# WEEKLY NEWS ARTICLE UPDATE

Prepared by John C. Baize and Associates | 7319 Brad Street | Falls Church, VA 22042 TEL: 703-698-5908 | FAX: 703-698-7109 | E-mail: jbaize@attglobal.net

# September 15, 2014

# **Articles in This Edition**

- Export Sales Highlights
- USDA Reports Large US, Optional-Origin Soybean Sales for 2014/15
- Brazil Soy Crop Seen at 95.1 MMT in 2014/15: Agroconsult
- Itochu to buy half of Brazilian soya company Naturalle
- Stoller Soybean Research Trial Produces 214 Bushels Per Acre
- Huge U.S. Soybean Crop Gets Larger
- Argentine Farmers Hoarding \$9.7 Billion in Soybeans
- Pennsylvania Perdue Soybean Plant Still a Go, Firm Says
- USDA State Soybean Yield and Production Forecasts
- Danish Farmers to Grow More Horse Beans

# **Export Sales Highlights**

This summary is based on reports from exporters for the period August 29-September 4, 2014.

**Soybeans:** Net sales for the 2014/2015 marketing year, which began September 1, totaled 984,300 MT. Increases were reported for China (658,200 MT), unknown destinations (105,000 MT), Indonesia (94,400 MT, including 62,000 MT switched from unknown destinations), Turkey (38,000 MT), and Japan (20,700 MT). Net sales of 70,000 MT for 2015/2016 were for unknown destinations. A total of 1,340,500 MT in sales were carried over from the 2013/2014 marketing year, which ended August 31. Exports for the period ending August 31 of 111,600 MT brought accumulated exports to 44,526,100 MT, up 23 percent from the prior year's total of 36,243,000 MT. The primary destinations were the Netherlands (64,800 MT), Japan (22,100 MT), Mexico (10,700 MT), Indonesia (9,700 MT), and Thailand (1,700 MT). Exports for September 1-4 totaled 72,900 MT, with Indonesia (62,100 MT), Mexico (8,800 MT), and Taiwan (1,400 MT) being the primary destinations.

Optional Origin Sales: For 2013/2014, optional origin sales of 55,000 MT, all China, were outstanding at the end of the year and carried over to 2014/2015. For 2014/2015,

outstanding optional origin sales total 1,133,000 MT (including carry-over), and are for China (968,000 MT), Egypt (120,000 MT), and Mexico (45,000 MT).

Export Adjustments: Accumulated exports to Indonesia were decreased 26,300 MT for week ending August 14, 2014 and 37,100 MT for week ending August 21, 2014. The shipments were reported in error.

**Soybean Cake and Meal:** Net sales of 14,100 MT for 2013/2014 were for Honduras (10,200 MT, including 9,400 MT switched from unknown destinations), Mexico (6,900 MT), Canada (5,700 MT), Guatemala (2,800 MT), Morocco (2,000 MT), and Japan (1,600 MT). Decreases were reported for Venezuela (12,000 MT), unknown destinations (4,900 MT), and Nicaragua (1,500 MT). Net sales of 203,200 MT for 2014/2015 were reported primarily for unknown destinations (90,000 MT), the Dominican Republic (55,500 MT), Venezuela (27,000 MT), and Costa Rica (10,500 MT). Exports of 89,400 MT were up 2 percent from the previous week and 7 percent from the prior 4-week average. The primary destinations were Mexico (27,500 MT), Canada (18,800 MT), Honduras (13,000 MT), Panama (11,000 MT), and El Salvador (8,900T).

**Soybean Oil:** Net sales of 5,800 MT for 2013/2014 were for Mexico (4,700 MT), Venezuela (2,000 MT, switched from unknown destinations), Guatemala (1,000 MT), and Canada (100 MT). Decreases were reported for unknown destinations (2,000 MT). Net sales of 8,100 MT for 2014/2015 were reported for the Dominican Republic. Exports of 6,100 MT were up 72 percent from the previous week, but down 48 percent from the prior 4-week average. The primary destinations were Nicaragua (2,000 MT), Venezuela (2,000 MT), Mexico (1,800 MT), and Canada (100 MT).

Optional Origin Sales: For 2013/2014, outstanding optional origin sales total 2,000 MT, all to Nicaragua.

