

H&N International at the IPE / IFE 2011 in Atlanta

The global poultry industry gathers every year in Atlanta for the International Poultry Exposition (IPE).

This year, H&N International was an exhibitor at this important poultry industry event.

The exhibition took place at the Georgia World Congress Center from January 26 to

28, 2011. The new H&N Corporate Exhibit Design was featured at this year's IPE. Approximately 20,000 key decision makers from nearly 100 countries attended this year's event.



H&N International Event

Come meet us in Bangkok

The next international exhibition appearance for H&N will be at the VIV Asia 2011 Show which will be held in Bangkok, Thailand from March 9 to 11.

We are looking forward to seeing you in Bangkok at our booth in Hall 01 at stand P032.



Pedigree Hatch Procedure: Accurate working is necessary

For the selection of the pure line birds in the breeding programme of H&N lines, it is a prerequisite to know the correct ancestry and genetic relationships of the individuals. Therefore, the procedure of hatching the pure line chicks needs to be organised in such a way to ensure that the frequency of pedigree errors be kept as low as possible. How we do this at H&N is described in the following article.

Pedigree Insemination

The pedigree hatch procedure starts already in the breeding farm where the selected males and females of each line are mated by means of artificial insemination. The mating plan (i.e. which male is mated with which female) is worked out in such a way to minimise the rate of inbreeding. For the insemination, the semen of each male is

collected in a small tube and only the hens designated for this male are inseminated.

The mating ratio is usually in a range of between 1:5 and 1:10, depending on the size and family structure of each line. During the egg collection period for the pedigree hatches, all eggs are marked with stickers showing the cage number of the hen.

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Alignment of the eggs on a setter tray

After sending the eggs to the pedigree hatchery, the eggs which have been collected over a period of 7 days for one hatch, need to be sorted according to the sticker number into one row to make sure that the eggs from the same hen from several days stay together during the setting and hatching procedure. After completing the seven-day egg collection period, the number of eggs set for each family is recorded and the eggs can go into the incubator.

Transfer of eggs

At 17 days of incubation, the eggs are candled and unfertile eggs are taken out. The fertile eggs from each family are transferred to hatcher trays. To guarantee that the chicks from different families do not mix during the hatch procedure, all eggs from one family are placed in a „pedigree basket“. These pedigree baskets are constructed using stainless steel sheet material with holes for the necessary air flow through the baskets. During transfer, the number of fertile eggs of each family is recorded again.

Hatch procedure

When the incubation procedure is completed and the

chicks can be pulled, the pedigree baskets are lifted one after the other. From each family in one pedigree basket, all chicks are collected before the next basket is lifted to avoid any mixing of the chicks from different families.

The chicks are graded and chicks which do not meet the necessary chick quality standards, will not be taken for the next generation. An egg shell with the family number identification will go together with all the chicks from this family to the sexing procedure. All chicks from the pure lines are vent sexed and checked for correct feathering (fast or slow feathering according to the line specification). After sexing, all chicks from one family are placed into plastic chick boxes, i.e. one box with two segments for each family.

The number of first grade chicks per family, the number of female chicks and the number of male chicks are recorded. The wing bands required are then placed into the chick boxes. The wing band numbers allocated according to family are recorded in the software programme. Each chick is marked with a wing band with a unique number. The wing bands are pierced through the wing web and sealed with a rivet seal. The wing bands

remain with the bird its entire life and therefore ensures that each individual bird be always easily identified during the performance testing procedure. Pure line and cross line chicks (for the field test of crossbred commercials) are handled in the same way and individually marked their entire lives.

A lot of possible errors can occur during insemination, egg collection, egg sorting and/or in the chick handling procedure. Therefore, it is very essential to work accurately at all times. If there would be a high percentage of pedigree errors, all the performance testing procedures would be useless and the genetic parameter estimates (e.g. heritabilities, breeding values) would be influenced by these pedigree errors.

During all the genetic evaluation procedures, there have always been good statistical properties showing a sound basis of pedigree and data recording without a reasonable frequency of errors. This provides the necessary basis for further genetic progress and proofs that in the pedigree hatchery, accurate and good work is being done line by line, year by year.



