France Hybrides satisfy diverse markets

France Hybrides’ products have been satisfying diversified markets and the varied pig users from consumers to slaughterhouses, processors and farmers for more than 30 years.

Their goal is to optimise the quantity of meat produced per sow and per year at the best economic cost (high prolificacy, growth rate, conversion index, percentage of muscle) and meat quality.

France Hybrides is a subsidiary of Glon – the first French animal production and food processing group involved in pig genetic improvement, reproduction and semen diffusion.

Some 180,000 sows are now sold per year in 18 countries across three continents – Europe, Asia and North America – through subsidiaries, distributors or commercial agents.

Genetic improvement in France Hybrides is led on three pure bred female lines – the FH004, FH012 and FH025 – and two pure bred male lines – the FH016 and FH019.

Nucleus herds in France, the Czech Republic, Ukraine, Vietnam and Canada contain 5,000 sows.

- The Galaxy is the undisputed star of prolificacy. The Galaxy 300, Galaxy 900 and Galaxy 480 are two or three way crossbreds that are quiet with good maternal qualities and high growth rates of their offspring.
- The ‘Maxter’ parental boars have fast growth and good carcass quality. The Maxter 486 give priority to growth, muscle percentage and meat quality and embryo transfer.
- The latest generation of gilts and boars from Rattlerow Seghers come from the low pig density region of Walloon in Belgium and they are of the highest genetic merit and health status.
- With Belgium’s Government supporting the bio-technical research programmes of Gentec, Rattlerow Seghers can stay ahead. New generations will be very efficient and more economic to produce cheaper pigmeat. Performance is improving rapidly and Rattlerow Seghers want producers to achieve the highest numbers of finished pigs sold at the lowest cost.
- With their Betterhealth programme the nucleus and multiplier herds are managed to safeguard the health status of pig breeding units around the world. With Rattlerow Seghers SPF-AI stations the breeding pyramid benefits at all levels of the rapid genetic improvement programme.
- Healthy pigs perform better, are easier to manage and are more efficient. Moreover, the uniformity and quality of the finishing pig will yield a higher bonus. The improved feed conversion and better growth rate will help reduce annual feed consumption.
- These cost savings are important throughout the industry to lower the cost of production. Rattlerow Seghers are committed to achieving this goal as cereals may become more expensive since energy resources diminish and alternative energy from arable crops becomes attractive.

Rattlerow Seghers is also committed to provide superior genetic products to minimise losses of pigs through the production cycle. They have bred for decades for strength and longevity in the sow and boar lines.

Durability is a very important characteristic in their selection programme and is reflected in their two female lines. The Cora gilt (25% Duroc dam line from England) is easy to manage and breeds strong animals with excellent meat quality.

The other female is the Mira, which is very prolific, producing and rearing high numbers of finished pigs with excellent carcass quality.

Rattlerow Seghers can also offer a complete range of boars with either the Extremus, MaxiMus, OptiMus, PriMus and Tornado, which will meet all producers’ production needs.

This forward thinking approach will rank partners of Rattlerow Seghers among the top performing pig farms. Rattlerow Seghers breeds for strength and durability.

Breeding to produce pork at lowest cost

Less labour and more kilograms of pig meat are produced per sow with Rattlerow Seghers.

The performance achieved by the best farms today is 26-28 piglets weaned/sow/year. These piglets are bred to produce pork at the lowest cost as ‘only what you sell makes money’.

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Rattlerow Seghers is also committed to provide superior genetic products to minimise losses of pigs through the production cycle. They have bred for decades for strength and longevity in the sow and boar lines.
Since 1962 Selección Batallé SA has been dedicated to the commercialisation of pigs for breeding purposes, obtained within its own independent breeding programme.

Four pure breeds take part in the breeding programme – TB-Duroc and TB-Landrace as maternal lines and TB-Pietrain and TB-Large White as terminal boars. The TB-Duroc nucleus can be considered the largest Duroc breed population in the EU.

