

Hy-Line Innovations

A Publication of Hy-Line International

| Issue 23

| July 2023

China Distributors Grow Despite Pandemic Obstacles

China may be tied for most-populous nation in the world, with more than 1.4 billion inhabitants, but the country is far and away the leader in egg production, approaching some 29 million metric tons of egg mass annually from the 1 billion-plus national flock of laying hens. The Chinese population loves eggs, consuming 20 kg per capita annually.

Brown eggs are preferred with a 54% share, but the tint egg is extremely popular and growing, occupying 40% of all eggs consumed. White and colored (green and blue) eggs represent the remaining 4-6% of the eggs consumed today in China. The Hy-Line Brown, Sonia, and W-36 have had a long history in China and are the birds of choice in the market, with the new Hy-Line Pink and Hy-Line W-80 gaining followers.



Today, three companies in China are responsible for Hy-Line chick distribution: Huayu Agriculture Science and Technology Co. Ltd; Ningxia Xiaoming Agriculture and Animal Husbandry Co. Ltd; and Shenyang Huamei Livestock and Poultry Co.

[Continued on p. 2](#)

Investing in the Future: A Message from the President

The egg industry is a dynamic industry. I am constantly reminded and impressed by the resilience and innovation of the industry, as egg producers are always faced with challenges. The rise of Highly Pathogenic Avian Influenza over a wider range of the globe on the heels of the Covid pandemic has stretched producers to their limits. Welfare changes, as well as the drive for improved sustainability, sometimes at odds with each other, keep the industry “on its toes”.

At Hy-Line, we are committed to developing and producing the most well-balanced, productive, and profitable hens for the world’s egg producers, to help them to meet not only these challenges, but the new ones that are yet to come!

In this *Innovations*, we discuss customer success using Hy-Line’s W-80 variety in various parts of the world to meet market challenges. We highlight the renovation of a core hub hatchery, and how the investment is part of Hy-Line’s overall sustainability strategy. You’ll read about new investments in our research and development program in Mexico and India, part of Hy-Line’s approach to develop varieties for specific markets and housing systems. We also have exciting updates from Hy-Line’s China distribution partners, as their markets have reopened after three years of travel restrictions. Finally, we have strong results displayed by the Hy-Line Brown Max in the latest Czech Republic random sample test.

You have my commitment that Hy-Line will continue to invest in research and development, to continue to drive Hy-Line varieties toward improved efficiency with high productivity. We continue to develop balanced layers which adapt to all of the challenges that world markets will throw at the egg industry.

We are halfway through 2023, so we look forward to finishing the year strong, and to working with you all to overcome any obstacles we find in our path.



Jonathan Cade

In This Issue:

China Partners	2-3	New Research Farm	9
New Technical Update	3	Brown Max: Best in the Nest	10
W-80 Successes	4-7	Upcoming Events	10
Renovated Hatchery	8		

China continued from p. 1

Huayu Agriculture, Science and Technology Company

Huayu company has produced chicks for more than 30 years, and has partnered with Hy-Line to distribute Hy-Line chicks for the past 17 years. Headquartered in Handan city, Hebei Province, Huayu distributes well in excess of 150 million Hy-Line day-old chicks annually throughout China. Seven years ago, Hy-Line became a joint venture partner with the company to expand the day-old chick offering and quickly has become among the largest day-old chick distributors of Hy-Line chicks in the world. The company recently held customer seminars in their home city, attended by more than 300 customers, to learn about the most recent Hy-Line genetic advancements and latest technical knowledge on layer management.



Huayu President Wang with Hy-Line President Jonathan Cade.



The Hy-Line China team recently recognized Huayu for their 15 year anniversary. It was the first such visit in several years, due to travel restrictions.



Hy-Line China Director Zhou Pengcheng visits the Huayu booth at the recent CAHE show.

Ningxia Xiaoming Agriculture and Animal Husbandry Co. Ltd

Hailing from the northernmost region of China, Inner Mongolia, Ningxia Xiaoming is headquartered in Yinhcuan city. The location provides excellent biosecurity for its breeding stock, as it is far from the intensive egg-farming regions in highly populated regions of China. Ningxia produces and sells well above 150 million day-old Hy-Line chicks per year, offering Hy-Line Brown, tint, and white varieties. Led by trained veterinarian, principal owner and CEO Mr. Wei Xiaoming, Ningxia boasts excellent chick quality. The company has recently begun re-engaging with in-person trade shows and events, as the country normalizes the movement of citizens around the country after the pandemic response. Ningxia has been a strong, growing partner of Hy-Line for nearly 15 years.



