

# DANBRED



**It's all about the genes**

Let our DNA improve your business

# **EXTREMELY EFFECTIVE AND SUSTAINABLE PORK PRODUCTION**

**HIGH FERTILITY**

**HIGH DAILY GAIN**

**HIGH FEED EFFICIENCY**

**HIGH MEAT QUALITY**

**HIGH LONGEVITY**



# DanBred – profitable crossbreeding and superior performance results

Implementing a dedicated breeding programme is fundamental to modern pig production and has important implications for your pig farm's productivity and economic progress.

More than 120 years of experience with targeted breeding has made DanBred genetics one of the best in the world, and that directly benefits our customers.

DanBred's breeding work, along with our strong crossbreeding programme, has led to the development of the DanBred Hybrid production sow, which has unique mothering abilities, good longevity, and guarantees more viable pigs per litter, along with weaners and finishers with high daily gain and optimum feed conversion.

DanBred delivers world-class genetics and service solutions to ensure the best overall economy by providing improved productivity, genetic and economic progress, and technical management support.

By doing so, DanBred makes it possible to produce the highest quality pork with the least costs possible, i.e., maximum output from minimum input.

## OUR DNA

# DanBred's purebred populations and hybrids

DanBred's breeding goal is not only balanced, but it is also focused and includes all important traits for production, meat quality, robustness, male fertility, and good mothering abilities.

DanBred's breeding populations and hybrids all have great genetic potential. They contribute to solid profits for pig producers as well as a reduction of the climate footprint, as effective breeding animals further a more sustainable production.

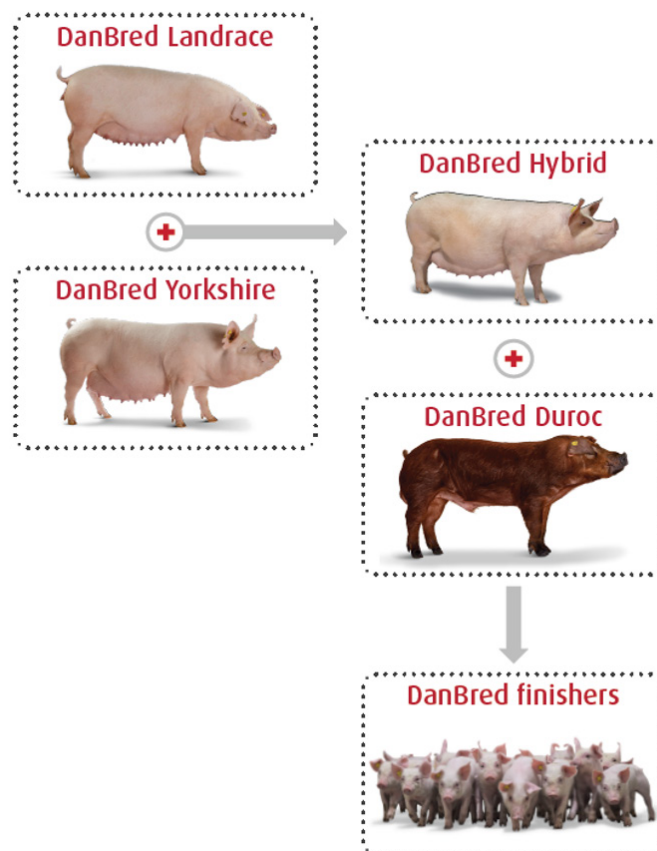
## THREE-WAY CROSSBREEDING SYSTEM

# The sure way to world-class results

Using our three-way crossbreeding system, producers of piglets and finishers do not only benefit from the breeding progress in DanBred's purebred populations, but also the heterosis in DanBred Hybrids as well as DanBred finishers.

The first cross between the DanBred Landrace and DanBred Yorkshire is the DanBred Hybrid, which is used as a female breed in the commercial production of DanBred finishers. DanBred Duroc is bred and used as a terminal sire line in the DanBred crossbreeding system.

The breeding goals for the breeds depend on how each is used in the three-way crossbreeding system, and they are different for sire and female breeds. Daily gain, feed efficiency, meat quality, and robustness are essential traits across all breeds, whereas the traits for good mothering abilities, LP5, and early growth are especially important for the DanBred female breeds, and male fertility is particularly important for DanBred Duroc.