The company’s aim is the genetic improvement of the parental breeds, in order to obtain commercial pigs with minimum cost for the producer, and maximum carcass and meat quality for industry.

With the collaboration of the research institutions like IRTA or the main Spanish Universities.

The TB-Duroc GP sow has a high feed efficiency and an excellent maternal aptitude. Their progeny have an optimal meat quality as a result of the implementation of an own genetic evaluation programme to improve the intramuscular fat in the commercial slaughter pig.

The TB-Landrace GP boar has been intensively selected for prolificacy, daily growth and lean meat content and is 100% stress free.

As the result of the cross between these GP genotypes, the TB-L hybrid sow shows a high viable prolificacy and excellent maternal aptitudes. Their piglets have a high vitality. Its adaptability to different environmental conditions, its robustness and its long productive life also stand out.

The TB-Pietrain terminal boar is ideal for the light carcass market. An excellent lean meat content, a higher percentage of primal cuts and a good daily growth rate are their main features.

It has been selected for growth rate, lean meat content and loin depth.

The TB-Large White terminal boar has a high sustained growth rate and high meat percentage. It is ideal for the heavy carcass market for processing and is 100% stress free.

Finally, the TB-2 commercial pig is the slaughter pig with the lowest production costs in the European market, maintaining a high carcass and meat quality.

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info@batalle.com

ACMC – a new company with growing influence

What sets ACMC apart from other breeding companies is the performance of their stock ‘on the ground’, according to the feedback the company receives from professional pig producers from all around the world.

Firstly, the females are renowned for their prolificacy. ACMC’s Meidam GP dam line female has been developed by carefully incorporating genes from the hyper prolific Chinese Meishan over a 21 year period. A registered purebred that is both unique and exclusive to ACMC, she is used to produce the AC1 parent gilt which has become renowned for its ability to produce large litters.

Almost without exception producers have reported rearing one extra pig per litter since switching to ACMC stock.

Secondly, the improvements in reproductive and maternal traits have not been at the expense of carcass quality. ACMC’s meticulous on-farm testing and meat quality work has focused on essential traits of lean tissue feed conversion, lean tissue growth rate and meat quality to ensure economical production and the best returns from the processor.

Thirdly, a specific range of boars is provided through ACMC’s breeding hub system. When mated to AC1 females these will produce slaughter generation pigs to meet the differing specifications of processors at a variety of carcass weights, according to a particular country’s market needs.

These sires include:

- Vantage FC – this high conformation ‘First Choice’ boar generates efficient feed conversion combined with excellent lean tissue growth and also imparts the benefits of hybrid vigour.
- Vantage LW – the classic and highly recommended sire line Large White, ideally suited to stringent grading classifications which require consistently high quality carcasses.
- Vantage EC – an ‘Extreme Conformation’ sire for systems requiring little backfat combined with highly developed muscles in valuable parts of the carcass.
- Vantage MQ – a ‘Meat Quality’ sire line boar derived from the Duroc breed to be used where darker coloured meat with slightly higher intra-muscular fat is required.
- ACMC has invested many millions of pounds (sterling) in providing advanced facilities to support its unique breeding scheme. It individually performs high standards of pigs a year which is combined with DNA marker selection to ensure maximum genetic progress.

The company also offers a number of services, including a worldwide AI service. Semen from its EU approved stud is regularly dispatched to many countries using special thermo packaging and extenders to ensure semen will both travel and remain viable for several days after delivery.

In addition, ACMC provides PigCom – a popular Windows based computer recording scheme. Designed to be farmer friendly, it analyses performance data, providing weekly and monthly summaries to enable businesses to be run more efficiently.

ACMC is rapidly opening up new markets all around the world, so it is not unexpected to find that the world’s largest pig production and processing company – Smithfield Foods – uses ACMC stock.

