

# POULTRY NEWS

2/2014

## TECHNICAL

New Data Recording and  
Flock Management Service

## CUSTOMER PROFILE

Bangladesh

## EVENTS

LOHMANN School  
and Hatchery Course



## STATUS-QUO ON LOHMANN GENETICS



**LOHMANN**  
TIERZUCHT

## *“Investing in the future”*



*Dear valued customers and partners,*

*We are constantly searching for further optimization of our breeding program and also improving our distribution network from day to day.*

*Comprehensive and precise performance testing together with innovative marker-based selection tools are the major priorities in our daily work.*

*Additional housing spaces with various enrichments situated in different regions of the world have increased our data input in terms of volume and quality. Sequencing the entire genome of our founder males in different lines have gener-*

*ated a new source of data for a more accurate and cost-effective selection. Tools like these are also being used in other farm species and have proven their efficiency.*

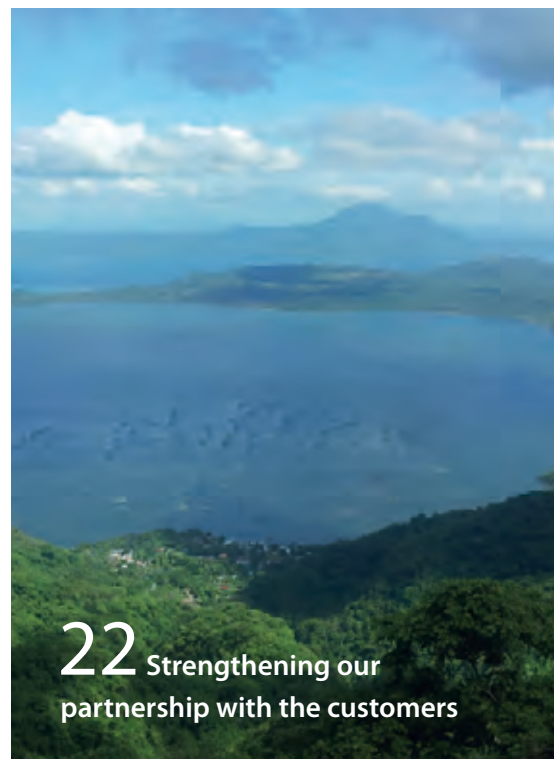
*The close collaboration with scientific institutes and other non-poultry based breeding companies have generated a lot of synergies and very valuable input for our daily work.*

*The latest achievements and customer reports can be viewed with the aid of QR codes and hyperlinks to download PDF files for further reference even on your mobile devices when you're on the go. With the integration of these tools, we are doing our best to keep pace with the latest technologies and developments in order to further improve the ecological and economic characteristics of our chickens. Look out for the QR codes and hyperlinks which are active in selected articles.*

*We hope that you will find this edition of our Poultry News very informative.*

*Yours faithfully*

*Prof. Dr. Rudolf Preisinger*



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**4** Status-quo  
on LOHMANN Genetics



**11** Mash feed  
for layer type breeds

## COVER STORY

Status-quo on LOHMANN Genetics ..... **4**

## TECHNICAL

New Data Recording and  
Flock Management Service ..... **6**

Review of different day-old chick  
quality parameters in  
layer type breed (1 Part) ..... **8**

Mash feed for layer type breeds ..... **11**

Marek's Disease ..... **12**

## CUSTOMER PROFILE

Bangladesh ..... **14**

## SPECIAL FEATURE

Egg farming in Canada (Situation  
in the egg production industry) ..... **16**

## EVENTS

Lohmann School  
and Hatchery Course ..... **18**

Japan Layer K.K. Seminar ..... **19**

VIV Utrecht ..... **20**

Strengthening our  
partnership with the customers ..... **22**

## DIGITAL FEATURES

QR codes and hyperlinks ..... **23**



# STATUS-QUO ON LOHMANN GENETICS

At this time, we are in the process of increasing our capacities for the testing of pure lines. The brand new breeding farm in Canada includes 33,000 single bird cages, 6,000 group cages and around 7,500 single units for pedigree males. In addition to the other pure line farms in Denmark and the area of Cuxhaven, our breeding program will be based on an even broader basis to generate a lot of breeding progress also in the future.



*Pure-line farm in Canada from outside  
Source: K. Arar*



*Extended renovation work on the farms in Cuxhaven (source: LTZ archive)*



*Newly developed single hen cages for brown and white layers in Cuxhaven (source: F. Mozafar)*



*Pure-line testing with the aid of a transponder-antenna system (source: W. Scholz)*



*Daily egg number recording in Russia (source: LTZ archive)*

A very comprehensive and precise laying performance test has been established in single bird units, which differ from each other in the various countries. Daily data recording of each individual pedigree layer is one of the secrets to our success. However, not only single bird units but also group cages in which members of the same family are housed, are among some of the very important breeding tools. These group cages offer a selection tool to improve behaviour traits as e.g. plumage condition which is not possible in single units. Feather pecking and ranks in hierarchy can only be exercised in a group. Further behaviour traits, e.g. nest acceptance are captured in a transponder-based group housing system. Testing with this system is also helpful for comparing performances of full-sibs in commercial floor housing and single bird units in order to be aware of potential genotype-environment interactions. These very comprehensive performance tests of pure lines are rounded off by so-called “field tests” at commercial laying farms. Therefore, cross-breeds are tested in different continents and in different climate zones. In addition to field tests in Germany and Spain, we have also housed testing birds in Russia and Columbia.

All together, the captured data is implemented in our data base system and combined with additional information based on DNA analysis. Since DNA information is available, males can be selected at an earlier age and it is possible to

differentiate among full brothers, which was not possible in the past. The combination of traditional phenotypic performance testing and genome wide analysis is a promising tool for enhancing the genetic progress for line combinations with a performance profile tailored to specific requirements.

According to this very broad-based performance testing of pure-line and cross-line hens, LOHMANN layers are very adaptable to varying housing systems, climate conditions and consumer preferences. Consumer habits and preferences for specific egg characteristics like shell colour and egg size also vary between countries and even between consumers within a single country. Japan, for example, has maintained one of the highest levels of consumption with more than 300 eggs per capita for decades now. The custom of breaking a raw egg over a bowl of rice for breakfast helps to explain the focus on egg quality: white-shelled eggs with superior internal egg quality and guaranteed freedom from Salmonella. White eggs are also preferred in North and Central America, the Middle East, India, Taiwan and the Philippines, whereas brown eggs are preferred in most of Latin America, Europe and China. Tinted eggs, produced from crosses between White Leghorns and brown-egg breeds, are popular in Japan and China, but seldom seen in Europe.