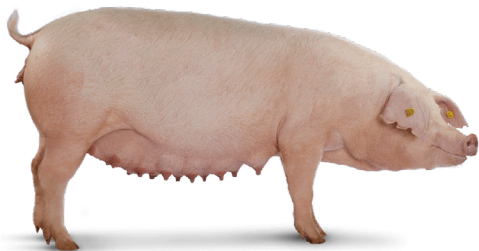




## PUREBRED POPULATION

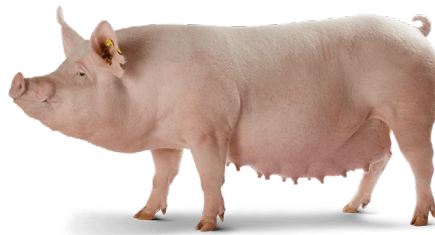
# DanBred Landrace & Yorkshire

The DanBred breeding programme consists of the two maternal breeds, DanBred Landrace and DanBred Yorkshire:



### DanBred Landrace

DanBred Landrace has high fertility and good mothering abilities, and it is known to produce large litters of robust pigs. Moreover, DanBred Landrace is a strong animal with solid legs and a high lean meat percentage.



### DanBred Yorkshire

DanBred Yorkshire is characterised by its good mothering abilities and produces large litters of uniform and vigorous piglets. In addition to that, DanBred Yorkshire has a high daily gain, high feed efficiency, and high meat quality, which makes this breed extremely effective for pork production.

## CROSSBRED POPULATION

# DanBred Hybrid

DanBred Hybrid is the optimal dam line and ensures high efficiency in the production by combining the best traits. It is the first cross between DanBred Landrace and DanBred Yorkshire, and the most prolific hybrid for the production of optimal finishers.

DanBred Hybrid is docile and has excellent mothering abilities as well as good longevity. The breed produces large viable litters of robust pigs, which grow fast and have a high feed efficiency all the way to slaughter, and when crossed with DanBred Duroc, the offspring will inherit all these traits as well as excellent meat quality. Therefore, DanBred Hybrid contributes positively to the bottom line and a sustainable production.



## HYBRID

- ✓ DanBred Hybrid has excellent mothering abilities and is docile
- ✓ DanBred Hybrid has good longevity, and thus, a large lifetime production
- ✓ DanBred Hybrid has fast-growing and feed-efficient offspring
- ✓ DanBred Hybrid contributes to the sustainable production of pork
- ✓ DanBred Hybrid produces many robust 'full value pigs'
- ✓ DanBred Hybrid produces large litters with high survival rates

## PUREBRED POPULATION

# DanBred Duroc

DanBred Duroc is the most competitive terminal sire and ensures that you get more pork for less money.

DanBred Duroc contributes to large litters and fast-growing finishers with a low feed conversion rate and a high lean meat percentage. Furthermore, DanBred Duroc produces carcasses with excellent meat quality, and its effective genetics are profitable for the pig producer and contribute to reducing the carbon footprint from pig production.



## DUROC

- ✓ DanBred Duroc progeny have superior daily gain from birth to slaughter and the best feed efficiency
- ✓ DanBred Duroc is the world's most profitable and environmentally efficient terminal boar line
- ✓ DanBred Duroc progeny are easy to handle and highly social, leading to higher animal welfare
- ✓ DanBred Duroc is ongoingly selected for high lean meat percentage, matching the trend for increasingly heavier finishers
- ✓ DanBred Duroc finisher carcasses have exceptional meat quality: pH, colour, and IMF
- ✓ DanBred Duroc progeny are robust and have uniform growth rates from birth to slaughter
- ✓ DanBred Duroc produces litters with high survival rates and vigorous piglets

# Balanced breeding for ambitious results

DanBred's breeding goal is balanced and includes pig producers' most economically important traits, such as finisher efficiency, maternal traits, robustness, and meat quality traits. Although some traits may have an unfavourable genetic relationship with other specific traits, DanBred has been able to successfully achieve genetic progress for all traits – with subsequent impressive economic and sustainable results as well as increased productivity.

The robustness trait, conformation, included in 1995, and the maternal trait LP5, live piglets on day 5/litter, are both examples of traits that contribute to animal health, welfare, and productivity simultaneously. However, as productivity increases, so does the importance of a balanced breeding goal to avoid compromising animal health and welfare.