# USDA Reports Large US, Optional-Origin Soybean Sales for 2014/15

WASHINGTON, Sept 11 (Reuters) - Private exporters reported the sale of 240,000 MTof U.S. soybeans to China for delivery in the 2014/15 marketing year, which started on Sept. 1, the U.S. Department of Agriculture said on Thursday.

Exporters also reported 210,000 MT of U.S. soybeans to to unknown destinations, and another 360,000 MT of optional-origin soybeans sold to China, both for 2014/15.

An optional-origin contract provides that the origin of the commodity may be the U.S. or one or more other exporting countries.

# Brazil Soy Crop Seen at 95.1 MMT in 2014/15: Agroconsult

By Gerson Freitas Jr.

Sept. 8 (Bloomberg) -- Production rising vs 87.8 MMT on increased planted area, higher yield prospect, Marcos Rubin, analyst at crop forecaster Agroconsult, said in phone conference with journalists.

- \* Soy planted area seen at 31.6 million hectares vs 30.1m last season
- \* El Nino rains expected to boost yields in south of country
- \* Brazil summer corn output seen at 29.2 MMT vs 29.8 MMT last season
- \* NOTE: Brazil planting season starts on Sept. 15

#### Itochu to buy half of Brazilian soya company Naturalle

Tokyo, Sep 9 (EFE).- Japan's Itochu Corporation will acquire 50 percent of Brazilian grain company Naturalle with an eye on quadrupling its annual soy production, the company announced on Tuesday.

Naturalle specializes in the cultivation of seeds for export to China and other Asian countries. By the end of this year, Itochu will have acquired half of Naturalle's shares from Brazilian venture capitalist firm Axial, for approximately \$18.8 million.

With 60 employees on its staff, Naturelle has set an annual million-ton target for soy output during the first two years of its tie-up with the Japanese company. This will be Itochu's first foray into the grain business in the South American country.

The Japanese corporation, along with its new Asian partner, the Choroen Pokphand Group, Thailand's largest conglomerate, is considering taking part in joint projects with Brazilian firms specializing in the cultivation and production of soybean oil, according to the Japanese daily Nikkei.

#### Stoller Soybean Research Trial Produces 214 Bushels Per Acre

PR Web -- HOUSTON, TX -- September 10, 2014 -- Soybean research trials conducted by members of the Stoller Enterprises research and product development team have produced a 214.7 bushel-per-acre yield in the Rio Grande Valley, near Weslaco, Texas. The two hundred plus bushel-per-acre yield may be highest yield achieved in replicated

soybean plot trials.

The research focused on the yield response to application of supplemental nitrogen during the growing season and was conducted by Stoller Enterprises under contract with Plant Power Products, Inc., an entity with which Stoller Enterprises does research and product development. The research utilized replicated plots and was conducted in the same manner as research done by major agricultural universities and companies.

The 214.7 bushel-per-acre yield was achieved from soybean seed planted at a population of 105,000 plants per acre. An initial broadcast application of nitrogen, phosphorus and potassium was applied prior to planting with additional fertilizer applications made throughout the growing season using a drip irrigation system. The cumulative amount of fertilizer applied during the growing season totaled 610 pounds of nitrogen, 40 pounds of phosphorus and 200 pounds of potassium.

"The agronomic community has long believed soybeans need four to six pounds of nitrogen to produce a bushel of grain and the nodules on the soybean roots would become lazy if excess nitrogen was present," says Jerry Stoller, president of Stoller Enterprises, Inc. "Our research trials clearly show that supplemental nitrogen can provide a significant yield increase and nodules don't become lazy throughout the entire growing season.

"In order to achieve this high yield, our Plant Power Products were applied to help maintain energy to the nodules throughout the entire growing season," adds Stoller. "The root nodules never dried up or lost their ability to fix more nitrogen."

The Stoller research trials also showed that as plant populations increased, yields decreased slightly. Stoller says he plans to continue research to find what is causing the drop in yield. "The highest yield was obtained from the lowest plant density — not the highest density. Stoller Enterprises is committed to understanding how to help the plant utilize more nitrogen, the relationship between yield and plant density as well developing the products that make it possible for farmers to maximize the genetic potential in the seed they plant."

All the soybean research trials were conducted using a vernal soybean variety seeded at populations ranging from 105,000 to 278,000 seeds per acre. There were replicated studies of each population rate and all the trials were analyzed for significant differences. Yield

differences were also expressed in the diameter of the stalk, extensiveness of root systems and the number of pods per raceme on the soybean plants.