For the foreseeable future, we can safely assume that general breeding goals such as egg number, feed efficiency and egg quality traits will



Pure-line farm in Canada from inside  
(Source: K. Arar)

remain priorities. Behaviour patterns and especially behaviour anomalies are likely to get more attention outside the Western world. Suitability for floor housing and free-range systems has become more important and this includes attention to a whole range of traits: acceptance of nests and free-range, persistent plumage cover to the end of lay, resistance to common diseases and minimal tendency to develop feather-pecking or cannibalism. National laws and regulations will reflect continuing attempts to define priorities and “sustainability” in terms of adequate nutrition for the growing human population, protection of the environment and natural resources, ethical standards for animal farming, and – last but not least – economics.

To supply the best possible combination for each market with specified optimal egg weight and most common housing system, LOHMANN TIERZUCHT offers six different strain crosses, which are all selected with focus on efficient egg production, but with different emphasis on individual selection traits. Quite new on the list of commercially available LOHMANN layers is the CONVERTER bird. Lines of LSL and LB CONVERTER were selected on an outstanding feed conversion ratio for generations. Compared to the LSL and LB CLASSIC layer, the CONVERTER lines lay around three eggs lesser and have a slightly lower egg weight. However, they have their winning points in feed consumption, which is 5 to 7 g lesser per day as compared

to LSL and LB CLASSIC. This results in an excellent feed conversion ratio of less than 2 kg for one kilogram of eggs. In contrast to this very efficient layer, LOHMANN TIERZUCHT is offering another new bird to the market. LOHMANN DUAL is the counterpart of LB CONVERTER. LOHMANN DUAL has a much higher body weight and is one reaction to hinder the euthanasia of day-old male layer hybrids. LOHMANN TIERZUCHT has therefore combined broiler and layer genetics to breed a dual-purpose chicken. The female lays around 250 eggs in an annual cycle length whereas the male is fattened up to 10 or 12 weeks of age, to supply a niche market with very tasty chicken meat.

Altogether, LOHMANN Genetics covers a big variety of different requirements and specific “wishes” that we’ve only been able to achieve owing to our good positioning on the market and sufficient testing capacities. It gives us great pride to announce the inauguration of our brand new pure line farm in Canada and also for our investments in the expansion of our facilities in Cuxhaven. Only in this way, it is possible for us to integrate new lines in our breeding program and be prepared for the challenges of the future.

*W. Icken, M. Schmutz, R. Preisinger – Genetics*



Facilities in Columbia (source: Dr. Caverio)



Housing in Columbia (source: Dr. Caverio)



Housing in Spain (source: M. Martinez)



Veranda aviary for GP's (source: LTZ archive)



# New Data Recording and Flock Management Service!

Since many years LTZ provides Excel templates and production charts to keep track of commercial and parent stock flocks. Production performance as well as a comparison with the respective standard can be seen at first sight on graphs and tables. When maintained on a weekly or (better) daily basis, problems can be detected early enough to find appropriate reactions and solutions. Yet there is one major disadvantage of these tools: only one file per aous flocks or even the average of last flocks

are difficult. Our new service is the answer to this: a web-based, easy accessible data managing and monitoring tool for parent stock and commercial flocks, to find under **<http://ltz.flockman4u.com>**.

A license management system declares different rights to use the application (e.g. input of data and reports of own flocks only / allowance to see sophisticated comparisons / allowance to access the Lighting program etc.), thus rights can be set up according to the needs of the customer.

Now there's only one hurdle to take before using our new web application: apply for a customer access at [ts@ltz.de](mailto:ts@ltz.de) and sign our mutual non-disclosure agreement. You will receive a customer number, a username and a password, and then let's get started with <http://ltz.flockman4u.com>!

*Dr. Anke Förster and Dr. Michael Lüke*  
*Technical Service*

## The main advantages are:

- ▶ The customer can easily collect and record data of his own flocks
- ▶ Single flock results are shown as graphs and tables, they compare performance with our target standards and provide useful information
- ▶ A peer report ranks the customer's own flocks according to egg number / HH
- ▶ A worldwide database is built up, which gives reliable information about the performance of our birds and makes calculations and analysis much easier
- ▶ The (anonymous!) comparison with similar flocks in the database (e.g. egg colour / climate / housing system.) is a valuable and interesting evaluation
- ▶ With the input of additional information such as housing system, density, climate etc. even more reliable comparisons are possible
- ▶ The Lighting Program software for open houses is implemented
- ▶ More LTZ programs can be included if necessary
- ▶ Input and treatment of economic data is in the pipeline





**Fig. 1 – General Information**

Input forms and reports are looking familiar to those who have experience with our Excel templates, but everyone will be able to work with the program very soon. Most of the features are intuitively understood, moreover the program comes with a manual, where first steps and FAQs are explained and illustrated.



**Fig. 2 – Input of data**

Data input is done on a daily or weekly basis, with some control functions to avoid mistakes (e.g. input of more eggs than birds is not possible, egg and body weight has to be within a reliable range).



**Fig. 3 – Diagram and table of performance**

Several reports and output formats are integrated to show information of single flock performance, such as egg production and liveability, feed and water consumption or body weights.



**Fig. 4 – Peer report of own flocks**

Peer reports ("TOP 20") show either a ranking of the customer's own flocks or the best comparable flocks in the system:



**Fig. 5 – Peer report of whole database**

# Review of different day-old chick quality parameters in layer type breeds

## Introduction

The aim of every commercial layer hatchery is a maximum hatchability of first quality chicks. Only healthy and vital chicks are able to have a good start in the rearing period after being handled and transported. Good chick quality is clear to see with a low first week mortality rate and a uniform development of the whole flock. It is therefore the key to success not only for the hatchery but also the rearing farm.

