January 2017

BBARD



DEAR READERS, CLIENTS AND PARTNERS.

Welcome and Happy New Year to you all!

The end of 2016 was an exciting time for the whole Hubbard family. It is undoubtedly marked by the agreement concluded with the company Yisheng in China, and also by the official launch of the communication campaign with Groupe Grimaud, "Genetech By Grimaud": two important topics detailed in this edition.

The avian influenza virus, still heavily present in Europe at the beginning of 2017, might hinder deliveries to your facilities due to import bans. However, the more widespread these viruses become, the sooner the international community will be obliged to change the current rules of operation, as these are no longer appropriate to the current situation. This is another area in which we are working very hard to meet the needs and expectations of your markets.

I, along with the entire Hubbard team, therefore wish you all the best for 2017!

Olivier Rochard CEO Hubbard



During a special Press Conference, held on Friday November 25th, Shandong Yisheng Livestock & Poultry Breeding Company Ltd. ("Yisheng") announced that Yisheng and Hubbard have reached an historic agreement for the supply of Hubbard Great Grand Parent stock.

he first Hubbard GGP deliveries have already successfully been placed in China on the facilities of Yisheng, China's largest broiler Parent Stock supplier with a volume of about 17 million Parent Stock delivered per year.

This deal is part of Yisheng's major strategic move to safeguard their customers and their own businesses by minimising supply disruption to their deliveries of Grand Parent stock caused by embargos imposed on regions traditionally used for supply, such as the USA and the EU due to HPAI. China banned poultry breeding stock imports from the United States in response to the December 2014 bird flu outbreaks, quickly followed by further bans on Europe for the same reasons. Now nearly two years later shortages of breeders is causing real concern about the potential knock on effect for supplies of chicken meat in the world's second-largest poultry market. Until recently the Chinese broiler market had been growing at a

significant pace including the successful development of numerous fast-food chains.

Hubbard is well-known to the Chinese market and successfully has been shipping Grand Parent stock to China since the early 1990's. Over the years Hubbard gradually increased its business with a small but dedicated team through a philosophy of close collaboration, training and customer service. As Hubbard's reputation grew at both breeder and broiler level, a number of major companies started to take interest in Hubbard's performance by increasing their Parent Stock placements.

The recent supply disruption caused by the Avian Influenza bans gave Hubbard and Yisheng the motivation to devise an alternative approach to meeting the Chinese market needs for breeding stock through the development of a series of state-of-theart Great Grand Parent facilities from which Yisheng will be able to source their Grandparent needs.



Hubbard is a company of



IN SHORT



Your next Rendez-Vous with HUBBARD:

15th - 17th March 2017 VIV ASIA – Bangkok – Thailand

Hubbard Premium Technical Meeting **December 7-8, 2016**



Hubbard teams from all over the world met eview and a global overview of performances and technical progress.

The very good performance levels for both PS and broilers and the ongoing further nprovements were exchanged. Hubbard continues to do everything to maintain a high level of customer satisfaction, also for the

Hubbard launches a New Yield Male: Hubbard M22



pplications of new technologies open new launches a new yield male to complete the Hubbard range: Hubbard M22.



2nd Hubbard Premium Forum June 12-14, 2017 in Porto – **Portugal**

After an overwhelming first edition held in The Netherlands in 2015, Hubbard will gather its main Premium Parent Stock customers for the second edition in Portugal in June 2017

More information will be shared through the



This technology has greatly accelerated the company's genetic advances of its products.

These advances stem in particular from the real cross-cutting synergy which exists between Groupe Grimaud subsidiaries on both sides of the Atlantic. Today the group has four scanners in

How does it work?

The scanners we use are similar to those employed by the medical profession. The principle is identical: the different shades in the image reflect the degree of absorption of the X-rays: each tissue of which the scanned object is composed reacts differently to X-ray exposure. This makes it possible for us to identify the type of tissue of which the animal is composed: muscle, viscera, fatty tissues, etc.

continuous use: two in the USA and two in France.

In addition, thanks to a powerful algorithm, the scanner can be used to analyse several animals and to automatically calculate the different proportions of which each animal is composed. This technology is not intended to replace traditional selection methods, but it

enables us to complete and refine the information obtained on each animal

Key benefits of the scanner:

The introduction of this technology into our selection work brings three key benefits:

1. Greater precision

Between selection by conformation scoring and final results, we obtain a correlation rate of 66% whereas the correlation between the results obtained using a scanner and actual breast meat yield is 93%. Animals selected in this way provide the desired intrinsic qualities to a high degree.

2. A non-destructive technology

Without slaughtering the animal, and ensuring its welfare, it is possible for us to obtain information on characteristics that we could not otherwise have obtained without cutting up.

3. Measuring new characteristics

The scanner makes it possible to study new selection criteria and to analyse their development

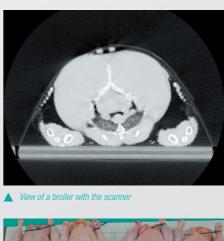
complementing the already existing information.

After three years of use within the R&D programme maintain and improve Hubbard's advances in

precisely over the course of time, thereby

Results are already evident in the field

across the full range of conventional and Premium Hubbard products, the results are starting to be seen in concrete form in the field, and will be accelerated in 2017. In the first instance, there has been a significant increase in meat yield results. Use of the scanner has also made it possible to



terms of leg quality, foot pad lesions and hock

Furthermore, we are now able to tell you about an important development for the Hubbard male range: the new Hubbard M22 male, selected using this tool. If we compare its performance with the other males we can observe results

of 1.5% additional yield on average, while also

Ultimately, all these benefits make it possible to

accelerate genetic advancement and reinforce

Hubbard's commitment to supply its customers

retaining the desired meat qualities.

with solutions suited to their needs.

burn, as well as meat quality.



