

## Boosting efficiency

**How to optimise production processes in agriculture and minimise costs?**

**Every farmer nowadays is looking for answers to these questions relying on science, innovations and cutting-edge technologies. EkoNiva also has its know-how. See more details at pages 3, 7, 14.**



### **Challenging the impossible**

'Successful development in agriculture requires setting challenging tasks and putting your whole self into the work', ascertains Gadgy Zaynudinov, long-standing partner of EkoNiva.

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### **Rigorous selection**

Zashchitnoye has developed an early generation seed production system aimed at preserving genetic properties of varieties.

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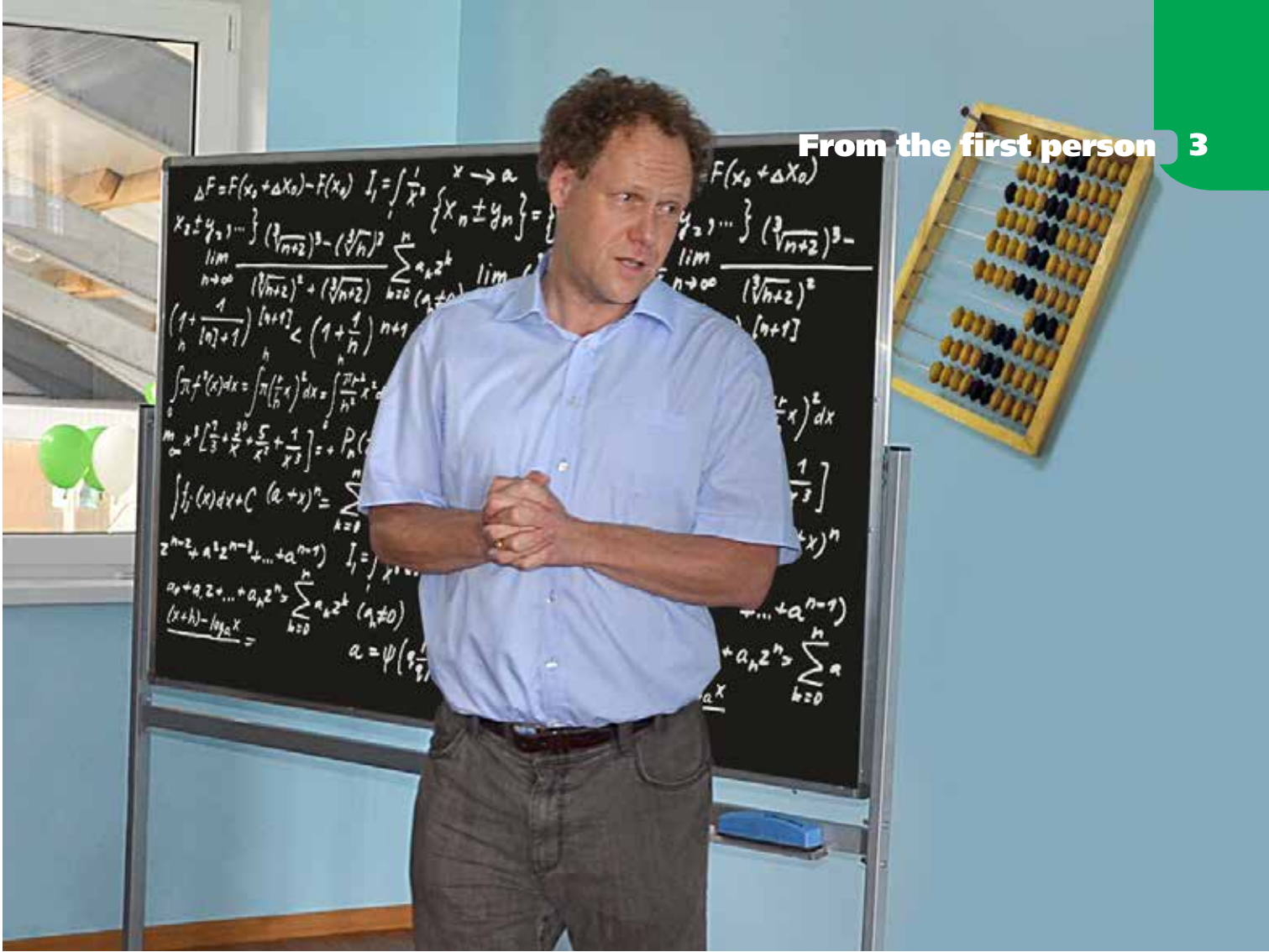


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## From basic arithmetic to rocket science

In 2002, when we purchased our first farm, we came to the accounting office and saw good-natured, hard-working women who were keeping books with the help of abacuses. At that time, EkoNiva-Tekhnika, our farm machinery dealership in Moscow, had been using computers for quite a while, and 1C Accounting was a familiar tool for the employees. The plan was to implement the same system on the farm. We purchased computers and held training courses for people. However, our accountants kept on using their abacuses assuring us that they were much more convenient and easier to work with. Meanwhile, the computer boxes lay piled up in the corner unopened.

