

HUBBARD



ON THE FRONTPAGE - *by Olivier Rochard - MD Hubbard*

Hubbard keeps its commitments

In our last newsletter, I reiterated our firm commitment to invest more in our genetic selection to supply you with even more efficient birds. The support of the Aviagen Group is also essential to succeed with what we committed ourselves to: to satisfy your specific needs, whether you are a Hubbard customer, business associate or employee.

The launch of our new "Hubbard Efficiency Plus" female breeder, available as Parent Stock since this summer, is a real good example of this approach. This newsletter is largely devoted to it. Surely our teams will tell you in detail more about this new product and how Hubbard reinforces its place in the conventional market.

The Hubbard Efficiency Plus is now our only conventional female breeder, marketed all over the world. Adapted to markets where Hubbard was already strongly present, we kept what was the strength of our broilers: robustness, adaptability to harsh environmental conditions, combined with good growth and greatly improved feed conversion rates and meat yield. The number of chicks per hen housed, already excellent with the Hubbard Classic, will also be higher with the Hubbard Efficiency Plus.

This Spring, Hubbard also announced significant improvements in the broiler performances of our Premium crosses using the yellow-skinned Conventional male and the ColorYield male. Without changing the growth rates, nor the benefits of robustness and animal welfare that are the important traits of these chickens, the industry

will also benefit from higher meat yields obtained with significantly lower feed conversion rates.

Also for hatchery key traits we are seeing significant gains thanks to our balanced selection and genetic progress. Our recessive Hubbard Premium female breeders Redbro and JA57Ki show a big improvement in productivity with a gain of several chicks per hen housed with the parent stock deliveries as from the beginning of this year. All this good news concerning our Premium product range was firstly announced to the many participants of our 3rd Premium Forum that took place in Barcelona last May. We can already inform you now that during the next edition, in 2021, we will celebrate Hubbard's 100th anniversary. No doubt it will be an even more international and unforgettable event.

Hubbard is fulfilling its commitments by launching the above-mentioned enhanced or new products to meet the demand of the consumers and broiler industry. Our willingness to invest even more in the genetic selection of our breeds to continue to respond to your needs remains intact, while maintaining a large product range to satisfy the different markets around the world.

www.hubbardbreeders.com

IN SHORT

Hubbard launches its new communication campaign to introduce the Hubbard Efficiency Plus



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Hubbard
YOUR CHOICE, OUR COMMITMENT

IN SHORT



Your next rendez-vous with Hubbard:

02 - 03 October 2019

VIV Poultry Africa 2019 - Kigali - Rwanda

03 October 2019

Pluimveerelatedag - Veenendaal - Netherlands

07 - 10 October 2019

Sipsa-Filaha - Algiers - Algeria

08 - 11 October 2019

Latin American Poultry Show - Lima - Peru

17 - 19 October 2019

Agrena - Cairo - Egypt

26 - 28 November 2019

Dawajine - Casablanca - Morocco

28 - 30 January 2020

IPPE - Atlanta - United-States

Latest Hubbard Technical Documentation:



Visit now the Hubbard Technical Library of the Hubbard website and download all Hubbard documentation on the **Hubbard Efficiency Plus** breeder and broiler



FOCUS ON

BEHIND THE SCENES, HUBBARD'S LABORATORY AT THE HEART OF ITS ANIMAL HEALTH STRATEGY

One of the pillars of Hubbard's Global Quality Strategy is the delivery of a healthy chick all around the world. Hubbard's laboratory plays an important role in that perspective. Its main purpose is to ensure that Hubbard's sanitary standards are met for our internal monitoring and our customers' quality requirements. The team of 5 people is led by Ms Elisabeth Cariou, laboratory manager. Let's have a closer look at what is done:

1. The laboratory team ensures that the flocks and hatcheries are compliant with the veterinary health monitoring schedule

A strict sampling plan is established for each flock placed (whether in rearing or production), and the hatchery. Making sure the right sample is taken and sent at the right time is the first task. Given the number of flocks, the density and the variety of samples, the workflow is optimised in such way that the team can manage 10,000 Salmonella samples, 50,000 tracheal swabs and 70,000 blood samples per year. From the preparation of the full sampling kits for each flock, to the overview of sample collection in farms, nothing is left to chance. Any disruption from the expected schedule is subject to a specific procedure to assure the high-quality level of sampling. Mandatory monitoring (e.g.: Salmonella and Influenza) are performed by a third accredited party or official laboratory. Hubbard's laboratory also ensures the operational communication with independent third-party laboratories. In case a non-conformity is being detected, the veterinary team is immediately informed.