That is why DanBred's breeding goal is focused on increasing productivity and ensuring the genetic gain for robustness to improve the health and welfare of the pigs.





## GENEPRO

# Let knowledge and data show the way

DanBred GenePro is for the customers who want to produce their DanBred Hybrids for closed herd production. GenePro gives access to the continuous genetic progress generated by DanBred and boosts productivity, and thus, the value of on-farm replacement gilts – maximising customer profits.



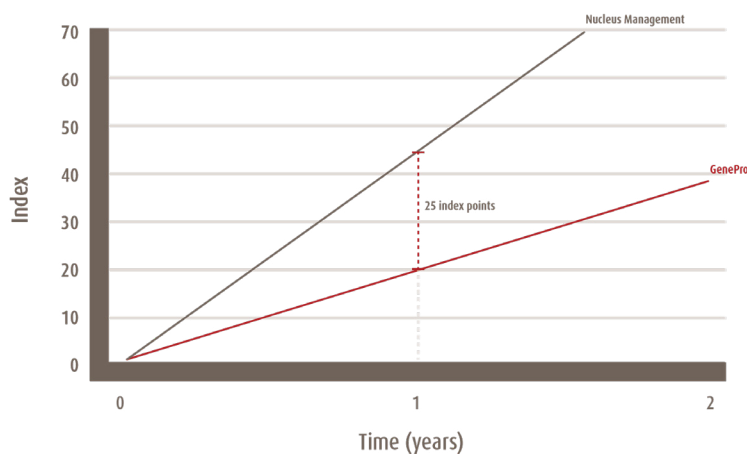
It is impressive how we can optimise our production with our own access to DanBred's Databank. It has made a significant difference in the herd. And even more amazingly, it is both affordable and very easy to manage.”

- Martin, weaner producer, the Netherlands

## NUCLEUS MANAGEMENT

# Optimise your gilts and boost your bottom line

Nucleus Management maximises the effect of GenePro with only a few weekly hours of routine administration. The digital tool offers access to all important key figures for planning the breeding work in your herd. At the same time, users become part of the GenePro ranking system, where it is possible to compare progress against other herds – completely anonymously, of course.



# What to expect from Nucleus Management

After just one year with Nucleus Management, users will see significant progress. It is the most advanced, thorough breeding tool for the on-farm production of replacement gilts. With Nucleus Management, you can expect DanBred Hybrids that:

- ✓ Produce large litters with high survival rates
- ✓ Have great mothering abilities and are docile
- ✓ Produce many robust 'full value pigs'
- ✓ Have fast-growing and feed efficient offspring
- ✓ Have good longevity, and thus, a large lifetime production
- ✓ Contribute to the sustainable production of pork

In brief, by using Nucleus Management, you ensure the implementation of DanBred's yearly genetic progress.

In the past years, users have experienced the following annual progress:

- ✓ LP5 (live piglets on day 5/litter) went up 0.37-0.40 extra live piglets,
- ✓ The documented progress in daily gain improved by 18-19 grams,
- ✓ The lean meat percentage increased by 0.11-0.16 %,
- ✓ And a lower feed consumption equal to -0.041 to -0.037 FUs/kg gain (~ -0.038 to -0.035 kg feed/kg gain).

Our continuous genetic progress generates world-class results that benefit you directly. In a changeable industry, DanBred's balanced breeding system contributes to a sustainable and effective production of robust pigs.

The developments have resulted in plenty of noteworthy productivity improvement. We can see that the litter size has improved. Moreover, there is a clear progress for finisher traits, e.g., feed conversion, daily gain, and meat percentage, which are some of the most economically important traits for pig producers around the world. At the same time, the robustness trait, conformation, is kept at an optimal, steady level.