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International Pig Topics — Volume 21 Number 5
Real added value from UPB’s genetic programme

The UPB genetic programme supplies the latest high added value breeding stock together with full technical support to ensure that future genetic progress is on-going and is maximised.

The results of the UPB genetic strategy has been excellent genetic progress across a range of very important economic traits.

All data are monitored for proactive management every quarter and the average progress, by trait, for the last three years has been as follows:

- Growth rate +41g per day.
- Feed conversion -0.041.
- Sire line backfat -0.39mm P2 fat.
- Number alive/litter +0.35 pigs/litter.
- Weaning to conception interval -0.39 days.

Using these data it is possible to put an accurate dollar value on the combined sire and dam line benefits of UPB pigs and the associated genetic programme per pig per year. The value is US$7.96.

Examples of the total annual ‘package’ value, using various herd sizes and litter production estimates, are shown in Table 1.

In addition to the economic returns from the UPB programme, the company prides itself on the outstanding conformation, style and type of their animals.

This progress has been achieved through the use of the UPB genetic programme via the control of the mating programme, accurate performance testing and the use of BLUP and the associated unique UPB selection indices.

The latter utilise genetic parameters, population data and industry economic values.

These are very important as they allow the optimum ranking and weighting of traits.

The current values are summarised as follows:

Table 1. Examples of the total annual ‘package’ value using various herd sizes and litter production estimates.

<table>
<thead>
<tr>
<th>Number of sows</th>
<th>Pigs per sow per year</th>
<th>Annual value from UPB programme (US$)</th>
</tr>
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<tbody>
<tr>
<td>1000</td>
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<td>26</td>
<td>1,034,800</td>
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</tbody>
</table>

Tailor made solutions for efficient pork production

Topigs is one of the leading organisations in pig breeding in the world, with a home base in the Netherlands. Worldwide there are about 150,000 grandparent Topigs sows, guaranteeing a production of more than 900,000 pigs a year.

Offering tailor made solutions for efficient pork production from pig producer up to consumer is the aim of Topigs.

They have a distribution network that covers more than 40 countries worldwide. The company is present in every substantial pig producing region around the world.

Balanced breeding

Topigs believes in sustainability. This means their animals are robust and reliable. This is accomplished by taking care of the pig as a whole.

Topigs does not look at one trait of selection, but includes many characteristics of the pig simultaneously.

Progress in pigs

Topigs improves the breeds and lines of their breeding programme continuously using large purebred populations all over the world for breeding value calculations.

In addition, results from commercial herds are included for breeding value calculations.

The result of this selection programme are impressive (see Figs. 1 and 2).

Fig. 1 shows the genetic progress in born piglets per litter and piglet mortality until weaning. The annual improvement is constant and is on a level of over 0.2 piglets per year.

Remarkable is the fact that, in spite of raising litter size, piglet mortality is not increased. This is an example of keeping a good balance in the selection programme.

Fig. 2 shows the genetic progress in the Topigs boar lines. Meat percentage and daily growth of fatteners is improving constantly.

Daily growth has gone up 57g in six years and the meat percentage improved with 1.35% in the same period.

Top class research and development

The genetic progress of the Topigs pig is powered by an extensive research and development programme.

At the affiliated Institute for Pig Genetics (IPG), researchers are working on items like better breeding value calculations, new techniques of breeding and the development of new genetic products.

An important field of expertise of IPG is meat quality. This makes Topigs a partner for integrations and meat processors.

FaxNOW +31 411 64 88 03

Tailor made solutions for efficient pork production
Quality and co-operation
JSR’s key to success

Globally renowned in the field of pig genetics, JSR Genetics is the largest British based pig breeding company and offers a wide choice of top quality breeding stock, semen and technical products.

Intense growth in overseas markets has encouraged the company to focus on meeting the increasing demand for its products, including successfully undertaking a number of key projects in the rapidly developing Eastern European and Asian markets.