A first indicator for chick quality is the percentage of second grade chicks. This percentage is naturally influenced by the age of the breeder flock. Young breeder flocks, e.g. at < 30 weeks, usually give poorer results. If the chick quality does not improve with the age of the breeder flock, examinations need to be performed in order to find out the causes. These causes can either be the age of the hatching egg and the general quality of the same, transport and storage conditions as well as the disinfection of the hatching eggs. Hatchery-related conditions might also have an impact on the quality of day old chicks. These include temperature, humidity levels, ventilation, frequency and the angle of turning during incubation.

The evaluation of chick quality in the hatchery provides important information on the whole production process. If properly applied, it can be used to detect possible weaknesses of the hatchery and the working routines in the same. Either quantitative or qualitative traits can be used for the measurement of chick quality. The qualitative traits are namely Chick weight, Chick Yield, Chick Length and Feather Length. Qualitative traits include the Vitality of the Chicks, the Quality of their Navel, their Beaks and Joints. Many hatcheries still hesitate to apply the examination of the qualitative traits in their quality monitoring program as these traits are highly subjective and hardly reliable.

There are, however, methods that can help to measure the qualitative traits as objectively as possible, i.e. by reducing the individual subjectivity to a minimum. These so-called "scoring" systems enable recordings of the first visual quality traits of a chick to be transformed into a quantifying assessment with a maximum score of 10 points. For every negative factor, one point will be deducted from the total of 10 points.

Parameters that can be included in the scoring system are all of the above-mentioned qualitative traits as well as additional factors, e.g. the efficiency of vaccination and injuries. This can help to monitor and improve the chick processing quality.

## At which point of the production process should chick quality be investigated?

The point of investigation should be determined by the aim of the quality control. If these investigations serve the primary purpose of improving internal production processes, then chick quality should be investigated at takeoff. The advantage of this is that at this point of the production chain, an overview of the quality of all hatched chicks can be attained. This helps to make conclusions about the incubation process and can give important hints on what needs to be improved. If it is desired to get an overview about the quality





of the chicks that will be handed over to the customers, and if information about the sorting and handling of the chicks are just as required, then it can be more appropriate to conduct the exa-

minations before transporting the chicks. At this point, the quality of the vaccination and chick handling can be evaluated as well.

## Quantitative Traits

### Chick Weight

Chick weight is highly correlated with egg weight and therefore relatively predictable. If the incubation process is done properly, the chick weight will be 2/3 of the egg weight. An extended or reduced incubation time as well as too high or too low temperatures and humidity levels during incubation can also have an impact on chick weight. The longer the chicks stay in the hatcher, the more weight they will lose due to dehydration. On the other hand, if the chicks are pulled early, the chick weight can be higher than expected. Two methods can be used for measuring chick weight:

① Take single chick weights of a certain number of chicks. This allows to calculate the variation of chick weights within the group investigated in addition to the average. A good or bad uniformity of chick weight can be used as an indication of the quality of hatching egg grading.

② The other possibility is to weigh a certain number of chicks at one time and calculate the average. This is a good and simple method, i.e. if only the average chick weight is of interest.



*Recording single chick weight at the hatchery*



*Weighing a certain number of chicks. Please don't forget to subtract the weight of the hatcher basket before calculating the average chick weight!*

### Chick Yield

In relation with the chick weight, the quantitative trait "Chick Yield" (Chick weight at hatch in % of the egg weight at point of set) must be mentioned. This is a simple method of checking whether the hatch time and incubation parameters are correct. To accurately measure chick yield, it is important to measure the weight of completely filled setter trays at the point of setting and to calculate the average egg weight. (Please do not forget to subtract the weight of the empty setter tray before calculating the average egg weight). The weighed setter trays must be labelled in order to identify them on the day of transfer. On the day of hatch, the chicks which originate from these labelled setter trays must be weighed in order to calculate the average chick weight. The ideal chick weight should be between 66–67 % of the egg weight. If the chick weight is below target, this can be an indicator that the chicks were pulled too late and are therefore at the risk of dehydration. It can also be a sign that the humidity level chosen during incubation was too low. If chicks are required to travel long distan-

ces, it can be appropriate to aim for a chick yield which is about 1 % higher than the ideal of 66–67 %. This can help to guarantee that the chicks arrive as fresh as possible at the rearing farm. In order to achieve reliable results in terms of chick yield, at least 70 eggs and 70 chicks per breeder flock must be weighed. It will surely be more accurate if from every flock, 3 setter trays in different positions in the setter are investigated.



*High Chick Yield  
> 67 %*

*Ideal Chick Yield  
66–67 %*

*Low Chick Yield  
< 66 %*

### Chick Length

In addition to chick weight and chick yield, the length of the chicks is another quantitative trait which can be recorded in the hatchery. In order to measure a chick, it has to be placed alongside a ruler and the length needs to be measured from the tip of the beak to the end of the middle toe (see picture below). This trait is often taken in broiler hatcheries as it is well known that the chick length measured on hatch day can have a significant impact on the performance at the end of the rearing period. For layer type chicks, this trait is not relevant as the chicks are able to compensate body weight development during the long rearing period of 18 weeks. If the hatchery manager nonetheless decides that the chick length should be recorded, the figures should be interpreted only in accordance with the hatch window. Layer type chicks can grow more than 1 cm per day which means that the age of the chicks at the point of investigation is of crucial importance.



*Measuring the length of a chick with a ruler*

### Measuring feather length

Examining the feather length of a newly-hatched chick can, in addition to other factors, help to optimize the incubation process. It can give an impression on how fresh the chicks are and if the incubation time chosen is either just right, too long or too short. It must be taken into consideration that the feather length varies between breeds. Fast-feathering chicks (e.g. the female line of the LB parent stock) already have much longer feathers at the time of hatch and the growth rate of the primary feather is also higher than in genetically slow-feathering birds. When measuring the length of a wing feather, a ruler must be placed carefully between the wing feather and then can the length be recorded. In the hatchery, LSL parent stock chicks show an average feather length of 9.6 mm with an average growth rate of 0.09 mm per hour. LB parent stock chicks, however, already show an average wing feather length of 15.6 mm which grows at 0.15 mm per hour.



*Length of a wing feather*



*Measuring the feather length of a wing*

To be continued in the next issue ...

