1 | 2014

H&N International
THE KEY TO your PROFIT

FACTS THAT FIGURE

Editorial

The Environment, Sustainability and World Food Security

The year of 2014 has begun but some of the old problems plaguing the egg industry still remain. For the future of the global egg industry, companies and people will have to place more emphasis on some specific points which will enable them to survive well into the future with profitability and sustainability.

The world has the resources and technology to eradicate hunger and ensure long term food security for all, in spite of many challenges and risks. Globally the growth rate of demand will clearly be lower than during the preceding decades. It is estimated that global egg production must rise more than 40% by 2030 in order to meet the demand for eggs by an ever increasing world human population. The egg is the second most complete food in human nutrition surpassed only by human breast milk. Thus, eggs represent one of the most important sources of food needed to eradicate hunger and malnourishment in the world. This should make us proud as an industry that our life's work is making a meaningful contribution towards creating a better world tomorrow for everyone.

Food security is a national responsibility and any plans for addressing food security challenges must be nationally articulated, designed, owned, led and built on consultation with all key stakeholders. The future of agriculture and the ability of the world food system to ensure food security for a growing world population are closely tied to improved stewardship of natural resources. Demographic pressures, climate change and increased competition for land and water are likely to increase vulnerability to food insecurity.

The challenge of providing sufficient food (eggs in our case) with security for everyone worldwide has never been greater. Climate change poses additional severe risks to food security including agriculture in general and specifically the egg industry sector. Agriculture

and the egg industry will have to adapt to climate change, but it can also help mitigate the effects of climate change, and useful synergies exist between adaptation and mitigation.

Climate change will affect agriculture and forestry systems through higher temperatures, elevated carbon dioxide (CO_2) concentration, precipitation changes, increased weeds, pests and disease pressure. Global mean surface temperature is projected to rise in a range of from 1.8°C to 4.0°C by 2100. Such changes will have more or less severe impacts on all components of food security. This includes all food production including eggs and availability, stability of food and egg supplies as well as access to and utilization of food.

What can we, as individuals do?

- First of all, practice responsible consumerism by purchasing products which are energy efficient and have a low carbon footprint.
- Choose energy efficient modes of transportation (public transport or purchase fuel efficient vehicles such as hybrid cars).
- Practice an energy efficient life style at home and at work (e.g. switching off lights in unoccupied rooms, raising air conditioning temperature to 25°C).
- Stay informed and spread awareness on climate change issues.
- Get involved by participating in environmental groups working towards mitigating climate change.

What can we, as corporations do?

- Corporations have the responsibility to conduct their business in a sustainable way.
- Purchase and produce environment friendly products which are energy efficient and have a low carbon footprint.
- Construct environmentally friendly buildings and office space which have a low carbon footprint.
- Implement environmental management systems and eco-friendly practices within the workforce.
- Report environmental impacts to the community as a means of Corporate and Social Responsibility (CSR).
- Educate staff on environmentally friendly behaviour and on climate change issues.

What can we more specifically as farmers do?

- Higher and better efficiency of our flocks' production performance taking into account both management and genetic factors.
- Improve our farming systems
- Better waste management at our facilities
- Better use and control of energy consumption at the farm
- Better feed management and efficiency, including a more precise feed formulation taking into account both local conditions and flock age.

In closing I trust you will find this issue of "Facts That Figure" to be both useful and interesting reading.

Eduardo de Souza Pinto
Managing Director H&N International

CONTENTS

Potential for Use of DDGS in Layer Diets

DDGS is a catchword or headline currently being used very often when the topic of worldwide raw materials for poultry feed comes up. DDGS is a co-product of the bio-energy or ethanol industry producing energy from sustainable sources. This usually means corn and wheat on a worldwide view. Nevertheless there are other agricultural sources that can be utilized to produce bio-ethanol or energy. This article will mainly refer to the DDGS produced from corn and wheat.