The average annual genetic progress (2018-2020)	
Daily gain 30 kg - slaughter (g/day)	20
Daily gain birth - 30 kg (g/day)	0.4
Feed conversion (kg feed/kg gain)	-0.037
Lean meat percentage (%)	0.17
LP5 (live piglets on day 5/litter)	0.16
Conformation (points)	0.12

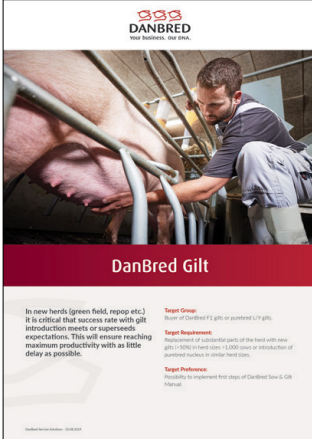
Table 1. The average annual genetic progress over the past three years (2018-2020)

The production results follow the breeding progress. So, the genetic progress generated in nucleus herds also manifests in the production herds, which means the improvements positively affect all our customers throughout the supply chain.

## IN-FARM SOLUTIONS

# Professional advice to optimise your business

DanBred's In-Farm Solutions are carefully designed strategic interventions, which generate measurable results for our global key customers and bring you closer to your objectives. Our advisors help establish practical routines and set specific requirements, so you can achieve high-quality results and increased efficiency. Here, theory and practice go hand in hand.



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**DanBred Gilt**

In new herds (green field, reprod etc.) it is critical that success rate with gilt introduction meets or surpasses expectations. This will ensure reaching maximum productivity with as little delay as possible.

**Target Group:** Herd of DanBred F1 gilts or purebred L/Y gilts.

**Target Requirements:** Replacement of a significant part of the herd with new gilts (1-50% in herd size < 1,000 sows or introduction of purchased sows in stable herd sizes).


**Target Preference:** Possibility to implement first steps of DanBred Sow & Gilt Manual.

DanBred In-Farm Solutions - 01/2015

### DanBred Gilt

The first period in a young animal's life is important to its productivity. Factors such as rearing, health, feeding and management play a role in determining how successful the young gilt will be as a productive sow. The DanBred Gilt solution is designed for best practice and to ensure an optimal integration of the young gilt into an existing production unit or at the start of a new one.

- ✓ For buyers of DanBred F1 gilts or purebred L/Y gilts
- ✓ Reach maximum productivity without delay
- ✓ Optimise use of purchased gilts



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Your Success. Not Ours.

**DanBred MaxWean**

The main key performance indicators that contributes to high profitability are litter size, weaned per weaning, weaned per litter, and weaning weight.

**Target Group:** Major customers with significant no. of sows (>3,000).

**Target Requirements:** Customer who sees DanBred sow benefits in interaction with advanced genetics. This includes both international pig production on an international scale (50-100,000 sows) and with significant influence on the trends in the local market.

**Target Preference:** Customer willing to learn and share knowledge.

DanBred In-Farm Solutions - 01/2015

### DanBred MaxWean


It is important to be able to adjust your business to the changing market conditions. In a time where each pig has a high value, it is important to wean as many pigs as possible. The great potential in the robust DanBred Hybrid sows and the addition of DanBred Duroc as the terminal boar can be optimised in many ways to ensure a maximum utilisation of the production. The DanBred MaxWean solution delivers this optimisation in farm.

- ✓ For major customers with significant no. of sows (+3,000)
- ✓ KPI's for weaned pigs meet the goals set
- ✓ 3 days on-farm and 3 phone/Skype meetings

## DanBred Validated Feeding

The genetic potential in DanBred animals develops fast. As production grows, the animals' physiological need for nutrition increases. We actively use feed formulation as a tool to help customers reach their specific objectives. In the DanBred Validated Feeding solution, we focus on feed optimisation of the total production.

- ✓ For GenePro-customers above 800 sows
- ✓ Guaranteed breeding progress implemented on farm, as fast as possible
- ✓ Genetic assessment reports or genetic management on farm



**Validated Feeding with DanBred**

DanBred breeding index at on-farm born animals and the option to the full guaranteed breeding progress implemented on farm, as fast as possible.

**Target Group:** GenePro customers above 800 sows.

**Target Requirements:** Being in DanBred AI system, or frequently using DanBred feedlines or DanBred validated breeding stock.

**Target Preferences:** Willing to share data, interested in the breeding aspect, and confidence with the DanBred index.




**Breeding Supply Chain**

In a production flow with high surplus from one sow it is essential that the subsequent production chain is optimized.

**Target Group:** GenePro customers above 800 sows.

**Target Requirements:** Being in DanBred AI system, or frequently using DanBred feedlines or DanBred validated breeding stock.