*Djanet Ould-Ali and Robert Schulte-Drüggelte – Technical Service*



# MASH FEED

## for layer type breeds

**Layer type breeds are being fed predominantly with mash feed – based on a worldwide view. One of the basic reasons will be the lowest cost in production - as mash feed - compared to others like pelleted, crumbled or expanded physical form.**

There are some more reasons – from birds' point of view – that mash feed will be the best physical version of compound feed for layer type breeds:

- › birds like to search within feed - mash feed offers some opportunities
- › birds being kept busy - and won't be interested too much in their colleagues in terms of "unwanted" behavior, like aggressive pecking or cannibalism
- › it's easy to incorporate real coarse limestone (source of calcium) - as most important tool for good egg shell quality
- › no impairment of feed supplements like sensitive vitamins or enzymes
- › no changes from insoluble NSP into soluble NSP – which cause an unstable digestion and gut situation

From a technical point of view mash feed production needs some basic request as there are:

- › suitable raw materials (no powdery ones)
- › optimal grinding technique for raw materials – for instance roller mill grinding
- › technicians in the feed production need to be trained on birds' view of optimal mash feed structure
- › the quality of mash feed must be checked regularly with a sieve analysis equipment
- › everybody involved in the production needs to accept, that homogeneity is the overall target with as less as possible variation from one production lot to another – because birds don't like huge changes
- › in order to support homogeneity and reduce segregation, mash feed should always have a minimum level of added oil or fat in the recipe

Finally it should be mentioned that pelleted or crumbled feed for layer type birds has some typical disadvantages:

- › it will never have real coarse limestone inside the pellets / crumbled particles
- › if pellets / crumbles break down, always real powdery fines show up, which birds absolutely don't like and even might refuse to eat at all
- › birds spend less time in eating activity and tend to develop "unwanted" behavior
- › it occurs repeatedly all over the world, that the single particles of a pelleted or crumbled feed are too hard and too sharp - with the consequence, that birds refuse to eat those particles at all. This topic is of very high relevance especially with regard to starter feed for day old chicks and might be one reason for high mortality during brooding period.
- › pelleted / crumbled feed will be more costly in production process at all times – compared to mash feed

**Robert Pottgüter**  
Technical Service



# 10th International Symposium on Marek's Disease and Avian Herpesvirus in the US

**F**rom July 20 – 23, 2014, the 10th International Symposium on Marek's Disease and Avian Herpesvirus with more than 200 participants was held in East Lansing, hosted by the Michigan State University and the USDA-ARS Avian Disease and Oncology Laboratory (ADOL). The symposium covered both Marek's Disease, a Herpesvirus induced lymphoma, as well as Infectious Laryngotracheitis, an acute respiratory disease.

In sessions on Epidemiology & Diagnosis, Virology, Immunology, Host Genomics & Genetic Resistance, Pathogenesis as well as Vaccine & Protection 48 speakers presented their most recent work. As in previous Marek's symposia many papers were related to molecular biological work for identification of the virus, characterization of pathogenicity, interactions of both field and vaccine viruses with the hosts immune system and development of new vaccine strains.

A special program point was a panel discussion on "Perspectives on Marek's Disease Breakthroughs since the 1930s", featuring important advances over the last three decades of the 20th century discussed by important researches and scientists such as Peter Biggs, Bruce Calnek, Hsing-Jien Kung, Ton Schat, Jagdev Sharma, Egon Vielitz and Richard Witter, all well known for their engagement in Marek's research and control.

The present situation of Marek's Diseases in Europe was illustrated in a poster session by Dr. Egon Vielitz, presenting

a survey done with veterinarians and members of the "Poultry Veterinary Study Group in the EU" (PVSG-EU). The Rispens (CVI 988) is still the most effective vaccine strain used either in combination with HVT or with the recombinant HVT-IBD vector vaccine.