Some time later, however, the computers were unpacked upon the boss' order, and the bookkeeping office started using accounting software. Still, all the results were verified with the abacus in case the

computers had made a mistake.

That was just a short while ago, and now it is hard to imagine our work without computers. No one would even think of using an abacus for accounting operations, even though it also gives the correct result!

Now we want every machine operator to receive their daily tasks via electronic mail or as a text message, which they could read on their telephones or tablets instead of holding Plan of the Day meetings. Many people think: why does a machine operator need a tablet? Machine operators must be disciplined strictly with the help of strong language and an iron hand.

Frankly speaking, this viewpoint reminds me of the story with the abacus. Of course, we can work without GPS and GLONASS systems as we did without

computers. However, precision farming systems allow us to manage farm work more efficiently because we can control the application rate of fertiliser and chemicals, supervise all field works and know exactly which operation the tractor is doing at this very minute. Besides, these systems ensure simple and reliable recording of all the costs for bookkeeping. Currently, a wide range of similar programmes is being developed in Russia. We have been engaged in precision farming for a number of years, and this year, one of our main goals is to develop and implement a precision farming system jointly with John Deere. We are sure that it will open new opportunities in agriculture, as the computer did at its time.

*Stefan DUERR,  
President of EkoNiva Group*



Aleksey Gordeyev, Governor of Voronezh oblast, has held a meeting with Horst Seehofer, Prime Minister of the Federal State of Bavaria in Moscow.

## Following in Bavarian steps

The meeting was dedicated to the development of the farming sector in both regions. Aleksey Gordeyev observed that it was worthwhile to adopt the Bavarian experience of social policy aimed at the support and development of rural areas.

'We should not only adopt high technologies but also aspire to the same level of agricultural production', says Aleksey Gordeyev, 'and use a patriotic approach. We must understand that rural areas are the core of the nation. We have a governmental programme for the development of rural areas, the goal of which is to establish a high standard of living in villages so that young people could stay to live and work there.'

The Governor of Voronezh oblast asserted that in order to ensure harmonious development of rural areas, it is essential to support local

government and encourage efficient interaction among the rural municipal bodies. Aleksey Gordeyev also discussed the development of the farming sector with Helmut Brunner, Minister of Food, Agriculture and Forestry of the State of Bavaria. At the end of the meeting, they signed a cooperation agreement.

'Bavaria and Voronezh oblast have been cooperating for many years', says Helmut Brunner. 'Aleksey Gordeyev has given it a fresh impulse. We have agreed on joint projects in the areas of professional education in agriculture, food industry and the development of rural areas.'

By Tatiana SIMONENKOVA



## The best of the best

The best performers of the region were awarded at the extended meeting of the Board of the Regional Department of Agriculture of Kaluga oblast.

Kaluzhskaya Niva received a number of awards. Vladimir Kavin, Director of the enterprise, won the first prize, the so-called Agricultural Oscar. He became the best manager of a dairy farm and the best manager of an enterprise producing seeds of legume grasses.

'I must admit I am pleased that our work is praised at such a high level', says Vladimir Kavin, Director of Kaluzhskaya Niva, 'and I am sure our team has deserved it. Three years ago, we harvested

3.5 tonnes/ha of cereals; now the average yields are 4.9 tonnes/ha in Ferzikovo and 4 tonnes/ha in Peremyshl district.'

It should be noted that such an impressive result was achieved under challenging weather conditions: a lot of wheat lodged due to heavy rains. The company has all reasons to hope for record yields under more favourable conditions.

'In 2017, we are going to harvest at least 5 tonnes/ha of winter wheat and produce over 40,000 tonnes of milk', says Vladimir Kavin. 'And in 2018, we are planning to receive 60,000 tonnes of milk.'

Such optimistic prospects are not accidental. High-skilled employees are able to conquer the highest peaks. This year, several specialists of Kaluzhskaya Niva were acknowledged as the best in their professions. Among them, Yevgeniy Yakovenko, Machine Operator, Sergey Voloshko, Chief Agronomist,

and Nataliya Bondareva, Robotic Milking Machine Operator.