Averages and ranges in composition of selected nutrients (100% dry matter basis) among 32 U.S. corn DDGS sources[1]

Nutrient	Average (CV)	Range
Crude protein, %	30.9 (4.7)	28.7 – 32.9
Crude fat, %	10.7 (16.4)	8.8 – 12.4
Crude fiber, %	7.2 (18.0)	5.4 – 10.4
Ash, %	6.0 (26.6)	3.0 – 9.8
Calculated ME (swine), kcal/kg	3810 (3.5)	3504 – 4048
Lysine, %	0.90 (11.4)	0.61 – 1.06
Arginine, %	1.31 (7.4)	1.01 – 1.48
Tryptophan, %	0.24 (13.7)	0.18 – 0.28
Methionine, %	0.65 (8.4)	0.54 – 0.76
Phosphorus, %	0.75 (19.4)	0.42 – 0.99

Source: U.S. Grains council // www.ddgs.umn.edu

Composition of wheat dried distillers grain with solubles (DDGS) and its comparison with wheat and maize dried distillers grain with solubles

	Wheat[1]	Wheat DDGS[2]		Maize DDGS[3]
		Mean	Min. – Max.	
Dry matter (DM)	86.8	92.7	89.3–94.4	88.9
Composition (as % of DM)				
Ash	1.8	5.0	4.6–5.7	5.8
Crude protein (N×6.25)	12.1	36.6	32.7–39.2	30.0
Crude fat	1.7	4.4	3.4–5.1	10.7
Crude fibre	2.5	7.6	6.1–9.0	8.6
Neutral detergent fibre (NDF)	14.3	30.1	25.4–35.3	41.5
Acid detergent fibre (ADF)	3.6	10.7	8.1–13.1	16.1
Acid detergent lignin (ADL)	1.2	3.2	2.1–4.5	
Starch	69.7	5.1	2.5–10.1	8.2
Sugars	2.8	4.0	2.4–7.2	
Gross energy (MJ/kg)[4]	16.20	18.67	18.24–19.10	20.21

Notes: (1) Sauvant, Perez and Tran, 2004. (2) n = 7; products with luminance >50; Cozannet *et al.*, 2010a. (3) n = 12, for dry matter, ash, protein, crude fat, crude fibre, NDF, ADF - Spiehs, Whitney and Shurson, 2002; n = 10, for gross energy and starch - Pedersen, Boersma and Stein, 2007. (4) Gross energy ist standardized for a 89% DM content.

Source: Bioful Co-Products as Livestock Feed, FAO 2012

What is the meaning of DDGS

Distillers Grains are a cereal byproduct of the distillation process. There are two main sources of these grains. The traditional sources were from brewers. More recently, ethanol plants are a growing source. It is created in distilleries by drying mash, and is subsequently sold for a variety of purposes, usually as a raw material for livestock. In the past this usually meant inclusion in feeds for ruminants.

There are two common types of distillers grains. **Wet Distillers Grains** (WDG) contain primarily unfermented grain residues (protein, fibre, fat and up to 70% moisture). WDG has a shelf life of four to five days. Due to the water content, WDG transport is usually economically viable within a short distance from the ethanol production facility only.

Dried Distillers Grains with Solubles (DDGS) is WDG – with the addition of some liquid co-products from fermentation – which have been dried to 10–12 percent moisture. DDGS have an almost indefinite shelf life and may be shipped to any market regardless of its proximity to an ethanol plant. Drying is costly, as it requires further energy input. In the US, it is packaged and traded as a commodity product and being sold in the world raw material market. Additionally all around the world we are faced with the production of ethanol from cereals and DDGS being offered subsequently as raw material for livestock. The general "yield" of using corn or wheat with relation to the production of DDGS (10% moisture content) is roughly 30%. This means one ton of corn or wheat used for producing ethanol will also generate roughly 300 kg of DDGS.