USA: HUBBARD LLC'S ALABAMA PROJECT



In March 2015, Hubbard LLC hosted an open house located in its new complex in the isolated region of North East Alabama. The initiative was to expose Hubbard to the community, the state and to solicit perspective growers for Hubbard LLC future production requirements.

Since then, the selection process of Hubbard's new complex in Alabama has paid positive dividends on all fronts:

- The bio-security has been reinforced all around the site and today is superior to the most drastic sanitary rules.
- Special automated nest design has enabled us to collect a stronger quality of hatching eggs, thus enhancing progeny performance.
- The Hubbard Production team has done a very good job in the training and educating of our new growing farmer base.

Hubbard LLC's key performance indicators prove the local GP production results are largely exceeding targets.

FUTURE VISION OF THE SITE

Hubbard LLC currently has 2 additional farms with 4 houses at various stages of construction. This will bring the total farms to 5 with each farm consisting of 2 houses. The goal is to build another 4 to 6 buildings, which will give Hubbard a total GP capacity of 7 to 8 farms with a total of 14-16 houses. Hubbard LLC prepares the future with continuous efforts and investments to keep supplying the customers with high quality chicks.



GENETECH BY GRIMAUD? YOU MAY BE WONDERING EXACTLY WHAT THIS ENTAILS

For several years, Groupe Grimaud's selection companies have been developing the application of new innovative technologies to their multi-species animal genetics lines, and the results can now be seen in the field. We have therefore decided to produce a communication campaign on this multi-technology disruptive innovation strategy undertaken within the group. This communication campaign is entitled "Genetech By Grimaud", the first part of which is based around the scanner imaging technology. Watch this space: in the course of 2017 we will inform you about advances related to the use of other innovative tools.

In the meantime: come and visit us at the different exhibitions to take a virtual tour of our scanner room, or check out the website dedicated to the application of new technologies at Groupe Grimaud: www.genetechbygrimaud.com/en/.

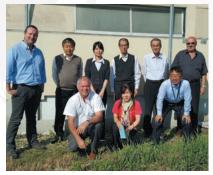
Hubbard Japanese Customer ISHII on European Premium Study Tour

End of the last year, Hubbard welcomed a delegation from Ishii, Hubbard Japanese customer to Europe.

After a brief visit to the United-Kingdom to study the slow growing products they moved to The Netherlands. The main objective was the developments of the market both for eggs and poultry meat. Of particular interest was the slower growing chicken market (like the "Chicken of Tomorrow") and the influence of the consumer and supermarkets in the significant continuing development of this market segment.

The production of "antibiotic free chickens" was also part of this study tour.

The group finally travelled to France to visit the Hubbard Premium Breeding Centre. The Hubbard team gave the Japanese visitors an update on the most recent developments of the Hubbard Premium genetics, the French market and its products requirements. •



The group during their visit to the Hubbard Premium Breeding Centre with Frédéric Fagnoul — Hubbard Premium R&D Manager here on the left.

Indonesia: Karya Indah Pertiwi chooses to grow with Hubbard



Karya Indah Pertiwi ("KIP"), one of Indonesia's leading poultry companies based in Tasikmalaya, West Java, are expanding their Grand Parent operation with Hubbard.

Currently producing 150,000-160,000 broiler chicks per week, initially for internal placement but rapidly expanding sales to third parties, KIP are increasing its capacity to cater to the significant growth being seen in external sales. After several years of close collaboration in designing new farms and bringing technical support, KIP confirmed Hubbard as being the business partner and breed of choice, offering consistent breeder performances and a broiler ideally suiting the Indonesian environment. • Here on the left picture: the "KIP" Family.

China: Yisheng's Technical team visited Paragon in Bangladesh

Last October 2016 Paragon Agro Ltd, a Hubbard Grand Parent distributor and one of the leading broiler meat producing companies in Bangladesh, hosted a technical visit for Shandong Yisheng Livestock & Poultry Breeding Company Ltd. ("Yisheng"), China's largest broiler Parent Stock supplier who recently became Hubbard's biggest partner in China.

The team of Yisheng had the opportunity to visit several farms together with the Paragon team, to discuss about management and to review the performances of the flocks. Paragon's technical staff was very pleased to be able to share the positive experiences of the Hubbard Classic Grand Parent, Parent and commercial stocks being used successfully by their company for over twenty five years now. •



From left to right: Dr. Hasan (Paragon GP Manager), Mr. Kevin Yuan (Hubbard Technical Manager China), Mr. Zhang Xiuming (General Manager Yisheng), Mr. Din Bing (Technical Manager Yisheng) and Mr. Ehsanul Kabir -"Mosru"- (Senior Technical Manager Hubbard).

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28 THE PEOPLE BEHIND HUBBARD



Let's meet with: Thomas de Bretagne, Director R&D Hubbard

Thomas de Bretagne recently has been appointed as Hubbard's new R&D Director. Under the supervision of Olivier Rochard, CEO of Hubbard, Thomas will focus on continuing the measurements routine carried out today by the Hubbard R&D team, while at the same time intensifying the integration of new technologies into the Hubbard selection programs. "New technologies such as RFID, sensors, imaging technologies,

genomics, etc. are paving the way for new information and greater accuracy within the breeding program". This work which is carried out transversely within Groupe Grimaud under the umbrella of Genetech by Grimaud will not cease to serve the objective of "providing products of very high quality matching the needs of Hubbard's current and future customers."

Welcome to: Victor Lesigne (Production and Technical Services Engineer).