Sun Daily: A Key Player in the Chinese Egg Industry

Sun Daily Village Poultry Company is a member of the Tie Qi Li Shi (TQLS) Group, a major agricultural group in China founded in 1992 by Mr. Lay Wen Yong. Sun Daily is located in Mianyang, Sichuan in southwest China. It was founded in 1999 and is comprised of five separate companies plus a poultry disease diagnostic center. It is ranked as the largest poultry layer breeding company in West China. Sun Daily's staff of 300 people includes 50 poultry technical specialists. The company supplies 42 million quality layer chicks per year to the Chinese market. In addition, Sun Daily maintains three million of their own layers to produce their branded eggs.

In 2003, Sun Daily began to include H&N Coral layers in their operations. Coral is now one of the main tinted egg layer breeds used by Sun Daily. Company staff appreciate the excellent and highly profitable performance of Coral at both the parent stock and commercial levels.

Sun Daily is an example of a vertically integrated poultry business designed to supply branded eggs to consumers. With their own breeding operations, feed mills, egg production and distribution Sun Daily can ensure supreme quality and wholesome eggs for human consumption.

Excellent Persistency of “Brown Nick” commercial layers under tropical conditions in Thailand

The records of two commercial layer flocks shown in the table confirm our claim that H&N “Brown Nick” layers adapt well to open housing conditions in tropical climate. Both flocks were housed in conventional cages, with two birds per cage and a moderate density of 600 cm² per bird.

Peak production slightly exceeded the standard, and production persistency was very strong. Both flocks easily exceeded the standard for the egg number per hen housed to 72 and 80 weeks of age. The excellent persistency of production is evident from the hen-day rate of lay between 77 to 80 weeks of age.

As an additional indication of superior persistency of production and shell quality, it may be noted that these flocks were kept in production until 92 and 96 weeks of age, without being subjected to induced molting.

Not surprisingly, egg weight under tropical conditions was under the “standard” (which is defined for conditions in closed houses with controlled temperature) however due to higher egg numbers, the total egg mass slightly exceeded the standard. Both flocks maintained desirable levels of feed consumption that allowed satisfactory feed efficiency and profitable production.

Detailed weekly records of mortality and HD rate of lay suggest that flock #2 was exposed to extreme temperatures twice during the lay cycle, with high mortality, but quick recovery of HD rate of lay after the heat period.



- **Capital (and largest city)** Bangkok
- **Total Area** 513,120 km²
198,115 sq mi
- **Water** 0.4 % (2,230 km²)
- **Population**
2010 estimate 65,998,436
2000 census 60,606,947
- **Density** 132.1/km²
342/sq mi
- **Official language** Thai
- **Government** Parliamentary democracy and Constitutional monarchy
- **Monarch** Bhumibol Adulyadej (Rama IX)
- **Prime Minister** Abhisit Vejjajiva
- **GDP (PPP) 2009 estimate** Total \$539.871 billion
Per capita \$8,060
- **GDP (nominal) 2009 estimate** Total \$263.889 billion
Per capita \$4,403
- **Currency** Baht (THB)



Source: wikipedia.com
Landscape: www.weltkarte.com

H&N “Brown Nick” Field Performance in Tropical Climate with Open Housing
Location: Saraburi, Thailand, Conventional Cages; 2 birds/cage; 610 cm²/bird

Std.*	Flock #1	Flock #2	Avg.	Std.	Avg.vs. Std.
Eggs/HH to 60 wks.	255.6	258.8	257.2	251.0	+6.2
Eggs/HH to 72 wks.	321.4	331.6	326.5	314.2	+12.3
Eggs/HH to 80 wks.	361.5	378.9	370.2	351.6	+18.6
HD Prod. Peak (%)	96.7	95.6	96.2	95.2	+1.0
HD Prod. Avg. (%)	84.7	88.7	86.7	82.3	+4.4
HD Prod. 77-80 wks. (%)	69.0	83.5	76.3	69.0	+7.3
Wks. over 90% HDP	20	33	26.5	26	+0.5
Avg. Egg Wt. (g/egg)	62.2	61.9	62.1	64.0	-1.9
Max. Egg Wt. (g/egg)	67.6	67.5	67.6	68.7	-1.2
Avg. DEM (g/bird)	52.7	53.8	53.3	52.7	+0.6
Total EM/HH (kg)	22.49	23.45	22.97	22.50	+0.47
Feed Cons. (g/bird/day)	109.0	113.4	111.2	110.0	+2.2
FCR (total kg feed/kg EM)	2.07	2.11	2.09	2.10	+0.01
Lay Cycle Mortality (%)	4.7	17.5	11.1	6.1	-5.0
Weekly Mortality (%)	0.08	0.29	0.18	0.10	-0.08
Body Wt. at 20 wks. (g)	1,847	1,835	1,841	1,645	+196
Body Wt. at 80 wks. (g)	2,191	2,191	2,191	2,051	+110