Mr. Zhou Pengcheng visits the Ningxia booth at the recent CAHE show in China.



President Jonathan Cade congratulates President Wei on recent expansion investments.



President Jonathan Cade of Hy-Line visits Ningxia's headquarters with Mr. Wei Xiaoming.



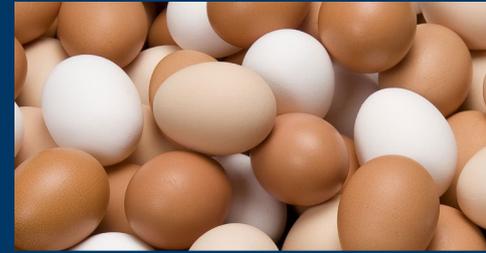
Ms. Li Yang receives President Cade and China Director Zhou Pengcheng of Hy-Line with General Manager Wang.



Zhou Pengcheng of Hy-Line visits the Huamei booth during the CAHE show.

Shenyang Huamei Livestock and Poultry Co

Huamei company, based in the industrial northeast region of China in the city of Shenyang, is the longest-running Hy-Line distributor in China, with 38 years distributing Hy-Line layers to their loyal customer base. The company recently finished a complete renovation of its grandparent housing, new parent housing, and a large investment in hatchery automation. The company is led by Ms. Li Yang, who continues the company's striving for excellence in the footsteps of her father, who initiated the Hy-Line relationship in the 1980s. Huamei company has been a close partner since the initiation of Hy-Line's entry into China. In fact, the company name itself reflects this close cooperation: Hua (China) Mei (America).



While the past three years have presented obstacles for engaging the China market due to pandemic restrictions, Hy-Line and our China partners have emerged stronger and more focused than ever on providing top-quality chicks with the best genetic traits for the China market. China produces nearly 35% of all of the world's egg production annually! Hy-Line and our partners in China look forward to the continued partnership with the market as the egg supply chain continues its rapid rate of innovation with the latest technology and management practices.

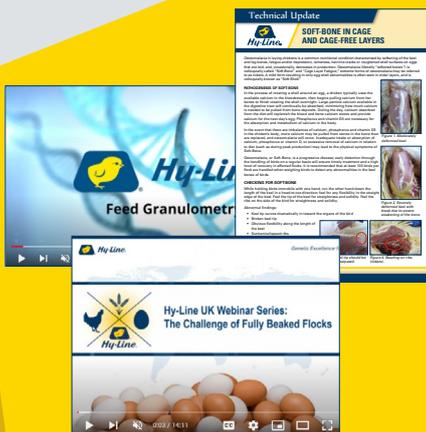
New Technical Update: Soft-Bone in Cage and Cage-Free Layers

Osteomalacia (also called "Soft-Bone" and "Cage Layer Fatigue") in laying chickens is a common nutritional condition characterized by softening of the keel and leg bones, fatigue and/or depression, lameness, hair-line cracks or roughened shell surfaces on eggs that are laid, and occasionally, decreases in production. Extreme forms of osteomalacia may be referred to as rickets. A mild form, resulting in only egg shell abnormalities, is often seen in older layers, and is commonly known as "Soft-Shell".

In the process of creating a shell around an egg, a chicken typically uses the available calcium in the bloodstream, then begins pulling calcium from her bones to finish creating the shell overnight. Phosphorus and vitamin D3 are necessary for the absorption and metabolism of calcium in the body.

In the event that there are imbalances of calcium, phosphorus and vitamin D3 in the chicken's body, more calcium may be pulled from stores in the bone than are replaced, and osteomalacia will occur.

[Read the Technical Update Here!](#)



Technical Videos Now Available!

Visit hyline.com/resources to view recordings of past webinars and informational videos, along with Technical Update documents.

Hy-Line W-80 Meeting Market Needs Worldwide

The Hy-Line W-80 is the world's fastest growing layer variety, becoming the preferred breed in world white-egg markets just a few short years from its introduction. Her high rate of lay, persistency of lay, strong shells, and efficient feed conversion throughout a long production cycle provides egg producers around the world with the best opportunity for profitability. The W-80's robust yet docile temperament allows her to overcome the myriad of challenges in the field and is suitable for both cage and cage-free systems.