The research was conducted under the direction of Dr. Albert Liptay, director of research for Stoller Enterprises, Inc. at the Texas A&M AgriLIFE Research center in Weslaco, Texas.

For questions concerning information in this news release, contact Jstoller(at)stollerusa(dot)com.

### About Stoller Enterprises, Inc.

Headquartered in Houston, Texas, Stoller Enterprises, Inc. is dedicated to helping producers enhance yields by maximizing genetic expression. Only Stoller products contain Stoller's proprietary technology that is proven to ensure optimum plant growth by maintaining appropriate hormone balance and activity. In combination with proper nutrition and good farming practices, the result is enhanced marketable yield, significant return-on-investment and improved stress tolerance. Validated by universities nationwide, Stoller's unique formulations outperform traditional products and result in healthier, more productive crops that are better able to achieve their full genetic potential.

#### Huge U.S. Soybean Crop Gets Larger

#### John Baize

As expected USDA today raised its estimate for the current U.S. soybean crop. The crop is now forecasted to reach 3.913 billion bushels (106.5 MMT), 97 million bushels (2.64 MMT) greater than USDA forecast in August.

The average yield was increased by 1.2 bushels/acre to a record 46.6 bushels/acre (3.13 MT/hectare). The yield in Illinois is forecasted at 56 bushels/acre. I believe that is the highest ever for any state. The average yields in Mississippi and Louisiana are forecasted at 49 and 51 bushels/acre respectively. That is ample proof of the huge achievements that have been made in boosting southern yields.

USDA is forecasting total usage of U.S. soybeans in 2014/15 at 3.583 billion bushels (97.52 MMT). As a result it is forecasting U.S. soybean ending stocks on August 31, 2015 at 475 million bushels (12.93 MMT).

The average farm price for soybeans in 2014/15 is forecasted at a mid-point of \$10/bushel (\$367.40/MT).

Among the other key points in USDA's supply/demand report of today were the following:

- U.S. soybean ending stocks in 2013/14 were reduced by 10 million bushels to 130 million bushels (3.54 MMT). However, the fact USDA's balance sheet has a negative 94 million bushel residual makes it quite likely USDA will raise its estimate for the 2-13 soybean crop in its January final estimate.
- USDA raised its estimate for U.S. soybean exports in 2013/14 by 5 million bushels to 1.645m billion bushels (44.77 MMT). It also raised its estimate for the U.S. soybean crush volume in 2013/14 by 5 million bushels to 1.73 billion bushels (47.08 MMT). The forecast for U.S. soybean crush in 2014/15 was increased by 15 million bushels to 1.11 billion bushels (48.17 MMT). Soybean exports in 2014/15 were increased by 25 million bushels to 1.7 billion bushels (46.27 MMT).
- USDA's forecast for U.S. soymeal exports in 2014/15 was increased by 23,000 MT to 10.89 MMT. Domestic soymeal consumption in 2014/15 was raised by 9,000 MT to 27.31 MMT.
- USDA made no change in its forecast for U.S. soyoil use in 2013/14 or 2014/15, but it did raise its forecast for soyoil exports in 2013/14 by 50 million pounds.
- USDA now is estimating the U.S. will export 62.7 percent of the 2013 soybean crop. That is the highest percentage ever. However, it must be pointed out that the export share likely will decline after USDA raises its estimate of U.S. 2013 soybean production either in November or January to make its balance sheet balance.
- USDA raised its forecast for China's soybean imports in 2014/15 by 1 MMT to 74 MMT. It also slightly increased its forecasts for soybean imports in 2014/15 by the EU-28, Japan, and Mexico and Vietnam.
- The forecast for Brazil's 2015 soybean crop was raised by 3 MMT to 94 MMT and Argentina's was increased from 54 MMT to 55 MMT. I will believe when I see it. I still cannot believe farmers in Argentina and Brazil will plant more soybeans for harvest in 2015 with the current price outlook.

• Global soybean ending stocks in 2015/16 were increased from 85.62 MMT to 90.17 MMT. That would be a stocks-to-use ratio of 31.6 percent.

My suspicion is that the forecast for U.S. soybean production will increase further in the next 2 monthly reports. However, that will only happen after there has been actual harvest yield data to justify the increase. I still believe the crop ultimately will reach about 4 billion bushels.