Market development for DDGS

Since the development of bio-energy and ethanol production in general, there has been huge interest in the livestock industry to use the co-products for nutritional purposes. WDG (wet distillers grains) has been a foodstuff used for decades for feeding different species of livestock. The real big interest started with the availability of DDGS (Dried Distillers Grains with Solubles) and the increasing economical influence of politics and public affairs due to the common interest to produce energy from sustainable sources. If this takes place, subsidies policy starts to influence business. Due to this situation DDGS has become an interesting and cost effective raw material for all livestock nutrition. The largest amount of DDGS still will be used for feeding ruminants. Nevertheless there is ongoing scientific research and practical experience in using DDGS in poultry nutrition.

Nutritional value of DDGS

DDGS basically can be described as a raw material quite rich or dense in crude Protein (CP) and amino acids (AA) together with some minerals, especially phosphorus. During the production of ethanol from wheat or corn mainly the content of starch will be fermented into ethanol and the remaining nutrients will be concentrated in the residues of the process. Due to these basics the nutrient content of DDGS will be related to the nutrient content of corn and wheat at all times. This means first of all, that DDGS from wheat will have a higher content of crude protein and amino acids compared to DDGS produced from corn. The content of crude protein within both cereals will influence the CP and amino acid contents as well. So the first question is if one wants to use DDGS in diet formulation, what was the grain that was used to produce the DDGS. This must be known in order to get a first impression of the nutritional value. Nevertheless, nutritionists who want to gain reliable matrix values are faced with the wide variability of all DDGS. This is especially between different ethanol plants and even within different lots of DDGS from the same plant. This is still the biggest constraint in using higher levels of inclusion of DDGS in poultry diets. Poultry in general needs a well balanced diet with low variation in nutrient content being permitted in the compound feed in order to match the nutrient demand of each single bird every day. Due to this, nutritionists are concerned with having too much variation in all raw materials, especially those having higher in inclusion levels in the formula. If someone wants or needs to realize higher inclusion levels of DDGS in poultry diets, the mayor suggestion at all times will be to analyze and monitor each load of DDGS as thoroughly as possible!

All the data above very clearly illustrate the major nutritional challenge with DDGS which is the large variation of the nutrient content which appears under the topic 'range' respectively 'min – max'. With the overall target to achieve a constant nutrient content of the compound feed, nutritionists will not use the maximum possible level of highly variable raw materials in diet formulation. Producers of DDGS have already recognized this problem and try to achieve more constant quality with less variation from a single production facility. Furthermore there is an ongoing process to develop different specified co-products from ethanol production, as there might be "high protein DDGS" for instance. Nevertheless we are faced with the challenge that DDGS is thought to be a commodity in the international raw material market and therefore needs special attention concerning specified and constant quality and nutrient content.

Varying nutrient content of different DDGS sources, 88% dry matter (in excerpts from Evonik AminoDat 4.0)

	DDGS corn - US	DDGS - High protein	DDGS - wheat	DDGS - barley
Crude protein mean %	26.1	41.2	31.9	22.6
Crude protein, range %	20.2 – 32.4	34.4 – 51.0	23.4 – 40.6	21.1 – 23.8
Lysine %	0.76	1.01	0.67	0.72
Methionine %	0.50	0.93	0.48	0.36
Met + Cys %	0.98	1.73	1.08	0.78
Threonine %	0.98	1.50	0.97	0.80
Tryptophan %	0.21	0.26	0.33	0.25
Arginine %	1.14	1.50	1.31	1.07
Isoleucin %	0.95	1.59	1.12	0.81

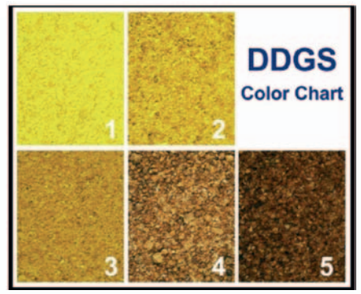
Source: U.S. Grains council // www.ddgs.umn.edu