2. For exports, Hubbard's laboratory team ensures that the flocks are compliant with the specific analysis required by the country of destination

The routine health monitoring scheme of the flocks covers most demands from third countries. However, there can be specific requirements from

a given country which will lead to a dedicated sampling session. Hubbard's laboratory optimises the workload in the farms by combining routine and export sampling schedules, as some sessions can be particularly demanding.

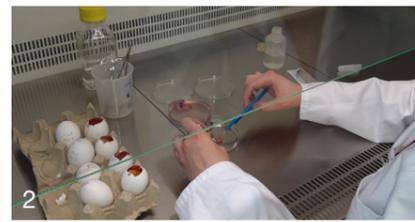
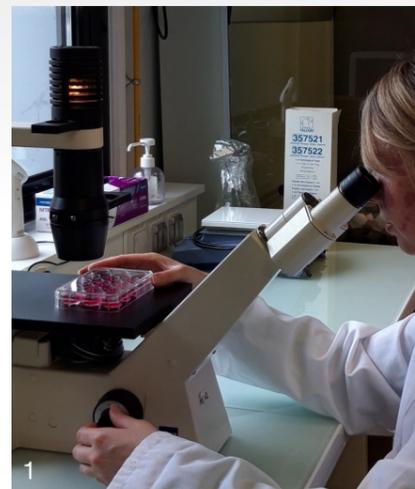
3. Hubbard's laboratory team performs analysis internally

As qualified laboratory staff, the laboratory team can perform multiple analysis internally: bacteriology, PCR, serology and cell culture. Bacteriology covers hatchery hygiene. PCR is dedicated to MG/MS surveillance (picture 4). The serology tool is used to assess all flocks' immunity and vaccination practices, or as an aid for clinical investigations. Finally, cell culture is used for the pedigree stock surveillance program on Avian Leukosis Virus (pictures 1, 2 and 3).

4. Health certificates are elaborated at the laboratory

Analysis compliance and documentation are two of the key points to ensure day-old chicks can actually leave the country and be delivered to wherever in the world. The recognised expertise of the laboratory team on these points ensures a high level of proactivity, always required when dealing with exports. Any issue coming up is immediately seen with the Hubbard veterinarians.

Don't hesitate to ask for a visit to the lab on your next trip to the Hubbard head office in Brittany, the team will be more than happy to welcome you and answer your questions! •



HUBBARD, READY FOR TODAY AND THE FUTURE

With its motto "Your Choice, Our Commitment," the Hubbard team is proud to offer products that respond to specific customer needs worldwide for the Premium as well as the conventional market. It is Hubbard's commitment to offer both conventional broilers and slow(er) growing chickens. Hubbard's genetic programs are designed and dedicated to meet the growing challenges of diverse market needs by providing efficient, healthy, high-quality and tasty chicken meat for the world's growing population.

Strong R&D base

For years Hubbard has invested major sums of money in R&D to implement ongoing improvements in their breeding programs. After Hubbard was acquired by the Aviagen® Group in February 2018, an additional \$10 million was invested to advance the Hubbard conventional breeder research and development base in Walpole, USA and €8 million in its Premium breeding centre in France.

These projects involve adding, expanding and modernising the pedigree farm base and hatcheries with state-of-the-art technology and equipment. The effort profits Hubbard customers by a boost in performance, health and welfare of their broiler breeder lines.

To increase the accuracy of genetic selection methods, Hubbard uses the latest technology and techniques to further progress bird performance. An example is advanced 3D imaging to improve selection for skeletal health, meat yield and quality. Also, Lifetime Feed Conversion Ratio (LFCR) technology is being implemented. This is a modern method to observe FCR and feeding behaviour during a bird's lifetime in order to select birds that are the most efficient in converting feed to body weight. These additional gains in FCR made in recent years means that less feed – the single highest cost in poultry production – is needed to produce healthy and productive birds.



Feed station at one of Hubbard's R&D centres

Hubbard Efficiency Plus, the new standard for Efficiency

In August 2019, Hubbard officially launched a new conventional female breeder, the Hubbard Efficiency Plus, which is commercially available to customers as from the middle of this year. It is the result of long-term research and development strategy initiated several years ago.

