udders +1.1. Calving ease at 90.



HD+ Milk & F&L



PALACE (151 ISU, BB & A2A2): The milk quality

PALACE brings TOP milk quality, Protein +0.07% and Fat +0.26%, a good milk production +702 kg and beef abilities +0.9. He transmits a complete type +1.2 with strong attached udder +1.6, moderate size +0.1 and perfect Feet & Legs +1.1 in locomotion. Has to be used on cows because of a calving ease at 89.



HD+ Beef

PAIREDas (150 ISU, BB & A1A2) : The best in F&L

PAIREDas is the best in Feet & Legs +2.6 with exceptional angles in foot +1.4 and legs +1.9 and a fluid locomotion +2.1. He brings also a high fertility to cows +1.2 and heifers and a calving ease at 92 ! About the productions, he has a fair milk production +542 kg. He transmits a complete type +1.4 with moderate size -0.1 and beautiful udder +0.6.

PASTOREO (149 ISU, AB & A2A2): The grazing type

PASTOREO is the perfect bull for breeders in grazing system. He brings milk +653 kg with Fat +0.18% and Protein +0.06% and beef abilities on males +1.7 and cows +0.2. He has the perfect type for grazing : small stature -0.3 with widths -0.2 and fluid locomotion +0.5. The udders are beautiful with strong support +1.2 and attachments +1.0. PASTOREO brings a good reproduction +0.1 and exceptional health +0.6 (udder, feet and general). The bull can be used on heifers and cows, the gestations will be short -4 days and calving ease at 91. Now available in conventional semen.

HD+ Fat

