

NEW HORIZONS

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Inside this issue:

- Hy-Line Hellas Celebrates Fifty Years with Hy-Line 2
- Protecting Brand Identity 3
- Kreager Appointed Chairman of GCC 6
- Hy-Line on the African Continent 7
- Hy-Line Continues Growth in Norway 8
- BFREPA Conference Attracts Record Numbers 9
- KPTS Celebrates Twenty Years with Hy-Line 10



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Welcome to the "New Horizons" E-zine

On behalf of everyone at Hy-Line International, I would like to welcome you to this first issue of our on-line, e-zine version of *New Horizons*. This quarterly publication is designed to keep all of our distributors, customers and business partners, around the world, up to date on new developments at Hy-Line International.

All of the articles have a contact e-mail address for the author so that you are able to contact them directly to follow up with any questions that you have. I also want to take this opportunity to thank all of our customers for your continued support for the Hy-Line brand.

This is an exciting time to be involved in layer genetics and I can assure you that none of us at Hy-Line take customer loyalty for granted. That's why we remain true to the basics of our vision and mission of providing the most efficient and superior performing layer breeds in the business to help nourish a growing population around the world.

Thanks for being part of the Hy-Line Team!

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Dr. John A. Greaves
President & CEO
Hy-Line International

Hy-Line International's Mission

The people of Hy-Line International are dedicated to the development and distribution of superior layer varieties.

We continually invest in research and development to produce the best performing layers to meet our customers' needs and expectations.

We support our customers with innovative management tools and technical expertise, allowing them to realize the full genetic potential of our products.

We foster an environment of continuous improvement for our people, products, and processes.

Hy-Line Recognizes Longtime Relationship with Greek Distributor

Hy-Line International is proud to recognize their Greek distributor, Hy-Line Hellas, for over 50 years of commitment to producing and selling the Hy-Line varieties in Greece.

Hy-Line Hellas, which was started by Takis Georgasopoulos, began importing Hy-Line parent stock in 1955 when the farm was only a small chicken house and a wooden Robins incubator.

In 1970, a new farm was constructed about 50 km. outside of the capital city of Athens. During this time period, Mr. Georgasopoulos expanded Hy-Line Hellas' sales beyond Greece, into the Balkan countries, Middle East, and Egypt, selling the Hy-Line variety W-36 and Hy-Line variety W-77.

"The connection between Hy-Line Hellas and Hy-Line International has been like a family for the past 50 years," said Mr. Georgasopoulos.

Today, Hy-Line Hellas continues to expand under the leadership of Costis Georgasopoulos, son of Takis Georgasopoulos, and maintains a 35% market share distributing the Hy-Line variety Brown and Hy-Line variety W-98.

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(L-R) Joao Paula, Hy-Line regional business manager for the African continent, and Costis Georgasopoulos stand in front of the many plaques Hy-Line Hellas has received from Hy-Line International over the past 50 years.

Belzer Appointed Egg Division Director of the UBA



Rogerio Belzer
Hy-Line do Brasil
Managing Director

In January 2007, Rogerio Belzer, managing director for Hy-Line do Brasil, was appointed director of the egg division, for the Brazilian Poultry Association (UBA), which represents the poultry industry in Brazil.

During his two year appointment, Rogerio's responsibilities will include; representing the egg division within the poultry industry, including media relations for the UBA; supporting regional organizations in order to strengthen local egg promotion activities, and continuous focus on food safety and animal health. Rogerio has been the managing director of Hy-Line do Brasil for nine years. Hy-Line do Brasil is a subsidiary of Hy-Line International in Nova Granada, Brazil.

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Protecting Brand Identity Through DNA Fingerprinting

Brand Value

A company's brand is the single most important commercial asset that it possesses. A brand is more than just a set of graphic standards or a logo. It is a promise – a unique set of experiences and expectations that establish a company's identity and credibility in the marketplace. The credibility of a brand in the marketplace is a direct reflection of all of the company's activities in meeting the needs and expectations of its customers with its products and services. It's a direct reflection of a company's vision, its mission and its values. Successful companies understand the value of a brand and what it means to their business, their employees and their customers. At the end of the day – customer service is all about a constant reinforcement of the "brand promise."