*Notes + actual performance exceeds standard
- egg weight in both flocks lower, mortality in one flock higher than standard

Öz Tavuk and H&N Celebrate 20 Years of Cooperation

Öz Tavuk A. S. of Yenisehir, Turkey and H&N International celebrated 20 years of successful business cooperation at a banquet held in Iznik, Turkey on November 2, 2010.

Dr. Hans-Friedrich Finck and Rich Wall represented H&N International at this event. Mr. Nazim Camci, one of brothers who co-founded Öz Tavuk, presented comments on his recollection of this important relationship. Rich Wall spoke about the history between the two companies from the beginning. Special recognition was given for the late Mr. Halil Camci, the main founder of Öz Tavuk and the late Mr. Kamuran Bastuji, who provided valuable technical assistance in the early years of Öz Tavuk. Mr. Chazim Camci, another member of the founding group was present as well. The second generation of

the Camci family, which currently manages the company was represented by Mehmet, Tolga and Tuncay Camci. Mr. Atam Kurchai who has been Öz Tavuk's production director was present as well.



Left to right – Tuncay and Nazim Camci, Dr. Finck, Chazim Camci, Rich Wall, Tolga Camci

Tolga Camci remarked that the keys to Öz Tavuk's success could be summarized as follows:

- 1.) Always supply good quality chicks on time.
- 2.) Always keep promises made to customers.

As a result, more than 80 % of Öz Tavuk's customers have never changed to another chick supplier!!

Turkey market data 2009

Basic country information

Population 72 million
Land area 78.3 million ha
Agricultural 26.5 million ha land

Laying hens

Layers 66.500.000
Brown to white ratio: 25:75
Chick placements 55.700.000

Production

Shell eggs 868.000 t
Average egg weight 62 g
Liquid 12.000 t
egg products
Prod. System 100 % Cages

Consumption per Capita

Shell eggs 174 eggs / year

Trade

Shell eggs (exports) 71.322 t
Shell eggs (imports) 0 t
Self sufficiency rate 100 %

Source: International Egg Commission (IEC), 2010



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Key Points in Designing an Effective Vaccination Program

The design of an effective vaccination program depends on the location of the farm and the local disease challenge. Biosecurity practices and proper cleaning and disinfection accompany effective vaccination programs. It is important that the vaccination program be adapted to local conditions.

The number of vaccinations is not the most important factor for a good vaccination program. The choice of the vaccine, based on the challenge and specific condition of the operation, is the determining factor. A good vaccination program should be cost effective. It should also protect the flock in such a way so as to allow it to reach its full genetic potential.

It has to be considered that some time is needed after the vaccination for a proper im-

mune response. If a challenge occurs shortly after vaccination, the efficacy of the vaccine may be compromised. For this reason, minimising early disease exposure of day old chicks with good biosecurity and isolation, is a key factor for a successful vaccination program.

The maintenance of proper body weight and good uniformity are essential for good egg production. It means stress and handling should be reduced as much as possible.

Therefore, the choice of the vaccination route is of high value to reduce the handling of the birds as much as possible.

Vaccination Methods

Individual Vaccinations - Intramuscular injections and intraocular (eye drop) administration are very effective and generally well tolerated but also very labour intensive.

Drinking Water Vaccinations are not laborious but must be carried out with the greatest care to be effective. The water used for preparing the vaccine solution must not contain any disinfectants. During the growing period, the birds should be without water for approximately 2 hours

prior to vaccination. During hot weather reduce this time accordingly. The amount of vaccine solution to be completely consumed within 2 to 4 hours should be calculated to be completely consumed accordingly. When vaccinating with live viral vaccines add 0.267 ounces of skim milk powder per gallon of water (2 g/litre) or other protective products offered by vaccine suppliers in order to protect the vaccine virus.