DDGS as a Soya Replacement

DDGS has a quite good content of protein. Raw material salesmen will call it a 'middle protein carrier' as the content of crude protein (CP) is in between the most typical protein carrier which is soybean meal, and on the other side corn, with a quite low content of crude protein. Nevertheless DDGS is offering some amount of crude protein (and amino acids) and will reduce the level of soybean meal and even full fat soya in diet formulation. As all soybean products are a 'wanted' raw material with high price volatility all around the world the inclusion of DDGS in poultry and layer diets normally will offer the chance of using cost saving effects. In comparison to "soya 48 brasil" with 46% crude protein (CP) one can estimate an exchange factor of corn DDGS (26% CP) as 2.2 and as 1.6 of wheat DDGS (33.5% CP). This means that 1% of soybean meal will be replaced by 2.2% corn DDGS and by 1.6% wheat DDGS. This exchange factor for sure will vary to some extent according to the matrix evaluation in detail. The amount of cost saving will be based on the actual price setting when offering DDGS into the diet optimization especially in relation to prices of soybean products.

Color of DDGS

The color of the DDGS gives a first indication of the quality. Whereas a more light and yellowish color might indicate a higher quality with higher amino acid digestibility than DDGS having a darker, brownish color. This is due to the fact that AA can undergo the Maillard reaction and AA (especially Lysine) can be combined with carbohydrates rendering them undigestible. It is considered that the dark color is due to drying the wet DDGS at excessively high temperatures. In the meantime scientists have established more quality indicators based mainly color to run an easy and quick test. Nevertheless color gives a first indication which should be combined with standard laboratory tests.



Source: U.S. Grains council

Contamination and unwanted residues

In DDGS everything from the basic cereal which has not been converted to ethanol and some minor co-products (for instance corn oil) during the fermentation process, will be concentrated. Levels of all ingredients in the cereals (without starch) will be approximately tripled. First of all the topic of mycotoxins needs to be mentioned; therefore DDGS from an origin where the cereals might show mycotoxin burden need regular monitoring so as to avoid high contamination. In order to control and guide the fermentation process, some supplements with antibiotic activity have been used in ethanol plants and might be used in the future as well. This would include Virginiamycin, Penicillin, Erythromycin, Tylosin and Tetracycline. Sometimes salt (sodium chloride) might be used as "drying agent" for water absorption of the DDGS. This will cause undesirable higher content of sodium in the resulting DDGS.

Inclusion of DDGS in Layer diets

Based on a constant nutrient content with normal and good digestibility DDGS from corn, wheat and other cereals will be a valuable raw material and cost effective as well especially under current high price and volatile raw material markets. Scientific trials with layer breeds have proven that corn DGGS could be used at levels of up to 30% in layer feed formulation. The level of inclusion being possible in practical layer diets is closely related to the amino acid digestibility and phosphorus availability; especially this aspect needs consideration because available phosphorus has become a

quite costly nutrient constraint in diet formulation for poultry. This is especially the case in all vegetable diets. The proper DDGS nutrient matrices will, to a very large extent, determine maximum inclusion rates. It should be mentioned, that Phytase and NSP Enzymes are highly valuable feed additives in association with the use of all kinds and sources of DDGS in layer breeds and poultry diets in general.

From a practical point of view following inclusion levels can be recommended for layer breed diets:

Layer feed type	Corn DDGS, rate of inclusion %	Wheat DDGS, rate of inclusion %
Starter	5	5
Grower	10	7
Developer	15	10
Pre-lay feed	15	10
Layer rations	20	15

It needs to be mentioned that feed structure should never be negatively affected, otherwise daily feed intake might be reduced and the DDGS might be "accused" of being guilty even though it isn't. DDGS from different production plants may show varying technical quality, meaning in terms of flowability and specific weight for instance. Additionally there is the challenge of variation in nutrient content. If buyers of DDGS are familiar with this topic it shouldn't be a problem.