"Our strategy of developing one conventional

female has enabled us to increase our focus on specific selection criteria to bring better performance to customers faster," says Olivier Rochard, Global Managing Director of Hubbard. "It is through this long-term strategy, combined with R&D investments and implementation of advanced technologies that has resulted in the Hubbard Efficiency Plus, the new standard in efficiency."

The Hubbard Efficiency Plus represents a perfect blend of advanced breeder and broiler performance. Customers will benefit from high egg and chick numbers, robust broiler growth rate with good health, and a high output of good quality saleable meat. It also adapts well to climatic and nutritional challenges. Additionally, its feed efficiency results in economic advantages for producers and sustainability for the environment.

BREEDER LEVEL		
Bodyweight at 20 weeks	2 345 – 2 425 g	5.16 - 5.34 lbs
Bodyweight at 64 weeks	4 080 – 4 140 g	8.98 - 9.11 lbs
TE/HH at 64 weeks	185.1	
HE/HH at 64 weeks	177.8	
Average hatch at 64 weeks	84.5%	
Chicks/HH at 64 weeks	150.3	
Feed consumption, incl. males	0-64 weeks	20-64 weeks
Per total egg produced	310 g / 0.682 lbs	271 g / 0.596 lbs
Per hatching egg produced	323 g / 0.711 lbs	282 g / 0.620 lbs
Per chick produced	382 g / 0.840 lbs	334 g / 0.735 lbs

"The Hubbard Efficiency Plus female breeder brings together the traits the industry is looking for in a single multi-purpose bird, with performance efficiency and economic efficiency at all levels of production. Focusing on one conventional breeder female also helps to secure the supply of quality breeding stock to our customers around the world," ads David Fyfe, Global Sales & Marketing Director of Hubbard.

BROILER LEVEL			
AGE	BODYWEIGHT (as hatched)		FCR
28 days	1 604 g	3.53 lbs	1.34
35 days	2 269 g	4.99 lbs	1.48
42 days	2 948 g	6.48 lbs	1.62
49 days	3 606 g	7.93 lbs	1.76
56 days	4 209 g	9.26 lbs	1.90

"With several options in our R&D pipeline, we are already prepared for future market developments in the broiler industry", says Frederic Fagnoul, head of the Hubbard R&D department. •



FROM OUR CUSTOMERS

Kenya: Avipro East Africa Ltd

For more than 25 years, Avipro has been exporting Hubbard chicks to Madagascar and East African countries (Uganda, Tanzania, Kenya among others) from its Grandparents' farms in Bonne Veine, Mauritius. Avipro's international development strategy beyond Madagascar is firmly focused on Africa.

Thus in 2012, the Avipro East Africa Ltd. (A.E.A.L) company was legally constituted in Kenya with the aim of building a Grand Parent (GP) site following the Mauritian model. Since then the search for sites where the A.E.A.L. operations could be established began.

The openly declared ambition is to offer a local service and the best product to the regional farmers, particularly in Ethiopia or Rwanda which not part of their focus area before. The long-standing relationship with Hubbard will ensure the distribution of Hubbard products in a number of East African countries.

Finally, a rearing and production farm as well as an existing hatchery were identified in Nakuru, Kenya's fourth largest urban city, and is now at the heart of the project of renovations/renewal.

In 2016, after long-term work by the Avipro team led by Robert Soupe (Export Manager Avipro, now retired) on customer development in East Africa, Frederic Bardothier (Operation Manager AEAL) flew to Kenya to launch the construction work.

At the end of 2018, the renovation of the site began, and 6 months later, the first rearing farm was able to receive the first Hubbard GP delivery, making this site the only farm of its kind in Kenya, where about 15 local people have been trained and hired.

The hatchery must be completed by September 2019. With the support of Hubbard for the implementation of strict biosecurity rules, Avipro is committed to ensuring the excellent health status of the chicks that will be produced and delivered to its customers, by the end of 2019.

The great of adventure in the African poultry industry continues... •



Standing up on the left: Frédéric Bardothier, Operations Coordinator AEAL, behind him: Erick Mwanzi, Farms Supervisor. Kneeling on the left: John Dantier, Operation Coordinator AEAL ; standing up on the right: Paul Kabalko, Hatchery Supervisor AEAL, together with the staff present on the day of the picture.