Europe Cage-Free Producers Turn to White Eggs

Cage-free production has grown significantly over the past 30 years. It is the dominant production system in most of Europe and accounts for more than 30% of egg volume in the USA. In addition, many countries around the world are beginning to expand into cage-free systems to address egg-buyers' requests and consumer demand for eggs produced in alternative systems.

With a push towards improved sustainability, many of Europe's traditionally brown-egg markets are showing a rise in movement towards white-egg layers in cage-free systems. White-egg varieties have lower mature body weight than brown birds and therefore tend to convert feed to eggs at a slightly better rate. A higher proportion of the nutrients consumed by white-egg layers are transferred into egg production, while the brown layer must support its higher body maintenance requirements. The estimated smaller environmental footprint of the white bird encourages producers to place more white birds in their quest to fulfill their sustainability goals.

In a market dominated by brown eggs, the UK is seeing a significant switch to the white-shelled variety, with Hy-Line's W-80 playing a major role. With low feed intake and high egg output, coupled with the potential for longer laying cycles, the W-80 ticks a lot of boxes for egg producers, whilst retailers see white birds playing a significant part in their mission to lower the carbon footprint associated with everyday foodstuffs.

One major egg producer in the UK which has switched some of its production to white layers is Griffiths Family Farms, which supplies eggs to major retailers and the food service sector. The switch coincides with a change in production methods, as it replaces colony cage units with barn systems. Their first W-80s were housed last August and peaked at 98%. Strong early egg weight has helped achieve an egg mass of 17.4 kg at 64 weeks (target is 16.6 kg), whilst cumulative mortality is 5.05% (target is 6.4%).

Director Jonathan Griffiths explains the company's move to white egg layers was driven 50/50 by farming considerations and interest from retailers. "From an egg production perspective, the efficiency factor is a major attraction," he says, "as is the longer laying cycle."

Consumer acceptance of white eggs has been positive in European states where size, quality, and cleanliness take priority over shell colour.



"We're aiming for 90-weeks plus, which cuts down turnaround time. Retail customers are increasingly keen to try white eggs, whether that's a pack of white-only or in a mixed pack with brown, and they are considering where white eggs may fit in a tiered free-range offer. At present, retailers are very pro-white eggs and customer uptake has been positive."

Jonathan did believe, however, that the UK egg sector was in an unusual trading position, with the market recovering post the impact of Covid and Avian Influenza, shortness of supplies has encouraged consumers to reassess their egg choices. "That's the bit we don't know, how demand for white will be in a fully supplied market. But this period of turbulence provides the opportunity for consumers to get used to white eggs."



(L-R) Jonathan and Michael Griffiths of Griffiths Family Farms.

The growth in white egg layers is mirrored across Europe. For France and Poland, Hy-Line forecasts numbers will more than double by 2025 from last year's bird base. Significant growth is also forecast for Italy, the Netherlands and Spain.



“As a business, we’re certainly going to continue increasing our numbers because we are very pleased with the bird performance we are seeing. We also have our egg processing plant so have the option of directing white eggs that way if necessary. And where we have fully dedicated flocks for processing, they will be white egg layers.”

“For a retail buyer, the headline figure of five per cent reduction in carbon footprint along with the perceived welfare benefits associated with white layers is very appealing. Combine that with farmers who have had white layers not wanting to go back to brown birds and it’s an attractive picture.”

“Its desire to seek out the seclusion of the nests has led to very few non-nest eggs.” At week 25, combined floor and system eggs were less than 1% with the first flock, a trend that has continued with Griffiths’ subsequent flocks of W-80s.



...the W-80’s temperament is completely different...it is far more active around the system and less docile compared to a brown layer, but in many ways this makes it an easier bird to manage.”

– John Widdowson, Hy-Line UK

Michael Griffiths, who works closely with the company’s retail customers, describes the current retail landscape as exciting. “Retailers are increasingly looking at delivering value to consumers particularly during these inflationary times, along with improving on-shelf availability. There is a cost benefit with reduced turnaround time, whites laying much longer also aids efficiency and supply to our customers,” says Michael.