Summary

DDGS has been well known for quite a long time in many countries around the world. With increasing production of bio-energy and ethanol from different cereals it has developed as an important raw material commodity in the international market, especially when it has been derived from corn. Scientific trials and practical experience have proven that DDGS is a very valuable raw material in feed formulation for poultry and especially for layer breeds. Due to restrictions and/or high volatility in the international raw material market, DDGS might even be a new raw material for layer feed formulation in some countries, which therefore widens the basis for diet formulation and offers some more flexibility in feed formulation in order to achieve low cost, but still nutritionally optimal diets.

Robert Pottgueter

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Hatchability Problem Analysis

Hatchability problems cause significant economic losses. Therefore, it is necessary to identify their causes in order to ensure the success of a parent stock operation.

Hatch debris breakout is a very useful tool to serve this purpose. The procedure includes opening un-hatched eggs and classifying the eggs into different categories. This helps to relate the problems to the breeder flock, the egg handling procedures and/or the hatchery. As breakout information is valuable for the whole production chain, they should be shared between the hatchery manager and the breeder flock manager.

To proceed

1. Take 4 to 6 sample setter/hatcher trays of one flock and hatch. Choose the trays from different positions within the incubator.
2. Record the number of all un-hatched eggs and place them on pulp trays.
3. Record the number of dead chicks and culls left in the trays.
4. Open all un-hatched eggs at the air cell which should appear in large end of the egg.
5. Classify the un-hatched eggs into appropriate periods at which the embryo has died (see hatch debris breakout categories).
6. If desired, you may classify the culled chicks into different categories as well.

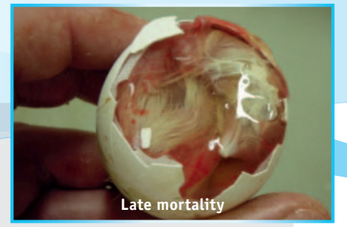
It is important to have a record sheet with the results and to express the mortality as percentage of eggs incubated. The results should be compared to a standard before being analyzed by the help of table 1. When breakouts are done regularly, the results can be used to build up a database and create an individual company standard.

If such a company standard is missing, the Technical Service Team of H&N International is available to assist our customers with the interpretation of the results.

Hatch debris breakout categories

- **Infertile:** no signs of development
- **Early mortality (from 1 to 7 days):** infertile and very early dead are difficult to distinguish since the breakout analysis is made at 21 days and there are modifications by degradation. The candling breakout analysis offers the highest accuracy in determining fertility which is solely related to the breeders and not the hatchery.
- **Mid-term mortality (from 8 to 17 days):** some of the embryos can appear black due to the breakdown of blood (not to be confused with contaminated eggs which emit a rotten odor). The length of the claws and beaks is a good tool to accurately determine the age of the embryo.
- **Late mortality (from 18 days until hatch):** some of the embryos can appear reddish-brown and without blood vessels in the allantois. In this period, chicks can also be found which were fully developed but were dead at hatch:
  - Pipped eggs: dead without being hatched. The egg shell is cracked but the chick was not able to get out. Common causes include (but are not limited to) fatigue and lack of oxygen.
- **Malposition:** the beak above the right wing, feet over head, head between thighs, or under left wing, or in the small end of egg occur most frequently.
- **Malformation:** may be the result of a genetic defect or of congenital origin. The most common deformities are exposed brains, ectopic viscera and supernumerary extremities, without eye(s) or a deformed beak.

Infertile eggs vs. early mortality



Late mortality

Embryonic development at day 11

Internal pip (late mortality)

Embryonic development at day 17

Pipped egg

- **Contaminated:** strong discoloration of the egg content with emission of rotten odors.
- **Cracked eggs:** all eggs with visible cracks. Eggs with very thin egg shells can be classified in this category, too.