'With such people, we can break a lot of records', says Vladimir Kavin proudly, 'moreover, we have just launched a new dairy farm for 2,800 head in Peremyshl district and started building a farm in Ferzikovo district. Step by step, we are moving away from old farms, which have been "inherited" from the previous owners, and construct new ones increasing productivity.'

The impressive performance of Kaluzhskaya Niva produces a good effect on the overall result of the region. In 2016, the gross agricultural output in Kaluga oblast amounted to 37.5 billion rubles. According to Anatoliy Artamonov, the Governor of Kaluga oblast, the most significant results were achieved in dairy farming. The total milk output on all categories of farms had increased by 6%. Of course, Peremyshl, Ferzikovo and Kozelsk districts are the leaders.

By Olga ATANOVA





## Exceeding expectations

EkoNiva took part in Beef and Dairy Industry trade show. Livestock farming leaders gathered at Crocus Expo.

**A**t the opening ceremony, Jambulat Khatuov, First Deputy Minister of Agriculture, underlined that the main priority is the establishment of a good basis for pedigree cattle breeding. After the opening speech, he visited all exhibitors, including EkoNiva.

EkoNiva sells dairy pedigree cattle of Holstein, Simmental, Red-and-White and Brown Swiss breeds.

In 2016, the company sold over 4,000 head of cattle. The largest batch was

delivered to The Karachay-Cherkess Republic — 440 head. EkoNiva is ready for 'big appetite' of clients. Purchasing large batches of animals guarantees herd uniformity, prompt adaptation of cattle and high milk yields.

'We have the same approach to clients regardless of the purchase volume', shares Vladimir Chirkov, Executive Director of EkoNiva-Semena. 'Our specialists give advice and share their experience in the areas of cattle

housing and herd management with all clients. We provide high-quality after-sales support.'

EkoNiva also presented a wide choice of seeds at the exhibition. All seeds offered by the company are of the world's best varieties consistently producing high yields. The guests of the event were interested in fodder grasses such as alfalfa, clover, timothy, festulolium, ryegrass, brome grass and wheat grass as well as grass mixes providing a balanced ration for animals.

'At first, we perform variety trials at our plot at Zashchitnoye operation, Shchigry district', says Aleksandr Ryabenko, Sales Manager of EkoNiva-Semena. 'Then we evaluate the performance of the varieties in our production fields, and only after that sell the seeds commercially providing the breeder's recommendations and our advice regarding growing technologies and chemical treatment for every variety.'

EkoNiva has long won the reputation of the crop growing leader. The company is well-known and respected in Russia and the CIS countries.

'Our goal is to preserve the reputation of a responsible supplier of high-quality seeds', says Vladimir Chirkov. 'We are very happy that we have an extensive customer base. We are ready to surprise our customers with the novelties, which are not yet available in Russia. We keep developing and offering exactly what the market needs.'

*By Tatiana SIMONENKOVA*

## John Deere welcomes guests

Clients of EkoNiva-Tekhnika from Ryazan, Tula and Kaluga oblasts have visited John Deere production facility in Domodedovo.

**T**he facility specialises in the assembly of 8 and 9 Series John Deere Tractors as well as T Series harvesters.

The total area approximates 70,000 square metres. Twenty-five tonnes of spare parts are shipped to John Deere representative offices all over Russia on a daily basis.

The hosts gave a tour of the production facility for the guests and showed the assembly line, the spare parts warehouse and the educational centre at which John Deere holds trainings for dealers and clients. The farmers learnt about John Deere financial programme and leasing options for the purchase of machinery and equipment. Machinery showcase was a special treat for the guests.

'We invited the clients who have never visited this facility', says Ivan Glebov, Head of Sales Department of Ryazan branch of EkoNiva-Tekhnika. 'We wanted them to see for themselves that high-quality machinery is assembled right next to their farms. Everybody was impressed with the management and scale of the spare parts storage facility; and, of course, the clients had an opportunity to ask their questions.'

*By Tatiana SIMONENKOVA*



## Food for thought

Representatives of EkoNivaSibir attended a workshop arranged by their long-standing partner Mezheninovskaya Poultry Factory. The event took place in Svetlyi village, Tomsk oblast, and was dedicated to rapeseed production.