For producers used to brown layers, the behavioural traits of white birds can be something of an eye-opener, an aspect Hy-Line UK’s John Widdowson has learned.

“After over 30 years working with browns, the W-80’s temperament is completely different but I’ve grown to like the bird very quickly,” says Widdowson, who provides the Griffiths’ farms with technical support. “It is far more active around the system and less docile compared to a brown layer, but in many ways this makes it an easier bird to manage.”

The growth in white egg layers is mirrored across Europe and when it comes to France and Poland, a forecast by Hy-Line predicts numbers will more than double by 2025 from last year’s bird base. Significant growth is also forecast for Italy, the Netherlands, and Spain, with the Netherlands already having seen its brown bird population reduce in favor of white strains from over 60% in 2003 to a little over 30% in 2021.

Consumer acceptance of white eggs has been positive in European states where size, quality and cleanliness take priority over shell color. In addition to lower production costs, white egg laying varieties incidence of meat and blood inclusions are nearly nonexistent.

The Robust W-80 Increases Share in India

The W-80 is taking the India market by storm, with more and more producers adopting the breed each month. Historically, Hy-Line found the Indian market to be a difficult one to penetrate due to the country’s unique requirements, making it difficult to adapt the company’s existing products to the local conditions. Heat stress can present a formidable obstacle at times of the year when temperatures are 50°C. In addition, competing against a local breed that had been the dominant layer in the market for years with unique character traits that had adapted to the market and vice versa proved difficult.

The local breed has a very small egg weight profile with a short production cycle, which is quite different from most international markets. Hy-Line white egg product specifications were not ideal and required significant management requirements by local farmers to adapt the bird to these local realities.

The Indian market has great potential for expansion of egg production and consumption, as the country is now tied for most populous country in the world with 1.4 billion inhabitants.

Egg consumption in India is very low relative to other countries around the world; however, due to the sheer size of the population, India is now considered to be close or just ahead of the USA in egg production, competing for the #2 world position.

The Hy-Line W-80 is the fastest growing breed in India, demonstrating longer production cycles, more hen-housed eggs, superior livability, more resistant shells, and better feed conversion than both local and international offerings in the market.

The India market requires a bird that tolerates and overcomes the obstacles of extreme heat, as regions of the country experience temperatures of 40 to even 50°C during the summer, inducing heat stress on the layers; very low dense feed rations offered to the birds; and the market is accustomed to very small egg weights in the 50 g range. To address the unique nature of the India market, Hy-Line elected to begin a breeding program in-country to customize the W-80 to the market through a local breeding program. Three years ago, Hy-Line placed W-80 lines on the Hy-Line India grandparent farm in order to select the birds which perform best in India in terms of egg weight (small), strong shells, early onset of lay, high peaks and good heat tolerance.

Today, the Hy-Line W-80 is the fastest growing breed in the market, demonstrating longer production cycles, more hen-housed eggs, superior livability, more resistant shells, and better feed conversion than the other local and international offerings in the market. Hy-Line supplies parent stock to Srinivasa who distribute chicks to egg producers throughout India.

In head-to-head trials, the W-80 demonstrated the best profitability against the two leading competitor strains available in the market showing a 140 Indian Rupee (US\$1.70) advantage per hen-housed through a complete cycle due to superior egg numbers and feed conversion.

The India market is on the verge of becoming the fastest growing day-old chick and egg production market in the world, should egg consumption trend upwards towards international levels. The Hy-Line W-80 meets the demands of the India egg producer for a highly productive, robust white-egg layer which provides the opportunity for maximum profitability. Hy-Line developed the current W-80 in the market to conform to the local conditions.



Srinivasa's General Manager of Operations, Mr. Harsha Chitturi (pictured, center), recently visited Hy-Line's Dallas Center, Iowa campus.