China: Hubbard Efficiency Plus launched at Yisheng's 30th anniversary celebration

Shandong Yisheng Livestock & Poultry Breeding Co. Ltd, one of the top broiler breeder companies in China, welcomed more than 800 Parent Stock and broiler customers from all over China at its 30th anniversary celebration held on the 10th of August. During this well organised event Hubbard introduced its latest offering for the conventional broiler market: the "Efficiency Plus Female".



Part of the attendees at Yisheng's 30th anniversary celebration

Olivier Rochard (Hubbard MD), Frederic Fagnoul (Hubbard R&D Director), Yann Thoueille (Hubbard Technical Director Asia) and Hubbard's Chinese sales and support team presented the background and details of this new product. All participants were delighted about Hubbard's move to the next generation of conventional product. This product is the result of additional investments in R&D bringing genetic progress to a higher level with more efficient breeders and broilers supporting Hubbard customers' businesses. Using the latest technologies and knowledge certainly has speeded up the results and allowed Hubbard to launch its new product with improved performances at each level of the value chain. Mr. Cao (Chairman of Yisheng) announced that he has a lot of confidence in the new product as their first GP flock of Efficiency Plus which was placed end of 2018 performs well and the first parent stock are now delivered to Yisheng's customer base.

To officially launch the Efficiency Plus in the Chinese market, Mr. Cao, Olivier Rochard and some key guests scattered the golden sand out of the bottles onto the screen below them which then showed the Chinese name and the pictures of the new product. In Chinese tradition the golden sand symbolises wealth, indicating fortune and in this case the initiation of a profitable project.



From left to right: Mr. Wen Jie (Chief Expert of the Chinese broiler industry), Mr. Tang Jianjun (Director of Shandong Animal Husbandry Office), Mr. Wang Junxun (Director of Veterinary Office of the Chinese Ministry of Agriculture), Mr. Xia Xianzhu (National academic of animal husbandry), Mr. Wu Changxin (National academic of animal husbandry), Olivier Rochard (Hubbard MD), Mr. Cao Jisheng (Chairman of Yisheng)

The celebration of Yisheng also highlighted the strong link between both companies. Yisheng and Hubbard have worked very closely together during the tough times of shortage of supply of breeding stock due to the HPAI situation around the world. Yisheng started to cooperate with Hubbard in 2015 when they imported their first Hubbard Grand Parent flock from France. Since then Hubbard's presence in China has been increasing very rapidly. Now in 2019, Hubbard has become one of the preferred suppliers in the Chinese market. This is a great success for Yisheng and Hubbard. The introduction of Hubbard Efficiency Plus is another milestone in the close collaboration between Hubbard and Yisheng, delivering the new standard for efficiency to the Chinese broiler industry. •

Brazil: Hubbard Efficiency Plus successfully introduced at SIAVS

During the last week of August Hubbard do Brasil welcomed its customers at the International Poultry and Pork Show (SIAVS), the largest Brazilian Poultry and Pork event which is held every two years. Hubbard do Brasil, has been delighted to introduce the latest Hubbard conventional female breeder, the "Hubbard Efficiency Plus", to the local market during this major event.

The Hubbard Efficiency Plus has been officially launched worldwide during the week of SIAVS and is available as from this summer. In Brazil, mated with the Hubbard M77 male, the Hubbard Efficiency Plus will be able meet the needs of the Brazilian and surrounding markets. It will be able to adapt well to the local conditions, and its efficient and consistent performance throughout the value chain will bring economic advantages to all the producers.

The launch of the new breeder obviously attracted a lot of genuine interest from the whole poultry industry. SIAVS was a real success for Hubbard! •



Part of the Hubbard do Brasil team during SIAVS 2019

Successful 3rd Premium Forum confirms Hubbard's leadership



On May 20-22 Hubbard organised the 3rd Hubbard Premium Forum for its Premium products customers. The biennial event, this year held in Barcelona, offered nearly 180 attendees from 34 countries around the world an excellent chance to learn more about the major investments and progress in the Hubbard Premium R&D, the many (new) developments in this market segment and to get the latest updates on field results and management advice. The meeting also allowed everyone to enlarge their network within the growing Hubbard Premium customer base.