Dr. Neil O'Sullivan
Hy-Line International
Director of Research &
Development



Dr. John A. Greaves
Hy-Line International
President & CEO

Establishing Brand Value

At Hy-Line International, we strive to breed the most efficient laying hens that are capable of producing the majority of eggs worldwide in order to nourish a growing population. Our brand stands for performance, quality and excellence and we strive to continually reinforce our brand promise in everything that we do to support our product. The year 2006 marked the 70th anniversary of the Hy-Line brand. Ever since our early beginnings in 1936, Hy-Line has been focused on four primary objectives. The first is to develop the best genetic products possible. This has required our team of geneticists to establish a system to continually find unique assemblages of alleles in our pure line populations and search for the optimum combinations of these alleles that result in the highest productivity potential possible for the commercial bird. Whether this is livability, peak production, persistency of lay, feed efficiency or disease resistance, our geneticists continue to improve performance with every generation.

The second has been to establish a global production capability to assure our customers of continuity of supply. With the current industry issues on general biosecurity and highly pathogenic poultry diseases such as avian influenza, the need for global production capability to ensure continuity of supply is more essential now than ever before.

The third has been to establish and support a global distribution system that is capable of delivering the highest quality Hy-Line brand commercial chicks in the world to any egg producer, anywhere. This requires a commitment by our market channel partners that they will constantly strive to uphold the Hy-Line brand promise and deliver the correct of each of the Hy-Line breeds. By maintaining brand integrity, our final customers can be assured that when they purchase Hy-Line brand commercial chicks, they're getting the most advanced genetic potential in the market.

The fourth component of the Hy-Line brand promise is about technical service. It's essential that when a customer purchases a flock of Hy-Line genetic product that they can realize the full genetic potential to maximize profitability. This requires that they make adequate preparation for receiving the chicks, use the correct vaccination and lighting programs, and that they use the correct nutritional regime at each stage of the bird's productive life.

In summary, the Hy-Line brand promise is about delivering the best genetic combinations possible and then helping our customers get the most out of them. This is a brand promise that has stood the test of time and a promise that we intend to maintain as we boldly take the Hy-Line brand into the future.

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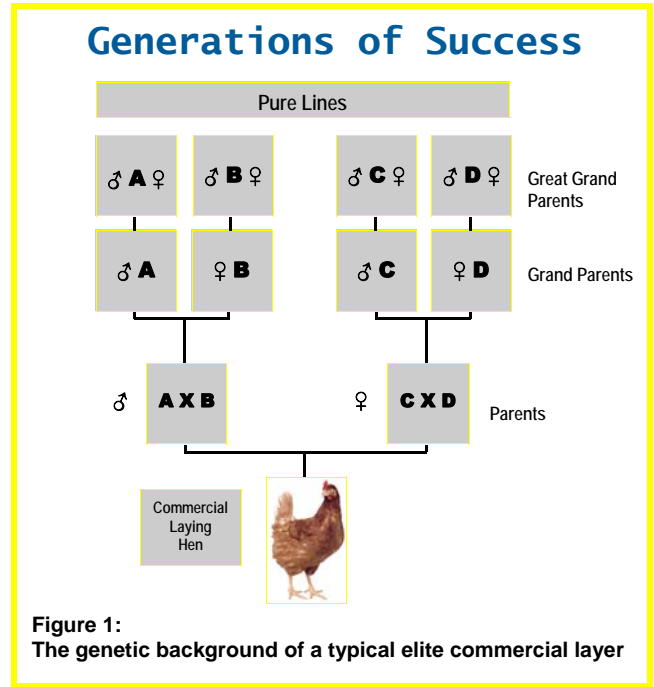


genetic combinations

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Factors that Damage Brand Integrity

Damaging a brand or diluting brand integrity unfortunately occurs quite readily across all business sectors. The damage may be caused by something as simple as the company or its employees not living up to the brand promise by not providing adequate customer service or by having low quality standards. Customers can be disappointed and frustrated when their expectations are not met and often look for alternatives because they feel that they have been let down by the brand that they have supported. Brand value or brand integrity can be damaged by the entrance of counterfeit products, bearing the same name, but failing to deliver on the very things that have built the brand. In the world of genetics, counterfeiting has become an unfortunate practice in some regions of the world – a practice that dilutes brand value and causes frustration for those who are true to the brand and what it stands for.