Performance Comparison vs. Competing Breeds *



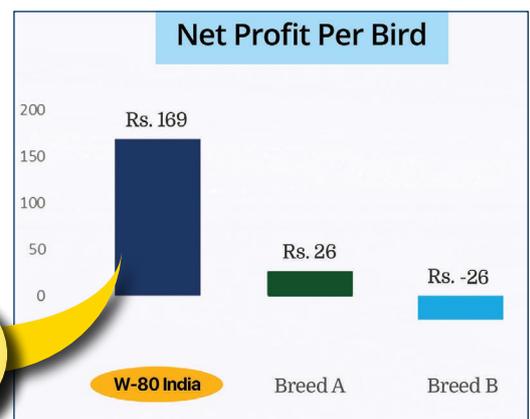
Particulars	W-80 India	Breed A	Breed B
Age (Week)	100	100	80
HHE (Number)	477	478	374
Feed Intake (g) /Day	102	110	111
Feed Intake (Kg)/Cycle	59	63	48
Feed Intake (g) /Egg	121	132	129
Small & Shell Weak Eggs/Bird (Number)#	5	40	40
Broken Eggs/Bird (Number)#	6	8	15
Saleable Eggs @ Full Price (Number)	466	430	319
Cull Bird Weight (Kg)	1.66	1.68	1.55

* As per Breed Management Guide # As per Market Feedback

In head-to-head trials, the W-80 demonstrated the best profitability against the two leading competitor strains available in the market, showing a 140 Indian Rupee (USD\$1.70) advantage per hen-housed to 72 weeks due to superior egg numbers and feed conversion.



+ \$1.70
per hen housed!



Hy-Line Honors W-80 Top Performers

In Latin America and Southeast Asia markets, the W-80 exceeds expectations, surpassing both breed standards and historical results.

Extraordinary Results in Guatemala

One such example is the extraordinary results achieved on Victor Martinez's Rosanda Farm of Guatemala, Central America, which Hy-Line recently recognized for exceptional W-80 flock performance. To 93 weeks of age, the flock produced 446 eggs per hen, produced for 48 weeks above 90% with 15 weeks above 95%; yielding 28.4 kg of total egg mass; an exceptional 1.95 Feed to Egg ratio; and 93.7% flock livability.

With Hy-Line providing highly productive genetic stock, Criaves company producing high quality chicks supported by expert advice, and Rosanda Farms using sound management practices and a well-maintained egg farm, the partnership proved to be a perfect combination for top results. Congratulations to Mr. Victor Martinez and his team, along with Criaves S.A. of El Salvador, long-time Hy-Line distributor to Central America.

Trait to 93 Weeks	Rosanda Farm	Manual	Difference
Eggs per Hen-Housed	446 eggs	429-451 eggs	+16 eggs vs. low std
Weeks > 95%	15		
Weeks > 90%	48	23-47 weeks	Low to high range
Cum Egg Mass (kg)	28.4 kg	26.5-27.8 kg	+1.9 kg vs. low std
Livability	93.7%	90.1%	+3.6%
FCR (kg feed:kg egg)	1.95	1.98	+0.03
FCR (g/egg)	124.2	122.2	-2 g



Above: The technical and commercial team of Criaves S.A. congratulates Mr. Victor Martinez of Granja Rosanda for his Top Flock Award during the recent Central

America Poultry



Congress in Costa Rica. Above: Mr. Martinez receives the award from Dr. Daniel Valbuena (second from left), Director of Technical Services, and Mauricio Sanabria (far right), Commercial Director for Latin America, along with Ing. Jorge Jimenez (far left), Director of Vitalimentos, holding company of Criaves S.A.

Exceptional Parent Stock Performance in the Philippines

Parent performance is important to the worldwide egg supply chain. Hatcheries must not only supply high quality, robust chicks to the market, but must also be efficient in their processes to maintain profitability. Highly productive breeding stock is a hallmark of Hy-Line genetics, as the hatchery business is under similar efficiency demands as commercial egg producers.

In the Philippines, a W-80 Plus parent flock recently demonstrated excellent performance to a first-time breeder farmer on the company's first flock! Rudy's Ranch of Batangas, Philippines, was recently recognized for superior parent performance. Their first flock of W-80 Plus parents yielded 114 day-old chicks to 65 weeks of age and required only 2.39 fertile eggs per chick incubation rate!



The performance of the W-80 in the Philippine market has generated a lot of interest from

farmers and hatchery companies. The Philippines is known for its heat stress conditions due to its tropical climate, and the market prefers a larger egg than some world markets. The W-80 Plus is meeting these needs and growing significantly in the market. The Philippines is a large country of 110 million inhabitants living on 2,000 of the 7,640 islands that make up the country. White eggs are preferred, making the Philippines among the largest white egg producing countries in Asia.