Spray Vaccination is an efficient method for vaccinating large numbers of birds. Spray vaccination of day old chicks can be carried out at the hatchery or in the chick boxes upon arrival at the farm. Droplets of 250 microns are ide-

al for day old chicks as this results in an even coverage of the birds. For chicks of up to 3 weeks, only coarse spray should be applied. Coarse spray droplets (> 100 micron at bird level) can be used to target the areas around the upper respiratory tract. Fine sprays (<100 micron at bird level) remain suspended in the air are inhaled and therefore, penetrate deeper in the respiratory tract. The water used for spray vaccination should be fresh, cool (temperature 8-20°C or 46 - 68o F) and free of certain minerals and chlorine. If the volume of water is too high, this can result in chilling of the birds. Follow the vaccine supplier's directions regarding the quantity of water needed for spraying of the birds.

General Recommendations

Only healthy flocks should be vaccinated. Check the expiry date of the vaccine batch used. The vaccine must not be used after this date. Keep records of all vaccinations and vaccine batch numbers. Vaccination programs vary according to area, disease exposure, strain and virulence

of the pathogen involved and must be designed to meet the needs of specific local conditions. Competent poultry veterinarians should be consulted regularly for revisions of vaccination and medication programs as well as for disease preventive management practices.

Medication practices such as the use of antibiotics and coccidiostats in the feed should also be under the direction of a veterinarian with special training and experience in avian pathology.

Special Recommendations

Vaccination against Mycoplasmosis with live or inactivated vaccines is only advisable if the farm cannot be kept free from the infection. Infections with virulent Mycoplasma species during the production period lead to performance depression. The best performance is achieved by flocks which are kept free of Mycoplasmosis without vaccination.

Vaccination against Salmonella could be done with live and/or inactivated vaccines. In many countries now, vac-

ination against Salmonella serotypes of public health significance, especially *S. enteritidis* and *S. typhimurium*, is being practised. This is done in order to improve consumer protection against foodborne Salmonella infections, but not to protect the birds themselves against clinical disease. Vaccination against *S. gallinarum/pullorum* is not recommended as farms should be free of this very important poultry pathogen.

Applying Vitamins in the first two to three days after vaccination can help to reduce stress and prevent undesired reactions. The specific situation on each farm will dictate the time period necessary for administering vitamins.

Serological Monitoring

Serological data obtained after the bulk of the vaccination program is complete by 17 or 18 weeks of age, is a good method for evaluating the immune status of a flock of pullets prior to production. Such data also serves as an immune status baseline for determining whether a field infection has occurred

when production drops are observed. It is recommended that the flock owner submits 25 good serum samples to a laboratory one or two weeks prior to the pullets being placed in the lay house to establish freedom from certain diseases such as *Mycoplasma gallisepticum* (Mg) and *Mycoplasma synoviae* (Ms) prior to onset of production. Serological data can give valuable information on the immune titre levels for a number of disease causing agents. It is recommended to collect and store serum samples from a layer flock every four weeks. In case of egg drops, blood samples should be collected and tested. If no problem has occurred, samples may be discarded when the flock is depleted. In this way, if a drop in production occurs due to a viral infection, serum samples to detect antibody levels are available before and after the egg drop.

Working with a poultry laboratory to set up a profiling system will aid better evaluations of vaccination programs and possible flock conditions.

Example of a Vaccination Programme

Disease	Appearance		Application	Remarks
	worldwide	locally		
Marek	●		SC-IM	Day 1 - Hatchery
Newcastle	●		W-SP SC-IM	Number of vaccinations according to disease pressure
Gumboro	●		W	2 live vaccinations recommended
Bronchitis	●		W-SP SC-IM	Number of vaccinations according to disease pressure
AE	●		W-SP-WW	Vaccination of Parent Stocks and Commercial is recommended
CAV	●		W-SC-IM	Vaccination of Parent Stocks is recommended
Mycoplasmosis		●	SP-ED SC-IM	Vaccination before transfer
Fowl Pox		●	WW	Vaccination before transfer
Pasteurellosis		●	SC	2 vaccinations approx. at week 8 and 14
Infectious coryza		●	SC	2 vaccinations approx. at week 8 and 14
Salmonella		●	DW-SP-IM	Vaccination before transfer
ILT		●	W-ED	2 vaccinations between 6 - 14 weeks
EDS		●	SC-IM	Vaccination before transfer