*Dr. Matthias Voß*  
**Veterinary  
Laboratory**

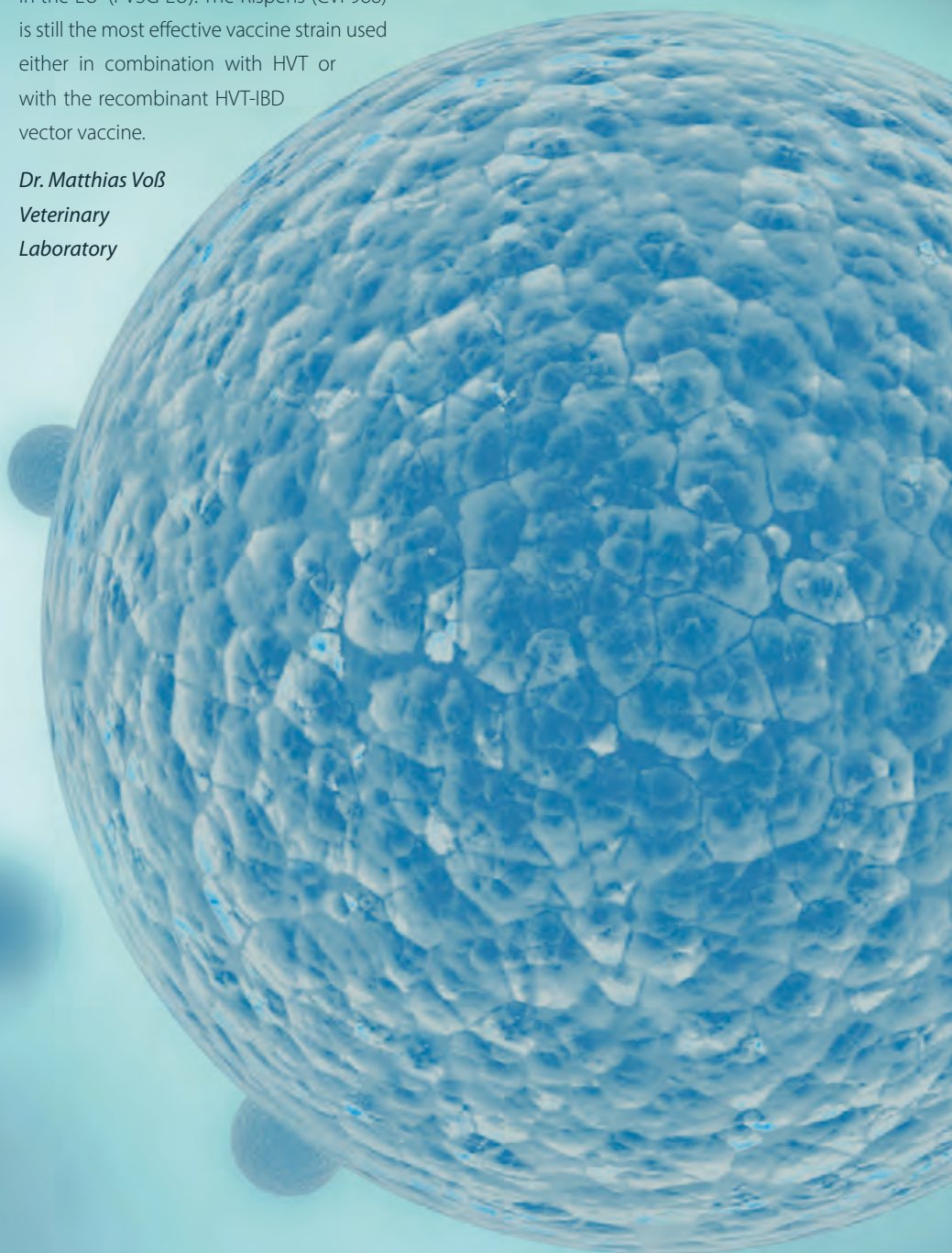
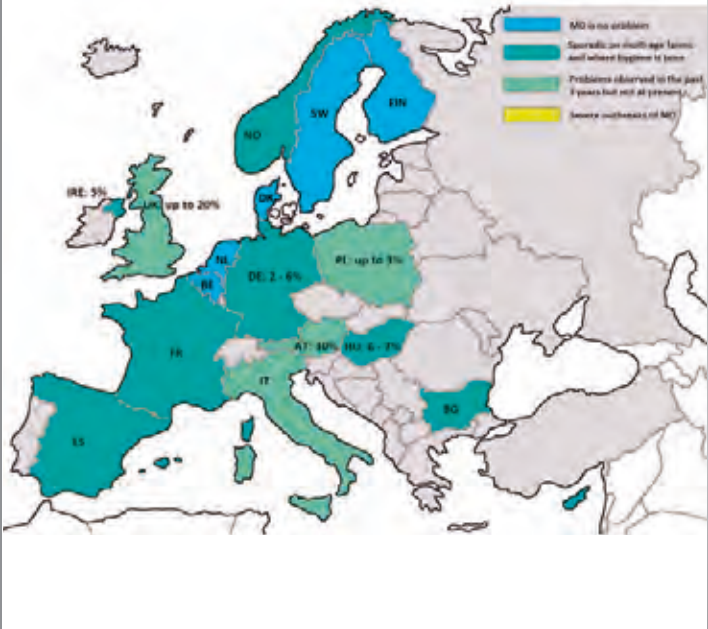


Table 1: Standard MD-vaccination schedules in Europe

| First vaccination                | Second vaccination             | Third vaccination              | Category                                 | Country                                 |
|----------------------------------|--------------------------------|--------------------------------|--|---|
| HVT (day old)                    | –                              | –                              | Broilers                                 | AT, CY, IRE, ES, FIN, IT, UK            |
| r-HVT (day old)                  | –                              | –                              | Free range broilers                      | CY, ES                                  |
| CVI 988 (day old)                | –                              | –                              | Free range broilers                      | AT, CY, FIN, FR, IT, S, DK              |
| HVT/ CVI 988 (day old)           | –                              | –                              | Layers and Breeders                      | AT, DE, DK, FIN, FR, HU, IT, NO, PL, UK |
| r-HVT + CVI 988 (day old)        | –                              | –                              | Layers and Breeders, free range broilers | BE, BG, CY, FR, IT, NL, UK, ES, HU      |
| HVT/ CVI 988 (day old), leg      | HVT/ CVI 988 (day old) neck    | –                              | Layers and Breeders                      | DE, PL, FR*                             |
| HVT/ CVI 988 (day old), leg      | CVI 988 (day old) neck         | –                              | Layers and Breeders                      | DE, FR*                                 |
| HVT/ CVI 988 (day old), leg      | r-HVT+ CVI 988 (day-old), neck | r-HVT+ CVI 988 (3–7 days), leg | Layers and Breeders                      | PL*                                     |
| HVT/ CVI 988 (day old)           | HVT (10–14 days)               | –                              | Layers and Breeders                      | UK                                      |
| r-HVT (day old)                  | CVI 988 (7 days)               | –                              | Layers and Breeders                      | IT                                      |
| r-HVT + CVI 988 (in-ovo 18 days) | r-HVT+ CVI 988 (day old)       | –                              | Layers and Breeders                      | UK                                      |
| r-HVT (in-ovo 18 days)           | CVI 988 (day old)              | –                              | Layers and Breeders                      | IT                                      |

Legend: AT Austria, BE Belgium, BG Bulgaria, CY Cyprus, DE Germany, DK Denmark, ES Spain, FIN Finland, FR France, HU Hungary, IT Italy, IRE Ireland, NL The Netherlands, NO Norway, PL Poland, S Sweden, UK The United Kingdom, \* (under high infectious pressure)

Fig. 1: Is Marek’s Disease still a problem in Europe?





**B**angladesh is one of the highest populated countries in the world with a population of 160 million people living in an area of 143,000 km<sup>2</sup>. About eighty percent of the people still live in villages and more than 70 % of these rural households are involved in keeping poultry. Unfortunately, they also face serious constraints as well as a high mortality rate of poultry which is said to be as high as 25 % due to a combination of many factors like improper feeding practices, ignorance of management needs and poor distribution of vaccines.

In Bangladesh, the poultry industry practically started as an emerging agribusiness during the eighties. With humble beginning of small commercial poultry farming in the early 1990's, the production stage developed into an industry with the introduction of economic and exotic varieties of breeds. The emerging poultry industry has received attention of the investors with remarkable changes in the last decade.

Poultry is a substantial contributor to food supply in Bangladesh. Many small and medium farmers are rearing poultry in Bangladesh. Development of poultry has generated considerable employment opportunities through the production and the marketing of poultry and poultry-related products.

In the last few years, the recognition of small-scale commercial poultry production has been helping to accelerate the pace of poverty reduction in Bangladesh. The poultry industry has successfully become a leading industry of the country and this sector has also been growing rapidly in the last two decades. It has already been able to rise at an annual growth of around 20 % during the last two decades. The industry has immense potentialities to contribute to the economic growth of the country as well as fulfil basic needs, keeping the price at a minimum level and ensuring food supply, especially in terms of animal proteins, for human beings.