# Argentine Farmers Hoarding \$9.7 Billion in Soybeans

# By Hugh Bronstein

BUENOS AIRES, Sept 12 (Reuters) - Argentine farmers are hoarding 21.5 million tonnes of soybeans harvested this season, according to government data, as low world prices and financial uncertainty at home prompt them to hang onto a higher percentage than they did a year ago.

Growers are selling "hand to mouth" as one grains export executive put it, releasing just enough into the market to pay taxes, inflation-sensitive operating costs and bank loans that have become more expensive since Argentina's July debt default.

Global 2013/14 soybean output was 283.1 million tonnes, of which 7.5 percent is being held on Argentine farms.

At the official free on board (FOB) price, the reserves being held from the market are worth \$9.7 billion. If they were to be released it would put downward pressure on global soybean prices already near four-year lows. <u>Sc1</u>

Argentina is the world's No. 3 soybean exporter and top supplier of soymeal livestock feed, which is fueling Asia's shift toward a higher-protein diet.

A gulf between the Argentine peso's official rate and black market rate is increasing expectations of a sharp devaluation before the year's end. The currency is under pressure from high inflation, a shrinking economy and the government's failure to make a July sovereign bond payment.

President Cristina Fernandez has ruled out a hefty intervention on the currency market but has failed to convince local markets, meaning growers are likely to keep hoarding soy to use as a unit of savings preferable to the peso.

Growers harvested 53 million tonnes of soybeans in the 2013/14 crop year, up 9.5 percent from 2012/13 season, according to the agriculture ministry. Soy is generally planted in September through December in the Argentina, and collected in April through June.

They have sold 31.5 million tonnes of their 2013/14 soy crop so far, or 57 percent of the harvest, ministry data says. Last year at this time growers had sold about the same in tonnage, accounting for 67 percent of the smaller 2012/13 crop.

"Someone who does not need cash right now will hold off on selling, considering the unstable financial context and the probability of a peso devaluation," said Leandro Pierbattisti, an analyst with Argentina's grains warehousing chamber.

The trend toward hoarding is clear when compared with the 2009/2010 crop year, when 41.5 million tonnes of soybeans were sold by this point in the season, accounting for 75.5 percent.

Santiago del Solar, who manages 15,000 hectares in the breadbasket Buenos Aires province, said that he and neighboring farmers would hold back more stock were it not for an inflation rate private economists see hitting 40 percent this year.

He said he has sold 60 percent of his 2013/14 soy crop outright, plus another 20 percent on the futures market.

"Because of inflation you have to sell 20 or 30 percent more soy in order to pay the same bills that you had last year," he said. "It costs 20 to 30 percent more than it did a year ago to buy the same amount of fuel, fertilizer and other inputs."

# Pennsylvania Perdue Soybean Plant Still a Go, Firm Says

Intelligencer Journal -- LANCASTER COUNTY, PA -- September 12, 2014 -- More than three years after it was announced with much fanfare, a proposed \$59 million Perdue AgriBusiness soybean-crushing plant in Conoy Township has yet to accept its first truckload of soybeans from Lancaster County farmers.

The state Department of Environmental Protection has been reviewing Perdue's air emissions application for two years, and frustration among plant supporters is growing.

Those backing the plant have recently appealed to Gov. Tom Corbett and the DEP secretary, among others.

The entreaties were delivered by state Sen. Michael Brubaker, a backer of the plant that would be built next to the county resource- recovery incinerator near the Susquehanna River.

So far, to no avail. It's now certain a third harvest season will pass without the facility in operation and its savings to regional farmers and projected boost to the local economy.

"This has taken absolutely longer than anyone envisioned," said Scott Sheely, executive director of the Lancaster County Workforce Investment Board and a board member of the Lancaster County Agriculture Council.

"Nothing seems to be moving. It's just dead in the water, and we don't know what's going to happen. From our perspective, it seems that all communication has stopped."

Added Conoy Township Supervisor Stephen Mohr, "We are totally frustrated at the length of time that it is taking for the permitting process.

"This will be the third season that the soybeans will be hauled elsewhere when they should have been coming here. We're 110 percent behind the project, and we have made contact in Harrisburg just in the last couple weeks supporting this project and asking about the holdup."

Lancaster County Commissioner Scott Martin called DEP's review "an unreasonable delay."

"Yes, I'm disappointed that it has taken this long," he said. "The economic impact is delayed with each growing season that passes by. I believe Perdue's proposed air quality standards are good, especially compared to other states."