In the animal genetics sector, the use of patents to protect new breeds is not currently practiced. Furthermore, the effectiveness of patents is only as good as the patent law in the countries where the product is sold. Until such time that patent protection can be obtained for unique animal breeds, animal genetics companies have had to develop other ways to protect the brand.

Importance of Genetic Integrity to Brand Value

At Hy-Line International, our breeding program begins with our pureline populations. The pureline populations are unique, closed populations that are constantly undergoing selection for a broad range of traits. Each individual pureline female in each line is evaluated for egg production for her lifetime, egg quality traits, such as egg weight, shell color, shell strength, albumen height, yolk weight, and meat or blood inclusions in the egg, are all evaluated at critical points in her life cycle. Her temperament and feed efficiency are also evaluated along with some line specific features such as fertility, hatchability and spur length. In addition to her own records, detailed family records, across generations are used to calculate breeding values for all the traits measured. Family records are also amassed from the largest field testing program in the industry. This consists of sire progeny traits so that males are selected which produce daughters which perform well across a vast range of commercial environment around the world. This leads to more reliable flock to flock performance under field conditions which has become a hallmark of the Hy-Line brand.

Prior to every selection cycle, data is collected on family grow records for livability and body weight in both field test and the purelines on our research farm. A special test is also conducted to look at specific Marek's disease resistance. Adult livability along with sexual maturity, peak, and persistency of egg production, and egg quality traits are all measured under both field and research conditions to identify the best genetic combination in each generation. In addition to evaluating data from birds housed on the research farm and our many field test locations we also look at variation at the DNA level among these birds. This is allows us to make accurate statistical associations between traits of interest measured at the research test locations, with specific regions of the chicken genome using DNA-based molecular markers. The unique combination of three sources of data: (1) field test progeny groups; (2) individual pure line records; (3) and marker assisted selection allows our geneticists to select the best birds to reproduce the next generation of Hy-Line branded layers. As each generation is selected we increase the frequency of genes which contribute to superior performance. Over time we see a steady improvement in all traits at every generation.

Birds selected in this cycle become the basic stock for multiplication through to grand parents and parents. At each cycle, the combining ability of the pure line selections is carefully monitored to make sure that when the A x B male parent is crossed with the C x D female parent, maximum productivity is achieved in the commercial bird (Figure 1).

Each of the pure line selections is based on a significant amount of data collection and analysis from all three major sources of data. Our field tests which examine bird performances under a vast range of conditions on three continents and at least four different countries for each test of every family used in all our purelines. Each family in addition to their performance in the field test have also been evaluated in our research farm in great individual bird detail. Thus, allowing performance in both a group test and individual basis to be weighted so that the final product is balanced and able to perform under all the range of conditions seen in commercial production. The promise of the brand grows with each and every cycle of selection our birds undergo.

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When the genetic product leaves the Hy-Line hatchery in Dallas Center, Iowa for destinations around the world, it is Hy-Line International's expectation that our channel partners make the correct crosses and deliver high quality parent and day-old commercial Hy-Line brand chicks to their customers and our ultimate customers. At Hy-Line, we take care in the selection of our market channel partners and we choose companies with the highest level of integrity in their specific geographic region.

However, despite the steps that we take in this process, concerns about counterfeit products appearing in the market place occur from time to time. When they do, those suppliers may claim that their products are Hy-Line breeds (specific combination of Hy-Line genetic lines), but they are unable to deliver the performance expectation of the Hy-Line brand promise. There are a number of ways counterfeit product can be produced using parent stock and grandparent breeding stock. Whatever the scenario, the brand integrity has been compromised and the brand value, diluted.