### LOHMANN in Bangladesh

The first introduction of LOHMANN in Bangladesh was through Phenix Poultry Ltd. already in 1992. LOHMANN BROWN adapted very well to the Bangladeshi environment and created a very good acceptance and demand among the farmers until 2009. Unfortunately, market conditions and severe problems in logistics did not permit a continuing market presence in Bangladesh. However, last year LOHMANN LSL and LOHMANN BROWN were reintroduced into the Bangladeshi market by three new customers: Aman Poultry and Hatchery Ltd, Nahar Agro Complex Ltd and Nourish Poultry and Hatchery Ltd. This is a good foundation for gaining market share in Bangladesh according to the leading position of LOHMANN chicks in Asia.

### A BRIEF INTRODUCTION OF OUR CUSTOMERS IN BANGLADESH

#### Nourish Poultry and Hatchery Ltd

Nourish Poultry and Hatchery Ltd, an agro-based company, was established in 1999 and belongs to the Nourish Poultry Group, a subsidiary of Khaled Group of Companies. The latter is engaged in producing day-old broiler and layer chicks as well as feed for broilers and fish. Nourish Poultry and Hatchery Ltd. ensures customer satisfaction by providing high quality chicks, feed and service.

Today, Nourish is considered a brand name with a steady and consistent market growth and premium quality products. Other group associates include Nourish Feeds Ltd which produces poultry and aqua feed and Nourish Agro Ltd., primarily a feed manufacturing company. Nourish Agro also has a broiler GP operation with an estimated weekly production of 1 million DOCs not to mention, a layer parent breeding operation with integrated farms, a research and development unit as well as a large scale of own commercial broiler farming.

NOURISH ranks with the first position in producing broiler feed and is in the third

position for the production of layer feed in the country. By 2015, the Group expects to produce 40 thousand tons of feed per month to establish its leadership in the market. The top management of Nourish expects to produce 32 thousand broiler parent stocks per week and 2 million broiler chickens per month by the end of 2015.

Nourish is our second LSL Lite PS customer in Bangladesh. The first batch of 10,000 birds is in production and commercial chicks have already been placed.

#### Nahar Agro Complex Ltd

The journey of Md. Rakibur Rahman, in the poultry industry started in the year 1989. The Nahar Agro Complex Limited formally came into existence in the year 2001.

From 2001 to 2005, the company was only involved in the broiler parent breeding business. Due to the increase of the demand of layer chicks on the market, the company decided to start a layer breeding business as well.

Nahar Agro Group is the fastest growing poultry company in Bangladesh and one of the prominent agro industries. They have a broad field of business areas such as poultry, dairy, feed and fish. The main focus, however, is the poultry supply chain in Bangladesh. Nahar Agro Complex Limited in Chittagong is engaged in producing eggs and chicks for sale in the domestic market. The company operates with 4 production lines which

# BA

From left to right: D. Khasruzamman, Mr. Michael B. Seidel and Dr. Manora





# ANGLADESH

A state in South Asia,  
known natively as the  
“Land of the Bengals”

Man, Md. Gaus Khan,  
Manoranjana Sharma



From left to right: Mr. Michael Seidel (Director of Business Development LOHMANN TIERZUCHT), Mr. Shaschu Vice-President Nourish Poultry and Hatchery Limited, Dr. Manoranjan Sharma (Area Manager LOHMANN TIERZUCHT), Dr. Khasruzzaman (Bangladesh Distributor)



are located in different places. Last year, Nahar Agro Complex Ltd. became our second LSL Lite Parent Stock customer in Bangladesh housing 10,000 females. Plans are in place to triple the capacity by next year.

## Aman Poultry and Hatchery Ltd

“Aman” means peace in the local language. The company dates back to the late sixties during the erstwhile Pakistan period. The ancestors of the group started a small scale trading and contractual business. After the emergence of Bangladesh, the business flourished a little under the banner of Aman Trading Corporation. In the late eighties the trading business witnessed a steady growth. In the mid 1980’s, the group felt that a mere trading business might bring only individual wealth. Being a well-placed family in society, the group wanted to uplift the poor mass economically. This highly influence ideas about venturing into investments that can generate employment for the rural masses. The group therefore decided to participate in the process of industrialization. The company is active in the textile, construction, trading and agro-based industries.

The agro-based industry includes a parent breeding business which was established in 2010. This operation went into production in 2012. Layer Parent breeding business is the latest addition to their breeding activities. In 2013, they started a layer business with 10,000 LOHMANN BROWN CLASSICS with the forecast of placing 5 flocks of 10,000 each in different locations.

*Michael B. Seidel – Director Business Development and Dr. Manoranjan Sharma*



# Egg farming in Canada, A way of life, still...

Canadian egg farmers operate under a system of Supply Management that ensures the needs and requirements of both farmers and consumers are met. The system is run by the farmers who agree to regulation of sales of their product in exchange for receiving a fair return.

The system was adopted in Dec. of 1972 in response to the turmoil that plagued the egg farming industry in the 60s and put many farmers out of business. Under the Supply Management system, egg farmers are organised in Provincial boards that collectively form the Egg farmers of Canada. The Role of EFC is to manage the supply of eggs, promote eggs and develop national standards for egg farming. The pillars of the supply management system are control of production and imports, and periodically determine the cost of production to ensure farmers are compensated fairly. Stability in the egg market promotes sustainability, as a result in 2013 there were 1021 egg producers in Canada with an average farm size of

22,255 layers, highlighting the family nature of egg farming. The farms are distributed over 11 provinces and territories, as shown in the table below:

Farmers and average flock size per province

|        | Number of farmers<br>per province or territory <sup>1</sup> | Average number of layers<br>per farmer <sup>2</sup> |
|--------|---|---|
| BC     | 133   | 19,015  |
| AB     | 156   | 11,694  |
| NT     | 4   | 28,033  |
| SK     | 77  | 11,959  |
| MB     | 155   | 14,257  |
| ON     | 325   | 23,581  |
| QC     | 115   | 33,297  |
| NB     | 17  | 24,982  |
| NS     | 24  | 30,481  |
| PE     | 8   | 16,327  |
| NL     | 7   | 49,506  |
| Canada | 1,021   | 22,255  |

<sup>1</sup> Reported data for 2013.  
<sup>2</sup> Reported data for 2013.  
Excludes inventory for Eggs for Processing and special permits.