JSR recognise that success depends on satisfying the demands of today’s consumers and their intensive development programmes have focused on producing prolific, robust animals that offer a high meat yield of superior quality, taste and consistency.

As a result, the JSR range of boars – comprising the JSR Titan, Hampshire, Duroc and Yorker – provides a choice of outstanding qualities to suit a wide range of pigmeat producers, whilst maintaining their reputation for low production costs and overall efficiency.

The JSR Duroc is a prime example of JSR genetics successfully combining high meat eating quality with low production costs. Its notable hybrid vigour offers a robust performance in a wide range of conditions and produces fast growing offspring that offer optimal backfat and high intramuscular fat for succulent and tastier pork, verified by independent taste panels.

The Yorker, bred from JSR’s own pure Large White sire lines, is an exceptionally lean terminal sire that produces vigorous, fast growing progeny, and is ideal for use in both intensive and semi-intensive systems. With an average of 150 days to slaughter, worth an extra £2.62 over the UK average herd, and an average lifetime FCR of 2.38, its combination of lean meat yield, low production costs and fast growth, can add vital extra profitability.

Equally renowned, the JSR Parent Gilt line includes the Genepacker 120, Genepacker Gold X and Genepacker 90. The latter is an indoor parent gilt, bred from genetically advanced JSR Large White boars and Landrace dam lines, and has earned an outstanding reputation for regular breeding and a long productive life.

The Genepacker 90
Consistently docile, it produces large litters of vigorous piglets that grow quickly and remain lean at the top grades. Compared to the average western European gilt, the Genepacker 90 produces an extra 4.6 pigs per year and has frequently reared more pigs than any other breeding company offering as verified by the independent Haus Dusse test.

With the support of a highly trained, professional team, JSR also offers an unparalleled array of technical products and services. These range from Prosperm Plus, a unique fertility enhancing boar feed supplement, to methodology to produce award winning pork with high meat eating quality.

JSR view superior genetics as the starting point for adding value throughout the pork supply chain, and are keen to establish mutually beneficial partnerships. Already involved in vertically integrated pork supply chains, including the M & S Muir Den range, JSR see this spirit of co-operation, combined with an unwavering commitment to technical excellence, as the key to their continued success – together with that of their customers – in the future.

When you choose a genetics supplier, what should you expect? If efficient, profitable pork production is your goal, the role of your genetics supplier is to provide you with a package that incorporates all elements necessary for profitability – both now and in the future:

The best swine genetics alone are not enough to keep you profitable. That is why Babcock developed the Closed Herd System. Encompassing genetics, closed herd technology, and cutting edge research in genetic improvement, Babcock provide you with the complete package you need to remain profitable, competitive, and confident – year after year.

The decision to close your herd will yield benefits virtually instantly. As your herd’s health status improves, performance will also improve.

The proven advantages of the Babcock Closed Herd System include:

- Reduced disease risk.
- Stable herd health and immunity.
- Overall reduced mortality.
- Superior growth rate.
- Higher feed efficiency.
- Lower cost of production.
- Maximum genetic progress.
- More pounds of pork produced per sow.
- Consistent, reliable cash flow.

The Closed Herd System provides steady genetic progress, stable health, and reliable performance. Babcock have helped pork producers worldwide implement the Closed Herd System, and will help you get started too. Their expert staff will help you make the transition to the proven closed herd security of the Babcock system. In today’s rapidly changing, competitive market every producer needs an edge.

The Babcock Closed Herd System has been proven effective, safe, and profitable – time and time again.

Their commitment to each producer is to supply the genetics and production system that will generate the greatest performance and highest level of profitability.

Their commitment to the pork industry is to be a positive leader, seeking innovation and improvement through science and research to ultimately provide producers, packers, and consumers worldwide with the highest quality pork.