Hy-Line presents Rudy's Ranch with a Top Flock award during the Southeast Asia Technical School in Bangkok, Thailand in March.

Hy-Line's Newly Renovated Hatchery Displays Sustainability Benefits

Earlier this year, Hy-Line finished a complete renovation of the Dallas Center, Iowa USA breeder hatchery. From the outside, not much is different, but inside is a different story. The hatchery redesign is complete with brand new, state-of-the-art setter and hatching machinery, new egg transfer and chick processing equipment, and an improved floor-to-ceiling update for optimum sanitary conditions and biosecurity for the precious breeding stock originating from the hatchery.

New Jamesway Platinum Series Setters and Hatchers replace the old machines. The new technology already demonstrates benefits, not only in higher hatches, which increase the efficient use of fertile eggs, but heavier, more robust baby chicks mean better chick quality to the breeder farms receiving them.

Throughout hatchery operations, Hy-Line strives to eliminate one-time use materials such as paper and cardboard and replace them with reusable materials to eliminate discarded waste.

A strong day-old chick is the first step in developing the best pullets, which in turn mean a more productive breeder. The benefit moves down the supply chain to Hy-Line distributors' farms, allowing the customer to realize the full genetic potential of Hy-Line breeding stock. In addition, the investment yields benefits which move Hy-Line along the path to meeting ongoing sustainability improvements. Hy-Line is producing more chicks which are more robust, while utilizing fewer resources.



*Eduardo de Souza Pinto,
Hy-Line President
of Operations*

Hatcheries use significant resources annually; therefore, the decision to invest in new hatchery technology that reduces input needs made sense to Hy-Line, as improved product quality, increased capacity together with the resource savings, help the company meet its sustainability goals.

For example, each incubation machine requires three gallons of water per minute for maintaining proper temperature and humidity for optimum embryo development 24 hours a day which adds up to be a significant amount of water. However, the new hatchery is equipped with a closed-loop system in which 100% of this water is recycled and reused by using a chiller to cool the water, and the heat taken from the machines is recovered and used to heat the hatchery environment.

The improved hatchery and setter design with updated technology allows Hy-Line to reduce the company's energy use by an incredible 77% savings in energy per kilowatt/hour! In addition, areas are now outfitted with efficient LED lighting on automated sensors, further reducing Hy-Line's energy use. Also to be considered, the newly-designed ventilation system with high efficiency indoor modular air handling units offer a more uniform environment in the facility, utilizing much less energy for heating and cooling.

Overall, the new processes were implemented to eliminate 'one-time' use materials such as paper, cardboard or foam trays and boxes, and replacing them with plastic trays and boxes, which are cleaned,



disinfected and reused rather than disposed of after a single use.

Finally, now 100% of the hatchery waste byproducts are composted. More chicks with higher hatch weights and improved chick uniformity are immediate, tangible benefits for Hy-Line and the distributor base. Reduced water and energy use and the implementation of recycling efforts in the hatching process shrinks the hatchery's environmental impact. Hy-Line continues in its efforts to improve sustainability by being a good steward of the resources utilized to deliver superior genetic stock to the market. The investment in the Dallas Center hatchery moves Hy-Line along that path.

Hy-Line's New Research Farm Established in Mexico

Egg producers require as many eggs as possible are produced in the nest in cage free systems. Non-nest eggs represent a significant cost, as these eggs must be hand-collected or become discard eggs if they cannot be retrieved.

Until recent years, nearly all layers in commercial conditions worldwide have been housed in cage systems. This meant nesting behavior was not an important trait for selection, as eggs laid in a cage simply roll out to the collection belt. Farmers did not previously need to manage against birds' tendency to lay eggs in dark, convenient spots of the house, as happens in cage-free systems. Today, with 15% of the world's eggs produced in cage-free systems and growing, this trait is extremely important.

With that in mind, Hy-Line has invested in a new research farm in Mexico outfitted with special nests to identify the birds with the best nesting behavior. Hy-Line can then incorporate those birds into the selection of the next generation, using genetics to discourage floor-egg behavior.

This is especially important in the brown birds, as their docile nature can result in a higher incidence of floor eggs. Other important factors that influence nesting behavior include environmental conditions and flock management. Consequently, the most important trait for the Hy-Line Brown today is optimizing nesting behavior.