Production is allocated under quotas distributed within the provinces; additional allocations are added in response to increase in consumption, as illustrated in the table below:

#### Federal quota allocation (dozens)

| Province     | 2014 Allocation    | 2013 Allocation    | 2012 Allocation    |
|--------------|--------------------|--------------------|--------------------|
| BC           | 72,833,659         | 71,106,537         | 70,711,082         |
| AB           | 54,896,749         | 52,544,160         | 52,054,819         |
| NT           | 3,083,608          | 3,043,209          | 3,033,910          |
| SK           | 27,035,121         | 26,329,593         | 26,169,611         |
| MB           | 61,996,255         | 61,210,897         | 61,030,688         |
| ON           | 219,869,208        | 215,767,593        | 214,827,519        |
| QC           | 113,974,147        | 109,504,517        | 108,467,912        |
| NB           | 12,22,277          | 12,017,765         | 11,967,730         |
| NS           | 21,266,135         | 20,998,913         | 20,937,591         |
| PE           | 3,523,195          | 3,478,421          | 3,468,119          |
| NL           | 9,448,423          | 9,325,217          | 9,296,896          |
| <b>Total</b> | <b>600,148,777</b> | <b>585,326,822</b> | <b>581,965,877</b> |

source: 2013 EFC annual report

In addition to the figures above, there are allocations for vaccine (635 thousand doz.), distributed between Ontario and Quebec.

The market for eggs in Canada has continued to grow, this will be the seventh consecutive year showing increase in retail egg sales, prompting the quota allocation increases referred to in the table above. Programs are adopted to encourage new entrants and help them to become sustainable egg producers, as well as involving younger generations in the family farm business.

The egg market in Canada is mainly a white egg market, with white eggs representing more than 90 % of the eggs sold, although the brown egg market has shown some growth lately due to the increase in popularity of alternative housing systems as well as organic flocks.

Canadian egg farmers promote egg consumption through communicating their values to key audiences, and through the practice of social responsibility. Canadian farmers contribute

generously and get involved in social programs and charities in their local communities, as well as over-seas as far as Africa.

The Board of Directors role is to provide leadership and vision for the Egg Farmers of Canada in key areas of interest, such as sustainability of the industry, public support and social license, and growth and innovation.

EFC invests heavily in research to promote sustainability and growth of the industry through innovation, with focus on human health and nutrition in relation to egg products. Other areas of focus are poultry health and welfare, in that regard animal care and well-being has become a major focus lately. It partners with research and teaching institutions with the aim of developing fact-based responses and initiatives. The EFC also champions and supports vital programs like the Animal care, the Start Clean-Stay Clean™,

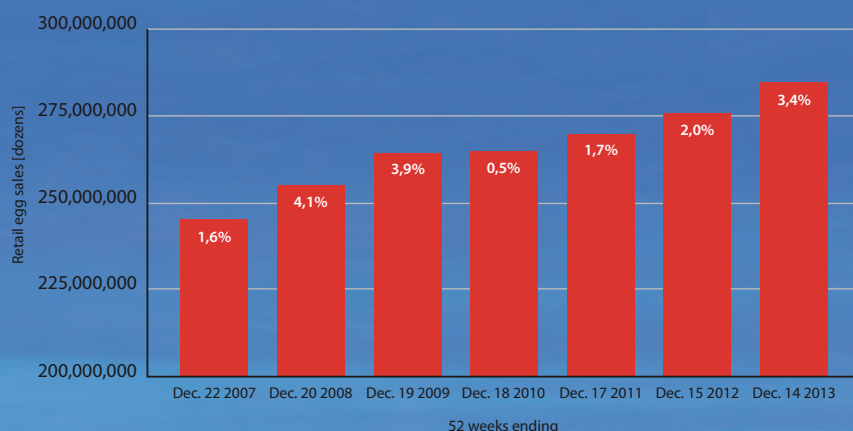
Traceability, and the National Quality Code for Canadian Eggs, which recently received a funding boost as part of \$2.2 million grant from the federal government to the National Farm Animal Care Council (NFACC) to update and develop poultry codes of Practice.

Never the less, the greatest success of the Supply Management system is to satisfy the demands of the Canadian egg consumer while allowing egg farmers to maintain their *Way of Life* ...

#### Position of LOHMANN in the Canadian egg-market

Since their introduction into Canada in 2001, LOHMANN birds have enjoyed continued growth in popularity, dominating the market in egg numbers and egg quality. The market share for LSL Lite has far exceeded any other breed in the market, due to its impressive return over cost. Similarly, with the market for brown eggs headed up lately, LOHMANN BROWN LITE is gaining market share as well, as producers become familiar with it. LOHMANN chicks are available through a network of five independent distributors offering products and services to egg producers across Canada. The large investments that LOHMANN made in primary breeding facilities in the past two years further affirms LOHMANN's commitment to the layer market in Canada and North America, and raises hope for an even brighter future.

Khalil Arar



Source: Nielsen Market Track, Total Eggs-National  
52 weeks ending Dec. 14 2013, Dec. 15 2012, Dec. 17 2011, Dec. 18 2010, Dec. 19 2009, Dec. 20 2008





# Lohmann School

**From May 12 nd until May 16 th 2014, the traditional LOHMANN School was held at the Hotel Seelust in Cuxhaven.**

As in previous years, the response was great and approximately 50 customers from about 20 countries made their way to Cuxhaven to listen to the exciting presentations by LOHMANN TIERZUCHT's own speakers. Frequently requested subjects such as "Nutrition" and "Hot Climate Management" were, in addition to other interesting topics, the main focus of the week.



# Hatchery Course

**This year's LOHMANN Hatchery Course was held in Cuxhaven from 1st to 5th of September.**

The number of registrations was overwhelming: 40 participants from 18 nations were present. In addition to the company experts, Dr. Marleen Boerjan by PasReform and Alistair Fillingham were key speakers and taught about embryonic development of the chicks and animal welfare.