During two morning sessions internal and external speakers focussed on different aspects of the premium products and markets. Analysed under different prisms, it is clear that Premium developments around the world bring together strong commitments that give priority to quality, animal welfare and sustainability.

At the end of the forum it was clear to all attendees that as a global leader in this segment Hubbard offers the largest range of Premium parent females and males to be able to respond in an efficient way to the growing

differentiation of the broiler markets ranging from organic, Label Rouge, 81-day free range, 56-day free range, certified, RSPCA Assured, 'Beter Leven', 'Chicken of Tomorrow' and the expected developments driven by 'GAP' in North America and 'Broiler Ask' in Europe.

Hubbard takes the premium market segment very serious as it is a key objective of Hubbard to be "the natural choice to bring the taste with a difference to more people in the world!"

Appointment is fixed at the next edition in 2021, a great opportunity also to celebrate the 100 years of Hubbard. •

HUBBARD PREMIUM
the natural choice!

Peru: first international seminar on Premium Broilers

Grupo ISAMISA, owned by the Alejo family, organised a coloured broiler seminar entitled "Primer Seminario Internacional Sobre Pollos de Color" in collaboration with Hubbard LLC and Laboratorio Ilender (a Peruvian veterinary company). The event took place in Lima's Chamber of Commerce on May 13th and was attended by more than 60 customers, some of them included in the picture below.

Juan Callupe and Rocky Ferrer of ISAMISA gave presentations on how to feed and how to manage young coloured broilers, Carlos Solano (Ilender) on Use of Disinfectants and Biosecurity and Arnoldo Ruiz (Hubbard) on Alternative Production Systems. At the end of the seminar there was a round table with questions and answers with much participation from the audience. •

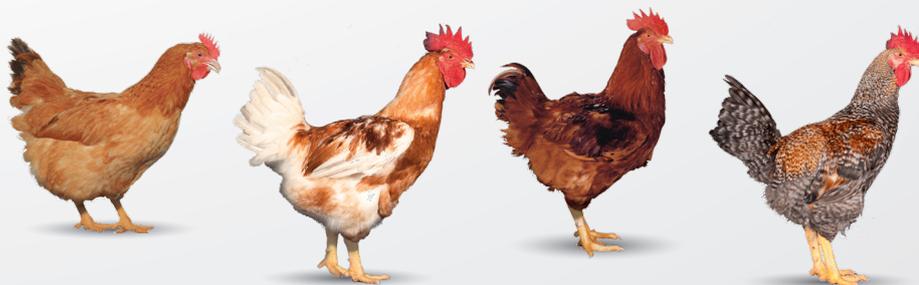


Dominican Republic: successful delivery of Hubbard Premium birds on the island

On August 22nd, Mr. Maury Diaz received the first Premium breeder flock ever sold in the Dominican Republic. The chicks arrived in excellent condition and Mr. Diaz was pleased with the quality of the delivery.

In his project he plans to receive breeder flock every 16 weeks and for this he has acquired a well isolated ranch where facilities are being built (see pictures below). This project has been built with the support of Hubbard's sales representative "Fabrica de Alimentos Animales Lahoz" (FALAHZOZ) giving customer support to several other projects on the island.

Mr. Diaz' intention is to produce a differentiated product, most probably a Free Range type broiler, with his own private brand, using the Hubbard Redbro M female mated with the ColorYield, Redbro and Tricolor males. His effort represents the first serious commercial intent to produce a differentiated broiler on the Island. •



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THE PEOPLE BEHIND HUBBARD

Olivier Behaghel: towards new horizons and new varieties!

Olivier began his career as Market Manager in 1983. Following the company movements of Shaver, ISA, Hubbard-ISA and finally Hubbard, he has been Director of the ISA subsidiary in Latin America, Executive Vice-President of Shaver in Canada, Vice-President EMEA for Hubbard-ISA (creating the Polish subsidiary) and finally Director Development for Hubbard (creating the Brazilian subsidiary and setting up new distributors in Europe and the Middle East). During these 36 years of

work in the various companies of our group, he has travelled many kilometres to sign and follow up the contracts of distributors around the world. Olivier has also been a caring manager and has supervised several international teams within the subsidiaries, but also the planning and sales department. In recent months, Olivier has gradually passed the baton to the new teams to ensure a good transition.

On behalf of all Hubbard teams, we thank him for his many years of involvement and wish Olivier and his family the best on this new route of vineyards and grapes! •