W Water SP Spray F Feed IM Intramuscular Injection SC Subcutaneous Injection ED Eye Drop WW Wing Web

Vaccination against Coccidiosis (F-W) is optional for floor rearing systems


Sanjarbek Djanibekov

- Born in Urgench, Uzbekistan in 1985
- 2002 completed high school
- 2002 - 2006 Agricultural studies at Urgench State University
- 2006 - 2008 Master of Business Administration in Agriculture (MBA) at the University of Applied Sciences Weihenstephan, Germany
- 2009 - 2010 Trainee H&N International
- Since 2010 Area Sales Manager H&N International

After successful completion of his Trainee program, Mr. Sanjarbek Djanibekov became an Area Sales Manager for the Ukraine market. With his native language, Russian supported by his knowledge of German, Mr. Djanibekov sets to strengthen H&N's business ties between Germany and the Ukraine. His responsibilities as Area Manager includes expanding the presence of the H&N brand in the Ukraine. Close market observation and establishing new business contacts with key players in the local market are his main objectives which will make this possible.

New distributor of BROWN NICK in Ukraine

The poultry farm "Kozhukhovskoe" was founded as a state-owned farm, "Sotsperestrojka", in 1938. In 1975, the latter was renamed "Kozhukhovskiy".

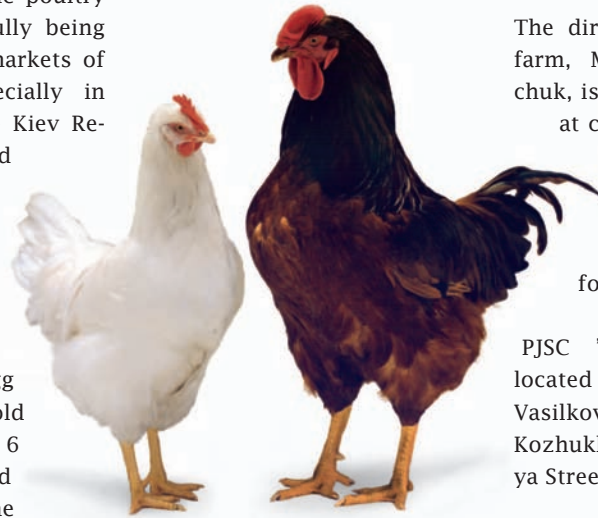
In 1996, OJSC "Kozhukhovskoe" was founded based on the business principles of the state-owned breeding farm "Kozhukhovskij". It changed its name and since September 2010, it has been known as Public JSC „Kozhukhovskoe“.

Today, the PJSC poultry farm "Kozhukhovskoe", which is a subsidiary of "Selkhozprodukt", has its own hatchery, formula-feed plant, slaughter house, egg storehouse, 3 breeding and housing areas, shops and a retail chain. The products of the poultry farm are successfully being sold in the supermarkets of the country, especially in the markets of the Kiev Region. "Our day-old chicks are being delivered to more than 50 enterprises in the different regions of Ukraine. There is a hatching-egg production, day-old chick production, 6 kinds of eggs and poultry meat in the assortment of our poultry farm."

Since 1996, the poultry farm participates regularly at all Ukrainian and regional exhibitions and it has also won a lot of awards and prizes. Production volumes are increasing continually thanks to effective poultry breeding operations. Great efforts are also being made to improve breeding conditions such as the reconstruction of the facilities, careful monitoring of the dietary intake of their birds and improving forage

reserve. The capacity at the poultry farm has been increasing steadily in the last 70 years.

PJSC Poultry Farm "Kozhukhovskoe" has one of the leading positions in the country's egg market thanks to



its professional staff, rich tradition in production, favorable geographical location and special focus in meeting the needs of its customers.

In 2010, PJSC "Kozhukhovskoe" signed a contract with H&N International for the delivery of Brown Nick one-day old parent stock chicks. This gave a kick-start to the development of a new product in the enterprise and paved the way for the implementation of magnificent new plans.

The director of the poultry farm, Mr. Evgeniy Bondarchuk, is a regular participant at charity events and active in charity campaigns. The company even has its own charity fund for its employees.

PJSC "Kozhukhovskoe" is located at: 08621 Kiev Area, Vasilkovskiy region, village Kozhukhovka, Pervomayskaya Street.



Breeding building Public JSC Kozhukhovskoe

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