

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 : OBERLIN

N°4 : POGBA

N°5 : JITAN

N°7 : OPIUM

N°7 : OMEGA PY

N°7 : ULTRAFORD



- ❖ New TOP Proven bull : LIMA
- ❖ 16 bulls in the TOP 20 of the breed
- ❖ A diversity of new bulls available in Sexed

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



- ❖ Diversity of crossbreeding modelled : 7 breeds, 17 crossbreedings, 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

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.



Crossbred Holstein x Normande cow, 3rd lactation

In each type of farm, the **Normande**, tested in various ways with various breeds, is **always in the TOP of dairy crossbreeding** with technical and economical criteria. You can find hereafter fews results of Normande in crossbreeding compared with others dairy crossbreeding.

INTENSIVE SYSTEM	Dairy Crossbreeding	Milk*	F%	P%	Milk Price/ 1 000 L**	Beef Income/ 1 000L	Total Income €
	HO x NO x BS	9 797 kg	4.31%	3.66%	362.4€	36.2€	3550 €
	HO x NO x MO	9 885 kg	4.29%	3.61%	358.6€	35.3€	3544 €
	HO x MO x VR	10 120 kg	4.18%	3.51%	349.8€	35.2€	3539 €
SEMI-INTENSIVE SYSTEM	Dairy Crossbreeding	Milk *	F%	P %	Milk Price/ 1 000 L**	Beef Income/ 1 000L	Total Income €
	HO x NO (ROT)	9 383 kg	4.25%	3.66%	360.8€	54.1€	3892 €
	HO x NO x FL	9 227 kg	4.28%	3.62%	358.3€	53.1€	3795 €
	HO x JE X BS	9 035 kg	4.5%	3.61%	364€	40.1€	3650 €
EXTENSIVE SYSTEM	Dairy Crossbreeding	Milk *	F%	P %	Milk Price/ 1 000 L**	Beef Income/ 1 000L	Total Income €
	HO x NO (ABSP)	6 164 kg	4.39%	3.76%	370.4€	49€	3585 €
	HO x NO x JE	6 453kg	4.6%	3.69%	371.9€	40.3€	2660 €
	HO x JE (ROT)	6 361 g	4.68%	3.67%	372.7€	16.9€	2477 €

HO : Holstein; NO : Normande; Mo : Montbeliarde,; VR : Viking Red; FL : Fleckvieh; BS : Brown Swiss; JE : Jersey

*Economical base : Milk = Kg milk produced per year / Nbr of cows

**Calculated on the milk price in France : 330€ / 1 000 L and French bonus for Fat +2.6€/ 0.1% and Protein +6.6€/0.1%

Modelled results after 20 years of crossbreeding and genetic improvement extracted of the study.

Excellence of our genetics in new proofs

TOP Proven Bull : LIMA (ISU 147, BB & A2A2), Sexed or Conv

Proven bull with good milk production +778 kg with fat +0.05%. He brings a complete type with well balanced udders +1.7 and strong rear attachments. The daughters have a moderate stature with a straight back and exceptional health +0.5 RLNI and +0.8 UdHealth. Males have good beef abilities +1.3 for young bulls. LIMA can be used on heifers and cows.



HD+ Ty & Ud
& UH



TOP Type : POGBA (ISU 164, BB & A2A2), Sexed or Conv

POGBA is a new bull with a high ISU. He is amazing in type +2.1 with exceptional udders +1.7. Udders are well balanced, strong attachments and high +1.9. The frame is impressive +1.2 in stature and +1.3 in chest width. Daughters will have fluid locomotion +0.6 and functional F&L +1.2 in feet angle. POGBA is an amazing dual purpose bull, +774 kg in milk and +0.7 in Beef abilities with a better beef value on cows +1.1 than on males 0.3.

TOP Milk Quality : PREMIO (ISU 149, BB & A2A2)

PREMIO has amazing F% and P% rates, respectively +0.57% and +0.25%, with a fair milk production +556 kg. The type is complete with well attached udders +1.2, functional F&L +1.1 in parallelism and moderate size +0.4. He improves fertility +0.3 and brings +0.8 UdHealth and +0.6 Health. Because of the high production of contents and the moderate frame PREMIO is exceptional in Feed Efficiency +2.1. He can be used on heifers and cows, calving ease 92 with short gestation -3 days!.

HD+ Protein



HD+ Fat



TOP Grazing Type: PASTOREO (ISU 153, AB&A2A2) ONLY Sexed

PASTOREO is the perfect bull for breeders in grazing system. He brings milk +703 kg with Fat +0.18% and Protein +0.06% and beef abilities on males +1.7 and cows +0.1. He has the perfect type for grazing : small stature -0.4 with widths -0.4 and fluid locomotion +0.6. The udders are beautiful with strong support +1.5 and attachments +1.0. PASTOREO brings a good reproduction +0.1 and exceptional health +0.7 (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.

Top Milk : OSTENDAL (ISU 149, BB & A2A2), Sexed or Conv

OSTENDAL has a high milk production +1 142 kg. He brings exceptional type with an impressive stature +1.8, beautiful udders with strong attachments +1.6 and support +1.0 and straight F&L +0.9 with fluid locomotion +0.9. He can be used on heifers and cows with the calving ease at 93, the gestation length will be very short -8 days !

HD+ Udder



HD+ Beef Abilities



ORFEVRE (ISU 158, BB & A2A2), available in Sexed or Conv semen

ORFEVRE is doing his comeback in availability in sexed and Conventional semen. He is very well-balanced with high milk production +717 kg and interesting values for Protein +0.07% & Fat +0.12%, Beef +1.1. He brings an amazing type +1.1 with balanced frame, high udders +0.8 and a strong parallelism +1.7. He brings healthy udders +1.3 and feet +0.5 RLNI.

OBERLIN (ISU 173, BB & A2A2), Sexed or Conv semen

OBERLIN has the unique balance Milk +594 kg – Beef Value +2.9 – Type +1.8. The Frame is moderate size -0.3 with wide +0.2 body. Udder very high +1.6, well balanced +2.1 and attached +0.9. He brings a good health +0.8, excellent udder health +1.5 and high fertility +0.4. He can be used on heifers and cows because of easy calving.

HD+ F&L Beef



PROSPERO (ISU 156, BB & A2A2)

PROSPERO brings a nice Fat and Protein production, respectively +0.18% and +0.20% with +525 kg. The type is beautiful +1.1 with good F&L, moderate frame +0.6 with widths +0.5. Cows and males will have high beef abilities +1.1. Udders will have a strong support +0.6 and high +0.4 and will be healthy +1.1. The gestation length is short -3 days with a calving ease at 90.

PIXEL (ISU 151, BB & A1A2), Sexed or Conv semen

PIXEL brings an amazing protein production +2.1 with a good milk production +690 kg. The type is complete +1.1 with strong udder fore attachment +1.1, amazing locomotion +1.1 and moderate size +0.5. He has a very good udder health +1.0 and Resistencia to ketosis +0.7. Males and cows will have high beef abilities +1.1. He can be used on heifers and cows in sexed semen.



HD+ Beef



OKAVANGO : protein in milk and beef ! (154 ISU, BB, A2A2)

OKAVANGO is now available in sexed, male and female, and conventional semen. He has an extraordinary Protein production +1 with a good milk production +738kg. He has a complete type +0.3 with moderate size -0.3 and good Feet&Legs +0.5. He brings amazing improvement for all functional traits. His male offspring will have a high value in beef +1.9. He can be used on cows or heifers with his 90 in calving ease.