**Target Preferences:** Willing to share data, interested in the breeding aspect, and confidence with the DanBred index.



**DanBred GenePro Nucleus Management**

DanBred breeding index at on-farm born animals and the option to the full guaranteed breeding progress implemented on farm, as fast as possible.

**Target Group:** GenePro customers above 800 sows.

**Target Requirements:** Being in DanBred AI system, or frequently using DanBred feedlines or DanBred validated breeding stock.

**Target Preferences:** Willing to share data, interested in the breeding aspect, and confidence with the DanBred index.



**DanBred Boar**

In a farm with on-farm AI the success of production is highly dependent of valuable boar management.

**Target Group:** GenePro customers above 800 sows.

**Target Requirements:** Being in DanBred AI system, or frequently using DanBred feedlines or DanBred validated breeding stock.

**Target Preferences:** Willing to share data, interested in the breeding aspect, and confidence with the DanBred index.




**Understanding our DNA**

As a foundation to farm breeding and performance selection, the genetic potential of the animals that we can use will have a strong impact on the results.

**Target Group:** GenePro customers above 800 sows.

**Target Requirements:** Being in DanBred AI system, or frequently using DanBred feedlines or DanBred validated breeding stock.

**Target Preferences:** Willing to share data, interested in the breeding aspect, and confidence with the DanBred index.



**Optimal Production Flow**

The main key performance indicators that can be used to optimize the production flow are: litter size, farrowing rate, and weaning weight.

**Target Group:** GenePro customers above 800 sows.

**Target Requirements:** Being in DanBred AI system, or frequently using DanBred feedlines or DanBred validated breeding stock.

**Target Preferences:** Willing to share data, interested in the breeding aspect, and confidence with the DanBred index.



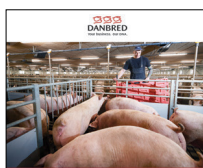
**Reproductive Performance**

In a farm with on-farm AI the success of production is highly dependent of valuable boar management.

**Target Group:** GenePro customers above 800 sows.

**Target Requirements:** Being in DanBred AI system, or frequently using DanBred feedlines or DanBred validated breeding stock.

**Target Preferences:** Willing to share data, interested in the breeding aspect, and confidence with the DanBred index.




**DanBred Performance Care**

Genetic factors have a strong impact on performance selection, with the genetic potential of the animals that we can use will have a strong impact on the results.

**Target Group:** GenePro customers above 800 sows.

**Target Requirements:** Being in DanBred AI system, or frequently using DanBred feedlines or DanBred validated breeding stock.

**Target Preferences:** Willing to share data, interested in the breeding aspect, and confidence with the DanBred index.




**DanBred Genetic Intelligence**

Genetic factors have a strong impact on performance selection, with the genetic potential of the animals that we can use will have a strong impact on the results.

**Target Group:** GenePro customers above 800 sows.

**Target Requirements:** Being in DanBred AI system, or frequently using DanBred feedlines or DanBred validated breeding stock.

**Target Preferences:** Willing to share data, interested in the breeding aspect, and confidence with the DanBred index.



**DanBred Grow**

In a production flow with high surplus from one sow it is essential that the subsequent production chain is optimized.

**Target Group:** GenePro customers above 800 sows.

**Target Requirements:** Being in DanBred AI system, or frequently using DanBred feedlines or DanBred validated breeding stock.

**Target Preferences:** Willing to share data, interested in the breeding aspect, and confidence with the DanBred index.



# Your business. Our DNA.

DanBred is one of the world's leading international pig breeding companies supplying genetics and service solutions.

DanBred has highly reliable breeding data and is the first pig breeding company in the world to use genomic information from all breeding candidates when calculating the breeding index, which amounts to more than 100,000 animals per year.

DanBred sets long-term, balanced breeding goals, which are revised regularly. This ensures that the genetic progress for the DanBred Duroc, DanBred Landrace, and DanBred Yorkshire breeds delivers maximum profit and creates a sustainable high investment return for our customers.

See our breeding goals at [www.danbred.com](http://www.danbred.com).

Well-documented genetics and comprehensive service solutions are the foundation of DanBred. This has made DanBred the first choice for leading pig producers worldwide who expect optimal, predictable business results.

DanBred P/S is owned by the Danish Agriculture and Food Council, Danish Agro, and Holdingselskabet DBI A/S.

## DanBred P/S

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