Table 1. Probable causes of embryonic mortality or problems

Period	Farm	Storage/Incubator/Hatcher
Early mortality (1–7 days)	• Very young and very old breeders • Temperature too high • Low eggshell quality • Mycotoxins, drugs, toxins or pesticides • Dirty and/or contaminated eggs and nests • Inappropriate nutrition breeders • Newcastle disease and infectious bronchitis	• Eggs damaged during handling and transport by jarring • Eggs stored too long • Temperature too high or too low both during storage and incubation • Lack of ventilation • Improper fumigation • Inadequate turning
Mid-term mortality (8–17 days)	• Too thin eggshells (Cracks or damaged eggs) • Dirty and/or contaminated eggs • Severe nutritional deficiencies*	• Eggs stored too long • Improper or sudden changes of temperature, ventilation, humidity and turning • Excess of O_2 and lack of CO_2
Late mortality (≥ 18 days)	• Severe nutritional deficiencies* • Breeders diseases • Poor shell quality	• Improper or sudden changes of temperature, ventilation, humidity and turning (high temperature and low humidity produce small embryos) • Inverted eggs • Contamination, especially from moulds as aspergillis • Fumigation too severe or too prolonged • Incorrect transfer: too latecracks and damaged eggs, egg chilled …
Pipped eggs, but died without hatching	• Severe nutritional deficiencies (linoleic acid) • Breeders diseases	• Low humidity, temperature or O_2 • Poor ventilation
Malposition	• Severe nutritional deficiencies (linoleic acid) • Old breeders • Round-shaped eggs or very large eggs	• Improper turning frequency and angle • Heat stress • Upside down placed eggs • High humidity
Malformation	• Genetic defect • Severe nutritional deficiencies* • Breeders diseases	• Inadequate ventilation during the start of incubation and low oxygen levels (exposed brain) • Inadequate ventilation in the middle of incubation (ectopic viscera) • Rough handling (supernumerary extremities)
Contaminated eggs	• Dirty nests and eggs • Floor eggs • Bad egg shell quality (cracks and damaged eggs) • Dust from breeder house	• Rough handling • Washed eggs • Water condensation on eggs (sweating) • Eggs dipped in conaminated solutions

*** Deficit: Bioti (crooked beak; "parrot beak"), vitamin D and Ca (bad eggshell quality, skeletal abnormalities), Mn (short limbs and abnormal lungs), riboflavin (crooked toes) and vitamin B_2 (cleft upper peak)**

Ana Blanco

PRONAVICOLA and H&N: A Success Story in Colombia and Venezuela

The offices of Pronavicola are located in the Colombian city of Buga (Valle del Cauca). Pronavicola has been supplying the Colombian poultry industry with premium quality layer and broiler chicks for 30 years.
In 2006, Pronavicola and H&N began their commercial relations. Since that time, Pronavicola has increased its placments of H&N Brown Nick parent stock each year. Brown Nick has become very important in Pronavicola's product portfolio. When Colombian and Venezuelan egg producers deal with Pronavicola they have a choice of top breeds from the EW Group including BROWN NICK. By offering their customers a choice, Pronavicola can meet their individual breed preferences. In addition most egg producers feel more comfortable with not being entirely dependent on one strain of layers.
Today, Pronavicola is the only hatchery Colombia and Venezuela that can offer two layer strain options that can provide excellent genetic potential. H&N BROWN NICK has made this option possible. BROWN NICK distinguishes itself from competitive layer breeds by its superior egg color and shell quality as well as its good egg size and generally excellent performance results in the field. The well qualified staff of Pronavicola soon realized BROWN NICK layers are capable of profitable performance even in hot tropical conditions.
With H&N Pronavicola has found a breeding company that offers a quality product that is backed with timely and meaningful technical support. This has given Pronavicola the confidence to strongly and prominently represent H&N in the important Latin American markets of Colombia and Venezuela.