In a letter dated July 31, Corbett replied to the appeal to expedite matters, saying he would continue to advance projects that expand agriculture while protecting the environment.

The delay revolves around emissions of hexane, a flammable solvent classified by the federal government as a hazardous air pollutant that contributes to smog.

Concerns about hexane have been voiced, especially from the York County side of the river.

Officials and residents there were so vociferous in their concerns that DEP's public hearing on the project was held in Hellam Township, rather than in Lancaster County, in December 2012, much to the chagrin of Conoy Township officials.

Perdue's application to DEP says the plant would emit up to 245 tons of hexane a year.

Opponents note that the area already is out of compliance with smog limits.

Sen. Brubaker said Wednesday that "the issue boils down to potential emissions and those entities which are attempting to clarify the overall impact of this project on the environment."

According to Sheely, Perdue thinks emissions limits DEP has set for the first-of-its-kind facility in Pennsylvania are very restrictive. "No other plant has been asked to operate at this level," he maintains.

"We recognize the environmental concerns, but it appears that in the mainstream, the hexane levels are not where they would be hazardous."

Perdue has maintained that hexane is used in 90 percent of the soybean-crushing facilities in the U.S. and that hexane levels at the planned Conoy plant would be well below limits set by the U.S. Environmental Protection Agency to protect public health.

Despite the extended environmental review, Perdue spokesman Kurt Knaus told Lancaster Newspapers that "we remain committed to this project.

"This is the first solvent extraction facility permit application Pennsylvania regulators have ever reviewed. We have met with DEP multiple times during the review to provide them with information about the process and technology. The permit remains under review by DEP, and we can't take any steps with the plant until they make a decision," Knaus said.

Asked about the long review, DEP spokeswoman Lisa Kasianowitz said, "DEP is still in the technical review phase of Perdue's permit application process. Any proposed permit would be subject to a public comment period and that would likely include a public hearing. Holding the hearing would be dependent upon the level of public interest expressed to DEP."

The plant would be built on property purchased from the Lancaster County Solid Waste Management Authority, which also would provide surplus steam from the incinerator.

Authority CEO James D. Warner said Wednesday, "LCSWMA understands that this project is unprecedented in the state, hence the need for regulatory agencies to take adequate time for review of any new permit issuances.

"However, we feel strongly that approvals must come very soon, as further delays only serve to hurt the local community with each passing harvest season. LCSWMA remains in solid support of Perdue and this project."

Perdue's option agreement on the property ends Sept. 20, but Perdue has indicated it wants a six-month extension.

Sheely said the plant would provide far more than 35 permanent jobs and hundreds of local construction jobs. A "multiplier effect" would actually create more than 150 jobs related to soybean processing, not to mention providing farmers with a closer place to sell their soybeans and a place to buy cheaper livestock meal.

Gov. Ed Rendell gave Perdue an \$8.75 million grant for the project. The grant was affirmed by Gov. Corbett.

# USDA State Soybean Yield and Production Forecasts

Soybeans for Beans Area Harvested, Yield, and Production - States and United States: 2013

and Forecasted September 1, 2014

: Area harvested : Yield per acre : Production :------State : : : 2014 : : : 2013 : 2014 : 2013 :-----: 2013 : 2014

: : : : August 1 :September 1: :									
: 1,000 acres :	hels 1,		.000 bushels						
Alabama: 425	500 43.0	41.0	41.0	18,275 20,500					
Arkansas: 3,230	3,350 43.5	46.0	46.0	140,505 154,100					
Delaware: 163	183 40.0	42.0	44.0	6,520 8,052					
Georgia: 225 2	270 40.0	37.0	39.0	9,000 10,530					
Illinois: 9,420 10,0	50 49.0	54.0	56.0	461,580 562,800					
Indiana: 5,190 5,	490 51.0	51.0	52.0	264,690 285,480					
lowa 9,240 10,	040 44.5	50.0	51.0	411,180 512,040					
Kansas: 3,540 4,	190 36.0	36.0	35.0	127,440 146,650					
Kentucky: 1,640 ´	,690 49.5	40.0	46.0	81,180 77,740					
Louisiana: 1,110 1	,440 48.0	50.0	51.0	53,280 73,440					
:									
Maryland: 475	495 39.0	44.0	44.0	18,525 21,780					
Michigan: 1,890 2	2,290 44.0	44.0	45.0	83,160 103,050					
Minnesota: 6,620	7,420 41.0	42.0	42.0	271,420 311,640					
Mississippi: 1,990 2	2,220 45.0	48.0	49.0	89,550 108,780					
Missouri: 5,550 5	,650 35.5	44.0	46.0	197,025 259,900					
Nebraska: 4,760	5,350 53.0	52.0	53.0	252,280 283,550					
New Jersey: 87	93 39.0	40.0	42.0	3,393 3,906					
New York: 278	397 48.0	49.0	49.0	13,344 19,453					