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susan@babcockgenetics.com
Intensive selection for overall conformation

Hermitage Pedigree Pigs Ltd has been dedicated to specifically designing high performance, high health genetics for their customers since 1958. Operating from their base in Kilkenny, Ireland, they have developed specific lines to suit commercial conditions both at home and worldwide.

At Hermitage they operate two distinct breeding programmes producing both sire and dam lines. The Hermitage ‘Maternal Line Programme’ focuses on producing female lines. These animals are specifically bred and selected for female line traits such as numbers born alive, feed intake, growth rate, milking ability and weaning to service interval. In addition, all Hermitage lines are intensively selected for overall conformation (feet, legs, teats and general body conformation).

The result is a hyperprolific female line which has all the necessary attributes to ensure the optimum sow productivity and longevity in customers’ herds. The Hermitage ‘Terminal Line Programme’ focuses on producing the ‘Hylean’ lines. Hermitage Hylean genetics take the name Newsham do Brazil. Their nucleus in Brazil and operates under regions.

Iowa, USA but their nucleus farms in biosecure locations located outside the traditional production areas of America and Asia on a routine basis.

Newsham Genetics also owns a nucleus in Brazil and operates under the name Newsham do Brazil. Their

Newsham – taking genetics to a higher level

Newsham, a name long recognised as providing superior breeding stock, is the largest privately held swine breeding stock company in the United States. Newsham Genetics LC’s only business is supplying genetic resources to its customers.

Newsham Genetics is headquartered in the heartland of the United States hog market, Des Moines, Iowa, USA but their nucleus farms and multiplication herds are located in biosecure locations located outside the traditional production regions.

Newsham Genetics also owns a nucleus in Brazil and operates under the name Newsham do Brazil. Their research and development partner is Gentec, which Newsham Genetics and Rattlerow Seghers own jointly.

Through rigid biosecurity and innovative selection methods, Newsham Genetics has taken genetics to a higher level for high performance, high health genetics.

Their product offering includes:

- SuperMom parent gilt
  - The SuperMom is a parent gilt that combines the extraordinary and unrivalled prolificacy of the Nebraska Index Line with the outstanding growth-finish and carcase characteristics that the industry has come to expect from the Newsham genotype.

- SuperSire terminal sires
  - SuperSire terminal boar lines offer a diverse selection of terminal sires with a superior mix of genetic strengths.
  - Focusing on the primary performance characteristics of growth and lean, Newsham SuperSire terminal boar lines allow customers to develop the right pigs to increase their herd’s total market value through superior performance while creating a premium carcass.

lines are specifically selected for growth rate, feed conversion, feed intake, lean meat percentage, muscle depth and area, meat quality and overall body conformation.

The resulting genotype has been independently evaluated as the number one sire for producing economically important traits in Ireland and is also proving very popular with Hermitage customers in other international markets, in particular, UK, Spain and Greece.

In addition to Ireland, Hermitage now have international production and marketing bases in the United Kingdom, Spain, Germany, Italy, Greece and Cyprus and in the USA. Many other markets in Europe and Asia are serviced from the Irish and international production facilities.

Hermitage also implement an impressive research and development programme. This programme comprises of three main areas:

- Reproductive technologies – including embryo transfer techniques and frozen semen technologies.
- Genotype performance testing and evaluation – including all aspects of physical performance testing and meat quality.
- Molecular biology – including examination of the mitochondrial genome and parental imprinting of major genes in Hermitage lines.

Hermitage are supplying frozen semen to Greece, Cyprus, South America and Asia on a routine basis. Hermitage is committed to a breeding programme that produces high quality lean meat at the lowest possible production cost for their customers thus benefiting the consumers of pork products worldwide.

Hermitage is dedicated to increasing customer satisfaction through the receipt of enhanced services and product quality levels.

FaxNOW +353 36 7722286 info@hermitage.ie

Newsham Genetics has recently acquired AusGene International (AGI), a United States breeding stock company located in Gridley, IL, USA.