Dr. Ronald Trenchi

H&N International in Ecuador

The Corrales family from Ambato, Ecuador has been linked for many years with the poultry industry, particularly the hatchery sector. Their main business is selling one day old chicks. In 2005, they founded a new company named Huevos Naturales Ecuador. In addition, strengthen their commitment to H&N and also as a marketing strategy, the name H&N BROWN NICK was added to the original name of the company.
The Corrales family decided to create this new company to introduce a strain of brown egg layers that would be new to the market and also be able to compete with the strains already present in the Ecuadorian market. They realized that BROWN NICK was not a product in which to compete in price but to compete in terms of egg quality and production against the competition.
Currently Grupo Corrales is the main supplier of layers in Ecuador. They account for 65 to 70% market share. Grupo Corrales offers very professional after sales service to their customers. They know this is necessary in order for BROWN NICK layers to maximize their genetic potential terms of production performance and egg quality. This will ensure acceptance of the product throughout the Ecuadorian market.

Dr. Ronald Trenchi

from left to right: Dr. Freddy Paz (Technical Director) Eduardo de Souza Pinto (Managing Director H&N), Ing. Javier Corrales (CEO Huevos Naturales Ecuador.), Dr. Ronald Trenchi (H&N Latinoamerica)

Successful H&N International Expo Participation, February 2014

H&N and its Ukrainian partner welcomed local customers from all around the country including the Autonomous Republic of Crimea to take advantage of interesting and up to date technical discussions conducted by qualified H&N personnel, and also by personnel of Ukrfeed and Kozhuchivska poultry farm. The event offered the latest available knowledge on the layer business.
During the show, H&N, Ukrfeed and Kozhuchivska staff presented the latest recommendations in the field of feeding and veterinary practice and management recommendations for the H&N BROWN NICK layer, which is getting more and more popular in Ukraine.
Besides the local representatives, Mr. Pavel Bogatkin H&N's CIS Area Manager from St. Petersburg, Russia conducted extensive discussions regarding the recent world trends in egg layer type genetics.

Pavel Bogatkin & Konstatin Iastrebov,PhD

From left to right: A. Yanchevskiy, P. Bogatkin, Natalya, K. Yastrebov

H&N and Agromix Broederij en Opfokintegratie (ABO) in the Netherlands

Agromix Broederij en Opfokintegratie (Agromix Hatchery and Rearing Integration or ABO) was founded at the end of 2010 as an independent rearing integration. After the realignment of distributors in the Netherlands in December, 2011, ABO acquired the distribution rights of H&N for the Dutch market.
At the same time ABO capitalized on the opportunity to build a totally new hatchery of their own for the production of layer chicks. The new hatchery in Afferden, Netherlands had an initial yearly production capacity of about 10 million day-old-chicks. This eliminated the need for ABO to have their chicks custom hatched in other hatcheries. The new hatchery became operational in October, 2012. Then in October, 2013, the yearly capacity was increased to about 15 million day-old- chicks. Even with this increased capacity, the hatchery is fully utilized.
About 50% of the production is used for the Dutch market and 50% is for the sales of Pluriton Ltd.. Pluriton, the export arm of ABO specializes in the export of layer hatching eggs and day old chicks. Pluriton's primary focus is on sales of H&N and other layer breeds included in the EW Group (like Hy-Line and Lohmann). In addition, Pluriton is involved in the export of broiler hatching eggs. Pluriton is known in the industry for its fast, reliable, customer focused approach. Painstaking logistical planning is another Pluriton strong point. These are the hallmarks of the increasing collaboration and growth between H&N International and Pluriton.

Regarding the Dutch market, ABO started in early 2012 by placing its first flock of H&N BROWN NICK parent stock. Since that time the aim has been to serve the Dutch market with premium quality brown eggs. ABO has succeeded in the re-introduction of H&N BROWN NICK in all management systems including aviary, free range and organic. The key unique selling points include superior shell quality and colour, high production persistency of premium quality eggs and docile temperament. The latter point is especially important considering the upcoming ban on beak trimming of layers by 2018. In addition, the H&N BROWN NICK is known for its good feathering.