Two new aviary style houses for the collection of individual bird nest eggs were recently established in Mexico. The new farm represents an extension of the US-based breeding program, providing Hy-Line's research team with data needed to select for maximum nest-egg production and to improve nesting behavior.

The cage-free facilities in Mexico allow Hy-Line to improve welfare under hot and humid climate conditions for alternative production systems.

All Hy-Line commercially relevant lines are tested in this facility. Evaluations are done on an individual basis using a mechanical trap-nest system.

With 15% of the world's eggs now produced in non-cage systems (and growing), nesting behavior has become an extremely important trait to producers, as non-nest eggs can be costly.

Each bird is evaluated for feather coverage, skeletal integrity by evaluating keel bone parameters, livability, and production by focusing on nest egg production. Hy-Line takes advantage of individual data collection in a trap nest system, combined with individual genomic information of those birds. The primary objective is to record individual bird nest egg production, but the test also superimposes heat stress and a commercial diet to simultaneously improve nesting behavior, robustness, and heat tolerance.



*Dr. Danny Lubritz,
Hy-Line Director
of Research &
Development*



Hy-Line Brown Max: Best in the Nest!

The results are in for the 20th Czech Cage-Free Production Test, and one variety clearly stands at the top: the Hy-Line Brown Max!

The Hy-Line Brown Max leads all competitors at 70 weeks of age in Hen-Housed Eggs, Cumulative Egg Mass, Average Rate of Lay, and Incidence of Floor Eggs.

Lowest Floor Eggs

The Hy-Line Brown Max produced only 0.76% floor eggs—by far the best in the test! Hy-Line Brown Max had 1/3 fewer floor eggs than their nearest competitor!



Superior Egg Mass

At 70 weeks of age, the Hy-Line Brown Max boasts a cumulative egg mass per hen-housed of 20.9 kg—that's 900 g more than the next best competitor, and 1.4 kg more than the average of all competitor brands in the test.



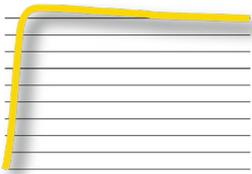
Most Hen-Housed Eggs

Once again, the Hy-Line Brown Max came out on top, with 3.9 more hen-housed eggs than the next best competitor at 70 weeks, and 13.5 more eggs than the average of all competitors.



Best Rate of Lay

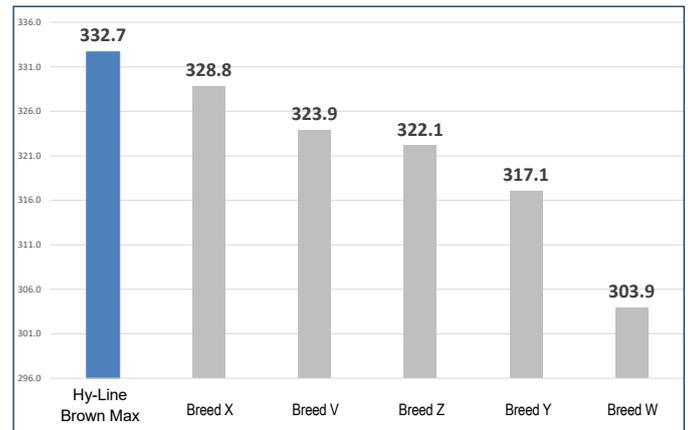
With a 91.4% average rate of lay at 70 weeks of age, the Hy-Line Brown Max beats the competition average by 3.7%.



Upcoming Events

Visit Hy-Line at these upcoming trade shows!

- **SPACE—12–14 September 2023 (Hy-Line France exhibiting)**
Rennes, France
- **Poultry India—22–24 November 2023 (Srinivasa exhibiting)**
HITEX Exhibition Complex, Hyderabad
- **IPPE—30 January–1 February 2024**
Georgia World Congress Center, Atlanta, Georgia, USA



The Hy-Line Brown Max's Hen-Housed Eggs advantage ranged from +3.9 eggs to +28.8 eggs versus competitor breeds!

[View the Hy-Line Brown Max Advantage Flyer Here!](#)

Follow Hy-Line on Social Media



Hy-Line International

2583 240th St.

Dallas Center, Iowa USA 50063

Ph: +1 515-225-6030

www.hyline.com | info@hyline.com