AGI was established by sampling germplasm derived from the Australian swine integrator, Bunge Meat Industries.

AGI provides Newsham Genetics an opportunity to utilise four unique populations for further product development within the Newsham Genetics breeding programme.

jrichmer@newsham.com
Boosting profits through genetic technology

PIC, the international leader in providing genetically superior pig breeding stock and technical support, maximises genetic potential for commercial pork producers. It combines quantitative sciences with leading edge biotechnology to develop non-GMO breeding stock; allowing major producers to breed healthier animals more cost effectively and provide higher quality products to consumers.

Operating for over 40 years, PIC’s success is attributed to its thorough concentration and significant investment in aspects of genetics, technology and health, as applied to the market.

PIC adopted an innovative method of calculating its breeding values in January 2005. Called Crossbred Breeding Values (CBV), these calculations now include information from crossbred siblings of the nucleus sires from real commercial environments in North America and Europe.

No longer is it necessary to assume that parents producing the best purebred animals in highly environmentally controlled facilities are also the best parents of crossbred animals in commercial facilities.

Use of performance data from the crossbred siblings will improve the accuracy of the breeding values by

The 327 is one of PIC’s market leading AI boars developed using PICmarq, delivering robust, lean growth efficiency.

Gene+ genetics satisfies all the markets

Specialists in pig genetics, Gene+ is aware of the diversity of the specific needs of each market. That is why they selected eight pure breeds and lines in order to offer a large choice of suitable products. This includes four female pure lines and breeds:

- French hyperprolific Large White
- French hyperprolific Landrace
- DKB. An original composite line based on Duroc and specialised as a female line.
- Tai zumu. The first sino-european line in the world which associates genes of the Meishan and Jaxhing Chinese breeds and the Large White hyperprolific genes.

The four male pure lines and breeds are:

- Pietrain
- The Large White sire line
- DRC. An original composite line based on Duroc imported from different continents.
- Musclor. An original composite line halothane negative and based on Pietrain.

The selection of these pure breeds and lines allows Gene+ to offer a complete range of products and give each subsidiary the possibility of adapting its supply to the local market with seven purebred or cross breed parental boars and three parental sows (a two-way cross, alfa+; a three-way cross, TOP and a sino-european sow, Youna).

Throughout the world, the Gene+ group sells more than 113,000 parental and grandparental gilts and boars each year.

Research and development in genetics and genomics, together with practical application focused on the needs of the market, will continue to make PIC products the market leading choice for the complete pork chain.

FaxNOW +44 1865 820187
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Gene+ genetics satisfies all the markets

The sino-european Youna sow shows high potential results on farm. The 25% top results are 14.1 total born, 13.3 live born and 29.2 weaned/sow/year.

relationship with international customers involves many types of partnerships based on various services:

- Genetic assistance to selection herds.
- Production of breeding pigs abroad.
- Delivery of parental or GP reproductive animals.
- Supply of semen from France.
- Assistance for adapting products to the market.

For the best integration of new genetic products, the Gene+ group proposes the most appropriate methods and tools including reproductive animals, semen doses, embryos.

The performances of Gene+ lie with the high quality of its research development too. Many programmes are involved in order to answer the breeders’ expectations as well as those of the supply chains.

The goals of other programmes are to prepare molecular and cellular genetics programmes for the future.

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cgodreau@genelplus.com
Hypor – the world’s local breeder

Hypor creates added value throughout the pork industry with localised and customised genetic solutions supporting profitable pork production worldwide.

A producer’s competitiveness is about making money at the slaughterhouse and saving money in the barn.

**Production efficiency.** Producers seek a robust easy to manage sow, able to wean large litters of heavy piglets with efficient feed conversion and fast growth rates resulting in uniform groups of slaughter pigs.

**Carcass performance.** Hitching the performance grid at the slaughterhouse delivers the highest return on investment. Slaughter pigs with Hypor genetics return premium payments to producers and deliver local pork quality concepts based on local traditions and consumer preferences worldwide.