Recently, the Dutch market has undergone a realignment due mainly to the increased self sufficiency of egg production in Germany, the leading destination for Dutch produced eggs. Historically, Dutch egg production has been at a level of 300% of the needs of its domestic market demands. Now the emphasis in the Netherlands has shifted to production of egg products for the egg processing industry as less shell eggs can be exported to Germany.
This change prompted ABO to commence placement of H&N SUPER NICK white egg parent stock at the beginning of 2013 in order to serve the changing demands of the Dutch market. In April, 2013 a H&N SUPER NICK product launch seminar was held to introduce Dutch egg producers to the advantages of the layers. Prof. Dr. Rudolf Preisinger, H&N's Managing Director served as the seminar's keynote speaker. Prof. Preisinger provided valuable information about H&N SUPER NICK to the large audience of Dutch egg producers in attendance.

In November, 2013 the first H&N SUPER NICK commercial layer flocks started production in colony, aviary and free range farms. ABO and its customers are very happy with the performance of these flocks under Dutch market conditions. They have demonstrated superior production performance and egg quality when compared to competitive white egg strains. The H&N SUPER NICK has also become known for a docile temperament and good feathering. The advantages H&N SUPER NICK offers in egg numbers and egg mass is very important for those producers supplying the egg processing industry.

Over the last few years, Dutch market demand has reversed from 60% brown and 40% white to 60% white and 40% brown. This means there is a lower yearly requirement of replacement pullet flocks as egg producers tend to keep white egg strains easily to 90 weeks of age and longer. In total the Dutch market has about 34 million layers and that means yearly placement of not more than 25 million replacement pullets.

Already last year ABO produced 7,5 million day old layer chicks for the Dutch market which currently accounts for a 30% market share. About 4,5 million of these chicks will be grown by ABO and sold as started pullets to Dutch egg producers. ABO has in total an H&N Parent Stock intake of 90.000 (50% brown and 50% white). The goal for the future is to maintain the excellent performance results of H&N and to steadily increase market share of H&N products in the Netherlands. There will also be emphasis to support H&N International in the introduction of its products to new markets with the delivery of hatching eggs or day old chicks.

Hans Groot Koerkamp,
Agromix Broederij en Opfokintegratie

The world of H&N International

H&N BROWN NICK

H&N NICK CHICK

H&N SILVER NICK

H&N SUPER NICK

H&N CORAL

Successful H&N School in Bremen

The latest available knowledge on layer business was shared during the H&N International Technical School. The 7th World Technical School of H&N International took place in Bremen, Germany, from December 9th to 13th 2013.

H&N International welcomed 31 participants from more than 20 countries to take advantage of a very interesting and updated technical training program conducted by qualified H&N personnel, and also by one outside guest speaker, Mr. Thomas Calil, from PasReform.

During the weeklong event, important subjects such as biosecurity, the latest management techniques for improving flock performance results, nutrition, ventilation, world egg market situation and hatchery best practice among others were discussed. In summary, all the latest information on the layer business was shared so those attending could upgrade their knowledge. They were able to their companies in a position to put into practice what they learned during the H&N School, thus delivering a very good return on the investment to attend the school.

The group also had an opportunity to visit the new state of the art hatchery of Agromix Broederij en Opfokintegratie b.v. in the Netherlands. While in the Netherlands, the group also had the opportunity to visit Kwetters, one of the largest egg grading and packing companies in the European Union.

"We have had very nice and pleasant moments with our customers during our technical school, and it was good to see the knowledge and cultural exchanges they could have, while talking to each other all during the week. They went back with a huge amount of valuable information, which make us, H&N International, proud of the results achieved during the week with them", stated Eduardo de Souza Pinto, Managing Director of H&N International.

H&N International has been working worldwide since 1945 to produce layers with excellent genetic potential in order to deliver to the market the most profitable layer available. This effort is supplemented by marketing activities and world class technical support, which is both timely and meaningful to H&N customers.

Melanie Schult

IMPRINT

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