North Carolina: 1,420	1,670	33.0	37.0	37.0	46,860	61,790			
North Dakota: 4,620	5,950	30.0	32.0	33.0	138,600	196,350			
:									
Ohio: 4,430 4,940 49.0 49.0 50.0 217,070 247,000									
Oklahoma: 335	295 3	0.0 3	31.0 3 <sup>7</sup>	1.0 ´	10,050	9,145			
Pennsylvania: 535	600 4	49.0	49.0 5	50.0	26,215	30,000			
South Carolina: 310	440	28.0	29.0 2	28.0	8,680 <i>´</i>	2,320			
South Dakota: 4,580	4,910	40.0	40.0	42.0	183,200	206,220			
Tennessee: 1,520	1,580	46.0	44.0 4	47.0	69,920	74,260			
Texas									
Virginia: 590 590 38.0 40.0 41.0 22,420 24,190									
Wisconsin: 1,550	1,780 3	38.0 4	43.0 4	6.0	58,900 8	31,880			
:									
Other States 1/ .: 51	60 43	3.1 4	2.8 42	2.2 2	2,196 2,	533			
:									
United States: 75,869	84,058	43.3	45.4	46.6	3,288,83	3 3,913,079			

1/ Other States include Florida and West Virginia. Individual State level estimates will be published in the "Crop Production 2014 Summary."

#### **Danish Farmers to Grow More Horse Beans**

Areas with organic horse beans increase significantly in the Danish fields. From 2011 to 2013, the area has more than tripled. And horse beans could be a good alternative for soy in animal diets.

And there may be good reason, because horse beans can replace a significant portion of the soy which organic farmers today have to import. Field trials carried out by the Knowledge Centre for Agriculture confirm this.

#### Not enough organic protein

Protein is an important part of the human diet. But cattle, pigs and poultry also need proteins so that their body mechanisms can function optimally. Unfortunately, the production of organic protein crops for animal feed in Denmark is small, and imports of foreign soybean are therefore heavy. But it seems as if the trend is reversing.

#### **Promising results**

Experts from the Knowledge Centre for Agriculture have tested whether horse beans grown in Denmark eventually are able to replace the foreign organic soy, which today is mainly imported from China. And the results are promising. "We have examined the horse beans because they, unlike soy fit our cooler climate, and they contain a good deal of protein. We have therefore fed dairy cows with horse beans and it looks to be a promising alternative to soy. With heat treatment of the horse beans and a customised feed level, it seems that we can completely do without imports of soy to organic dairy cows", says Margrethe Askegaard, Consultant at the Knowledge Centre for Agriculture.

Askegaard is the project manager of the project ØkoProtein (Organic Protein), a four-year project in collaboration with the Faculty of Agricultural Sciences, Aarhus University, a number of companies and many organic farmers. The project's objective is that the Danish organic livestock in the future can be fed with Danish organic protein. The findings suggest that organic farmers have embraced the new knowledge about the horse beans. The proportion of horse beans in Danish fields is rising steeply from 478 ha in 2011 to 1,571 ha in 2013. "And based on the sold organic seeds for this growing season the areas seem to rise continuously", says Margrethe Askegaard.

#### Still dependent on soy

Howver, it will still last a while before the Danish organic farmers can completely do without the soy. "If we actually replaced all imported soy for the Danish organic dairy cows, it will have the consequence that we will have to harvest about 47,000 tons of horse beans annually. With an average yield of 4 tons horse beans per hectare, this means that in Denmark we must cultivate horse beans on more than 11,000 hectares. So there is much to be done before we can be self-sufficient", says Margrethe Askegaard. Currently, the experts are examining what the producers of organic pigs and hens laying eggs think of the horse beans, which not only can be used in organic production, but also in conventional production.