Assuring Brand Integrity through DNA Fingerprinting

Hy-Line International was the first poultry primary breeding company to establish an on-site molecular genetics laboratory. Over the last several years, Hy-Line molecular scientists and geneticists have been working closely to apply the technology to the Hy-Line breeding program through marker-assisted selection and our research and development team are making excellent progress. While marker assisted selection is rapidly being integrated into the Hy-Line breeding program, we can also use DNA markers to protect brand integrity and identify counterfeit products at the DNA level (Figure 2).

Molecular markers are fragments of DNA and have been routinely used to evaluate variation at the genomic level. They essentially provide a pattern which can be unique to a specific pure line population. Within the two-way cross of parent birds and the four-way cross of commercial birds, unique highly conserved DNA patterns can be used to qualify the genetic pedigree of the bird. For example, a single sample of blood taken from a commercial day-old chick, can be used to extract DNA and analyzed at the molecular level to accurately determine which lines are present in its genetic background. If another breed has been crossed to a Hy-Line parent to generate a counterfeit Hy-Line bird, DNA analysis of a single drop of blood can confirm this. Alternatively, if a Hy-Line parent or grand parent has been crossed without license to another parent from a different breeding company to produce a different brand, DNA analysis can also confirm this. In the case where a completely different genetic background is masquerading as a Hy-Line breed, DNA analysis will confirm the obvious phenotypic and performance differences.

In the future, Hy-Line customers can be assured that when they invest in the Hy-Line brand, they receive the most productive genetics in the industry. Over the course of the next few years, Hy-Line will be establishing access to DNA testing capability for our grand parent and parent distribution network to assist them in assuring that our ultimate Hy-Line customers consistently receive the best genetic products. After all, it's part of the Hy-Line brand promise of Genetic Excellence®.

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Figure 2:
A scientist at Hy-Line International's molecular genetics lab conducts DNA analysis.



Kreager Appointed Chairman of GCC

Dr. Kenton Kreager, Hy-Line International director of Internal Veterinary Services, was named the chairman of the General Conference committee (GCC) of the National Poultry Improvement Plan (NPIP) by the official delegates of the 38th Biennial Conference of the Plan in Portland Oregon.

As chairman of the GCC, Dr. Kreager will work along with other members of the steering committee and serve as advisories to the NPIP, the official federal advisory committee of the Secretary of Agriculture on matters pertaining to poultry health.

According to Andrew Rhorer, senior coordinator of the NPIP, the objective of the NPIP is to provide a cooperative industry-state-federal program through which new diagnostic technology can be effectively applied to the improvement of poultry and poultry products throughout the country. The provisions of the NPIP, developed jointly by industry members and State and Federal officials, establish standards for the valuation of poultry breeding stock and hatchery products with respect to freedom from egg-transmitted and hatchery –disseminated disease and thereby provides certification of poultry and poultry products for interstate and international shipments.

Dr. Kenton Kreager is the director of Internal Veterinary Services at Hy-Line International. He oversees the company's effort to provide diagnostic services and management assistance to Hy-Line customers worldwide. Dr. Kreager has been employed with Hy-Line International for 23 years.



Dr. Kenton Kreager
Internal Veterinary
Services Director

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VIV Asia 2007 Held in Thailand

In March 2007, Hy-Line International was proud to be a part of the VIV Asia exhibition held in Bangkok, Thailand.

Hy-Line had a strong presence at the three-day event, where members of the Hy-Line team spent time giving further training and education to existing Hy-Line customers and establishing new business contacts. Hy-Line team members included; Dr. John Greaves, president & CEO; Dr. Chuck Strong, regional business manager of the Pacific Rim; Dr. Doug Grieve, global technical service director; Dr. Neil O'Sullivan, research & development director; Bob Connolly, sales & marketing director; Chunning Zheng, regional business manager in China; and Miguel Paula, regional business manager in the Middle East & India.

(L-R) Below, Miguel Paula visits with Dr. Ali Helal and Saad Al-Sabbar, of Al-Sabbar Farms. The company is Hy-Line's exclusive distributor in Saudi Arabia.