**Biotechnology parameters.** All Hypo terminal sires are Halothane free (except BeauPi) and RN-gene free with boars being monitored and selected on favourable marker genes like IGF-II, HFABP and others related to favourable carcase and meat quality.

Hypor provides an impressive portfolio of terminal sires. Differentiated sirelines combined with a uniform hybrid sow deliver solutions for a wide range of markets from the extremely lean markets of Germany and Belgium to the highly marbled meat markets like Japan. At Hypor they tailor their products to succeed.

Hypor genetics return premium pay-offs. Slaughter pigs with their pipeline is an engine for diversification and further flexibility in producing pigs to best meet production system and market demands.

Continental European origins, allowing the customer a variety of options related to favourable carcase and meat quality.

Hypor provides an impressive portfolio of terminal sires. Differentiated sirelines combined with a uniform hybrid sow deliver solutions for a wide range of markets from the extremely lean markets of Germany and Belgium to the highly marbled meat markets like Japan. At Hypor they tailor their products to succeed.

**Choice genetics from Monsanto**

Monsanto Company is a leading global provider of technology based tools and agricultural products that improve farm productivity and food quality. The heart of Monsanto’s research and development is their product pipeline.

Their pipeline is an engine for discovering and developing the next generation of commercial products. This research platform is aimed at providing benefits to the primary stakeholders of agriculture.

The company’s swine division, Monsanto Choice Genetics, is a leading provider of swine genetics to the pork industry, improving productivity, increasing profitability, and enhancing meat quality.

Monsanto Choice Genetics maintains five pure maternal lines of North American, English and Continental European origins, allowing the customer a variety of options to best meet production system and market demands.

Monsanto Choice Genetics females have demonstrated their ability to produce larger litters, with lower sow cull and mortality rates than other genotypes, under a wide variety of management systems in the United States and Canada.

The three Monsanto Choice Genetics terminal sire lines (derived from Pietrain and Duroc lines) allow further flexibility in producing pigs designed to best meet the needs of the targeted packer or consumer market.

All lines are selected using a combination of BLUP and Marker Assisted Selection. The Monsanto Choice Genetics marker programme is based on a combination of a whole genome scan utilising thousands of individual markers spread densely across the entire swine genome, and the experience Monsanto has gained through the application of genomics in the area of crop improvement.

The use of genetic markers has allowed unprecedented improvements in performance for Monsanto Choice Genetics customers. Each line, maternal or terminal, is selected on a unique index, and new traits and markers are constantly being considered for inclusion in the breeding objectives.

The basis of the Monsanto Choice Genetics breeding programme in customer herds is the Core Matrarch programme.

This proprietary system is based on proven genetic principles and reduces risks to animal health within a pork production system, while minimising genetic lag and allowing flexibility in the market animals that are produced.

Weekly reports are sent to the client farms to help with breeding, culling, and selection decisions. Because of the importance of high health, all Monsanto Choice Genetics nucleus and multiplication farms have been relocated in remote areas of Canada and the United States over the past five years. A carefully planned and implemented system monitors the health of the animals on these farms.

Monsanto Choice Genetics combines the power of a world class research organisation and the practical experience gained over many years in the swine genetics business to offer customers the opportunity to increase efficiency and maximise profits.

**Table 1. Reproduction targets.**

<table>
<thead>
<tr>
<th></th>
<th>Genex Duroc</th>
<th>Rock-Y</th>
<th>Multi-Y</th>
<th>Body-Y</th>
<th>BeauPi</th>
<th>Japanese AB</th>
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<td>13.0/13.5</td>
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<td>2.85/2.62</td>
<td>3.0/2.80</td>
<td>5.0/6.0</td>
<td>6.5/8.0</td>
<td>235/250</td>
</tr>
</tbody>
</table>

An EBX terminal sire (Pietrain).