*Stella Schnor – Marketing*

# JAPAN LAYER K.K.

## Seminar great success

**O**n April 4th 2014, Japan Layer (JL) organized a seminar in Nagoya for Japanese table egg producers and related industries. Well above 150 participants attended this event. JL's Managing Director Mr. Wataru Hashimoto welcomed the audience and gave a short update on the current situation in the Japanese egg market.

Ron Eek gave an introduction on LOHMANN TIERZUCHT and developments in the global layer-type market. Dr. Wiebke Icken presented a comprehensive paper explaining the Research & Development program. Finally Matthias Voss DVM addressed the global poultry disease situation.

Since several years egg consumption in Japan is stagnating. The Japanese consumer prefer white shelled eggs (about 60 % of which the majority is further processed), brown (30 %) and tinted (10 %) eggs are mainly sold as so-called branded eggs.

In 2011 Japan Layer K.K. was founded as a separate company from the original Ghen Corporation focusing on sales of commercial layer chicks only. JL also belongs to EW-Group and is a key producer

of commercial layer chicks with an annual capacity of almost 25 Million chicks. Since the early nineties the share of LSL commercials (called Julia in Japan) has grown to more than 85 % of the domestic white egg layers.

LOHMANN TIERZUCHT supplies both LSL Classic and – Lite Grandparents to Japan to safeguard continuous production of breeding stock. Both breeds form a perfect match for producers who need M- and L- class eggs. In 2012 a variety of LSL with predominantly MS sized eggs completed the package.

*Ron Eek – Regional Area Manager*



### JAPAN LAYER K.K. Locations in Japan

- 1 Gifu Main Office**  
Sano CM  
Hatchery  
PS farm JL
- 2 Fukuoka**  
CM Hatchery







# VIV Utrecht

The VIV Utrecht opened its doors to a large scale of visitors from May 20th - 22nd 2014. LOHMANN TIERZUCHT was present with an own booth where many visitors with great interest were kept abreast on the latest news in the breeding business.

**L**OHMANN TIERZUCHT is currently one of the driving forces in the industry where sex determination in the egg is concerned. Together with research partners, it is now possible to determine the sex of the embryo on day 10 of incubation by means of analysing the Allantois fluid with high accuracy in white and brown layers in the laboratory. This is a big success for the reproduction of laying hens. Measures are on the way to implement this practicably in hatcheries. This is, however, not the only method to LOHMANN TIERZUCHT is exploring to try to avoid euthanising male day-old chicks.

Recently, the first parent stock flocks of Lohmann DUAL were housed in Germany. Aside from Germany, commercial flocks of LOHMANN DUAL have also been housed in Switzerland and Austria. Both the cockerel and the hen can be grown for meat and eggs. The males can be fattened to a live weight of 2 – 2.3 kgs within 9 weeks. With the introduction of the Lohmann CONVERTER in Sweden, LOHMANN TIERZUCHT has responded to the demand for hens with an optimized feed conversion. The reduced feed intake, reduced body weight and a slightly reduced egg weight induce better utilization of resources. The first flocks of laying hens in Sweden are already demonstrating outstanding performance data and excellent feed conversion.

LOHMANN TIERZUCHT has also included genomic selection in its traditional breeding program. Based on 600,000 SNPs (genetic markers), one can obtain information on the genetic performance regardless of the age of the bird.

Already in rearing, the genetically valuable pure-line cockerels can be selected and a significantly shorter generation interval can be achieved. Thus, egg producers can already benefit from the genetic progress at a much earlier stage. With the introduction of this new selection tool LOHMANN TIERZUCHT introduced Genome Chicks® that is setting a mark in terms of application-oriented research.

LOHMANN TIERZUCHT is expanding further and wants to react to the realities and needs of the different markets. Therefore, it is also necessary to invest in new farms and expand existing breeding farms. Recently, a breeding farm with a capacity of 30,000 birds and fitted with individual and group cages began its operations in Canada. Two more houses are under construction. Existing breeding farms in Germany were modified. The pure lines will be kept in modified cages in the future and individually tested in a fully configured environment.

*Djanet Ould-Ali and Stella Schnor – Technical Service and Marketing*









*Group Photo of the participants at the 2nd Bounty School (Informal)*

## STRENGTHENING OUR PARTNERSHIP WITH THE CUSTOMERS

The 2<sup>nd</sup> “Bounty School” with the motto “Strengthening Our Partnership With The Customers” by Bounty Farms Inc was conducted in Tagaytay City, a highland town overlooking a volcano in the middle of the Taal Lake. The beautiful sceneries acted as a backdrop to the seminar that was conducted from 26<sup>th</sup> to 28<sup>th</sup> June 2014 and was participated by the commercial layer customers, distributors and partners of Bounty Farms Inc. LTZ was represented by Dr. Matthias Voss, Dr. Micheal Lueke and Dr. Ling Ling Chuah that made up the line of speakers that includes Mr. Edwin Chen (Managing Director of BFI), Dr. Rowena Weng Lucas, Dr. Nieves Mendoza and Mr. Richard Rapisura from Bounty Farms Inc, Philippines.

The topics that were presented and discussed during the school covered Commercial Layer Production, Layer Nutrition, Diseases Affecting Layer Performance, Maximizing Profitability in Table Egg Production and Global Layer Industry Update. It was an excellent platform for the participants, the Bounty Farms Inc team and LTZ to share their experience, knowledge and new ideas besides getting to know each other and further strengthened the close partnerships.

*Dr. Ling Ling Chuah  
Area Sales Manager, Philippines*

*Pictures are courtesy of Dr.. Rowena Weng Lucas of Bounty Farms , Inc*



*Dr. Rowena presented Dr. Lueke with handmade souvenir*

*Tips on how to maximize the profitability from Dr. Michael Lueke*

*Dr. Nieves Mendoza stresses the importance of good chick quality*

*Mr. and Mrs. Yu Beng Chua, with Mr. and Mrs. Chen*

*Mr. Edwin and Mrs. Sylvia presented certificate to Dr. Voss*

# CUSTOMER PRESENTATION

**Our long-term customers Pronavicola S. A. and Lohmann France comprehensively described their businesses and the corporate philosophies behind the same in their respective corporate videos.**

PRONAVICOLA S. A.



LOHMANN FRANCE



## This could be your place!

We invite you to take the opportunity to also present your company in the next issue of the Poultry News and to share it with all of our interested readers.



# Imprint

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