(L-R) Miguel Paula, Dr. Chuck Strong, Dr. Neil O'Sullivan and Dr. Doug Grieve at the Hy-Line booth



Hy-Line Continues Growth on the African Continent



(L-R) Pictured at the Hy-Line France booth at the SPACE 2006 tradeshow are Joao Paula, Dr. Diouf, Sedima's technical director, and Mr. Theophile, a consultant from Sedima.

In the past few months, Hy-Line has expanded its distributorship within the African Continent. Two new distributors have been added to the Hy-Line family in the countries of Senegal and Tunisia.

Hy-Line recently obtained the largest breeder company in Senegal as a parent stock distributor. They recently imported their first flock of Hy-Line variety W-98.

Representatives of the company traveled to the SPACE 2006 tradeshow, which took place in Rennes, France, and met with Joao Paula, Hy-Line's regional business manager for the African continent.

Societe Chahia, is the new Hy-Line distributorship in Tunisia, and is located in the city of Sfax, which is located in the southern part of the country. The owners recently bought the layer business from Hy-Line's previous distributor, STPA. Societe Chahia imported its first Hy-Line W-98 parent stock flock in late 2006.

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(L-R) As part of Hy-Line's technical outreach, Joao Paula recently visited Societe Chahia and was able to spend time with representatives of the company. Pictured are Dr. Chaker Mounir, technical director, Joao Paula, Hatem Chaabouni, general manager, and Dr. Lotfi Frikha, who is responsible for their laboratory.

Commemorative Celebration for Philippine Distributor

During the month of March 2007, Universal Robina Corporation celebrated its 20th anniversary as the exclusive distributor of Hy-Line chicks to the Philippines.

Universal Robina Corporation has 20% market share in a country that is a 100% white-egg market. Universal Robina distributes the Hy-Line variety W-98.

In the photo, Dr. Chuck Strong, Hy-Line regional business manager for the Pacific Rim, (yellow shirt) presented a commemorative plaque to Vincent Go, general manager of Universal Robina's Agro-Industrial Group. Also present was Mr. William Lim, general manager of Universal Robina's poultry business unit, and Dr. Amy Santos, Universal Robina's brand manager. Dr. Bernie Beckman (far right), Hy-Line veterinarian, presented some topics on technical service during the event.

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Hy-Line Market Maintains It's Growth In Norway

Since the year 2000, Nor Chick A/S, Hy-Line's exclusive distributor in Norway, has been producing the Hy-Line variety W-98 and the Hy-Line Brown. Nor Chick A/S distributes the Hy-Line products through two hatcheries and growing operations in the Stavanger area, a coastal city in southwestern Norway.

Norway, a country measuring almost 3000 km from the north to the south, has a population of less than 5 million inhabitants and a layer flock population of roughly 2.2 million white egg layers and 300,000 brown egg layers. Although, the flocks are primarily located in the southern region of Norway, occasionally the day-old chicks and layer pullets must travel long distances to reach their destination, and in the winter months, delivering the birds can be a real challenge.

As the Norwegian government regulates the number of layers on each farm in Norway, most farms have between 5,000 and 12,000 birds. The layers are mainly housed in cage systems, but the number of floor systems is increasing rapidly.

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(R-L) During a trip to Norway, Peter van der Krabben, Hy-Line's regional business manager for Europe, presented a service plaque to Nor Chick A/S owners, Nils Undheim and Arne Salte.



Peruvian Distributor Continues Success

Hy-Line's Peruvian distributor, San Fernando, continues it's success in Peru, by capturing a 50% market share in that country.

The San Fernando group of companies, which are owned by the Ikeda family, distributes Hy-Line chicks via its marketing company, Produss S.A. San Fernando has been Hy-Line's exclusive distributor in Peru for over 25 years and distributes Hy-Line Brown commercial chicks.

Hy-Line International recently presented Produss with a plaque commemorating 25 years of commitment to Hy-Line.

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(L-R) Tom Dixon, Hy-Line regional business manager for Latin America; Bob Connolly, Hy-Line director of sales & marketing; Alberto Ikeda, director of San-Fernando-Produss; and Dr. John Greaves, Hy-Line president & CEO.

BFREPA Conference Attracts Record Number of Attendees

The British Free Range Egg Producers Association (BFREPA) held their 20th annual conference at Stoneleigh Park, United Kingdom, this past December .

Hy-Line U.K. was the main sponsor of the event, which attracted a record number of trade stands and 430 delegates. The conference had many distinguished speakers including; Dr. Don McNamara, executive director of the Egg Nutrition Center in Washington D.C.; Willi Kalhammer, chairman of the International Egg commission; and John Campbell OBE, owner and chairman of Glenrath Farms in the U.K.

During the conference, Hy-Line U.K. was proud to receive the "Breakthrough of the Year" award in recognition of its pioneering beak treatment technology.



(L-R) Tom Vesey, chairman of BFREPA, presented Andrew Hignett, Hy-Line U.K. managing director, with a "Breakthrough of the Year" award.

Hy-Line Moving Strongly in New Zealand



Hy-Line International presented a 15-years of service plaque to Tegel Foods in January 2007. Tegel Foods has secured 42% of the market share in New Zealand, a country which boasts a 218 per capita egg consumption, by distributing the Hy-Line Brown and the Hy-Line variety W-98.

In the photo, (L-R) Trevor Clarke and Peter Hanna, of Tegel Foods, display their Hy-Line International 15-year plaque.

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Avigan Terralta Marked 20th Anniversary with Hy-Line

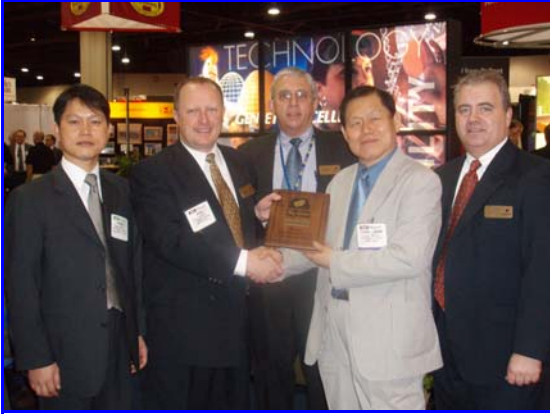


In December 2006, Dr. John Greaves, president and CEO of Hy-Line International, awarded Enrique Borrás, owner of Avigan Terralta, a plaque in honor of 20 years of working with Hy-Line.

Avigan Terralta, located in Tortosa, Spain, produces 10.5 million chicks annually and distributes them throughout Spain and the surrounding countries.

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KPTS Celebrates 20 Years As Hy-Line Distributor



(L-R) Kim Yun Ho, son of Kim Young Hwan, Dr. John Greaves, Hy-Line president & CEO; Dr. Chuck Strong, Hy-Line regional business manager in the Pacific Rim; Young Hwan Kim; and Bob Connolly, Hy-Line sales & marketing director.

Korean Poultry Technical Services Co. (KPTS), located in Seoul, recently celebrated its 20th anniversary as a Hy-Line distributor in South Korea.

Under the leadership of Kim Young Hwan, KPTS has captured 70% of the market share in Korea. The country, which is nearly a 100% brown-egg market, has more than 450,000 brown breeders and 34 million brown layers. The Hy-Line Brown has had tremendous success in this market due to its excellent livability and outstanding egg production.

In January 2007, Hy-Line International presented Mr. Kim with a commemorative plaque at the International Poultry Exposition in Atlanta, Georgia, U.S.A.

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Avicola Colombiana & Hy-Line Join Forces for Technical Seminar

Hy-Line International and Avicola Colombiana, Hy-Line's exclusive distributor in Colombia, held its second Hy-Line technical seminar in February 2007.

The one-day seminar, which was held in the capital city of Bogota, attracted more than 130 people from around the area. Hy-Line International had four presenters at the event including: Dr. Doug Grieve, global technical service director, who spoke about Lighting Programs & Marek's Disease; Dr. Jesus Arango, geneticist, presented the Hy-Line research program; Tom Dixon, regional business manager for Latin America, spoke about Hy-Line's presence around the world; and Dr. Tony Marangos, nutritionist, discussed feeding the Hy-Line Brown.

Avicola Colombiana, who produces and sells the Hy-Line Brown & W-36, has roughly 40% market share in Colombia.

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