The workshop was attended by representatives of the leading enterprises of the region, which shared their extensive experience of growing this crop. EkoNiva's expert Willi Drews, Doctor of Agronomy, made a presentation on effective rapeseed growing practices in Siberian conditions while Aleksandr Zuyev, Head of Sales Department of EkoNivaSibir, provided information on the agricultural machinery and equipment, which can become indispensable on the farm.

Since the seminar took place shortly before the sowing season, it was

especially important to discuss the question of the most appropriate tillage and sowing equipment. In this regard, the news of the recent expansion of John Deere lineup at the manufacturing facility in Orenburg with the new combination rippers came in handy.

The John Deere 2720 Disk Ripper for primary tillage has gained the reputation of the toughest in its class.

'It ensures smooth operation in any conditions', says Aleksandr Zuyev. 'It does everything: sizes and manages residue, penetrates and shatters the compaction

layer, buries and mixes residue and helps to level the soil profile. It combines four field operations in a single pass: ripping, disking, working the soil down to 40 cm, levelling and packing.'

The John Deere 2730 Combination Ripper prepares the seedbed. After this machine, farmers can use any type of sowing equipment, be it air seed drills, mechanical planters or precision seed drills.

The John Deere 2210 Field Cultivator for Seedbed Tillage with a flowing hitch for fast seedbed preparation in spring is easy-to-operate, maintains precise and consistent soil penetration on uneven terrain, and the staggered tine arrangement ensures optimum residue distribution without clogging up.

Seedbed preparation varies depending on the crop and soil conditions. The versatile machinery offered by EkoNivaSibir is very efficient. In the long run, it enables enterprises to reduce the costs associated with additional machinery purchase, save time and fuel by doing fewer passes, and thus cut crop production costs.

A special focus during the workshop was placed on efficient harvesting of rapeseed. The John Deere 600X Combine header with a table extendable up to 1,200 mm is the best choice since it virtually eliminates grain losses.

'The workshop promoted a constructive dialogue, which I think everyone benefitted from', says Aleksandr Zuyev.

By Tatiana SIMONENKOVA

## Good neighbours

EkoNiva-Semena presented its products at AgriTek/Farmtek Astana 2017 international trade fair in the capital of Kazakhstan.

'Kazakh market provides huge opportunities for our products, but we are just starting to explore it', says Valentina Sarayeva, Sales Manager of EkoNiva-APK Holding. 'Farmers are interested in seeds, in



particular soy, peas Jackpot and wheat Triso. Livestock producers are looking for optimal fodder crops, so we offer them perennial grass varieties and provide useful tips for growing them.'

Another important topic discussed at the trade fare was pedigree cattle delivery. Sibirskaaya Niva had already prepared 68 head of Simmental cattle for shipment to Kazakhstan.

'We met the clients at last year's trade show', says Valentina Sarayeva. 'The negotiations continued for a year, the clients had an opportunity to see for themselves that our company has a very good reputation and make sure that the cattle had been duly vaccinated in order to

be transported to Kazakhstan. Currently, all organisational issues have been resolved, and the whole procedure will become simpler for everyone in the nearest future.'

Simmental cattle are very popular with farmers in Kazakhstan. Another benefit of the cooperation is that Novosibirsk oblast shares borders with Kazakhstan, so the climatic conditions are similar, and the animals transported from Novosibirsk are adapted to the weather.

Kazakh farmers are interested in the cooperation with EkoNiva. Currently, the parties are discussing preliminary agreements for the delivery of seeds and pedigree cattle.

By Tatiana SIMONENKOVA



Cutting-edge technologies will ensure rising to an entirely new level in farming. New solutions and modern farming practices were discussed at an extended session of the Ministry of Agriculture of Ryazan oblast.



**S**ergey Krupskiy, Director of Ryazan branch of EkoNiva-Tekhnika, told us about the state-of-the-art developments and solutions implemented at the farming enterprises of the region. The John Deere AMS system allows performing field operations with maximum precision. Depending on navigation type and signal intensity, the overlap area decreases by 99%. In essence, it is an 'autopilot' system, which simplifies the work of machine operators significantly. The JD Link system allows remote access to a tractor or a combine, controls the machine's track and fuel consumption and monitors the condition of the machine's components. Almost one fourth of the breakdowns are eliminated directly on site and the machine does not

have to leave the field. The FarmSight system provides additional opportunities for cutting maintenance costs. The main purpose of the system is to increase operational efficiency of the machine by means of diagnostics, repair and preventative maintenance between the seasons when machines are stored in the garage. 'Our partners believe that precision farming systems have a huge potential', says Sergey Krupskiy. 'For example, Head of Vyshnegorodsky agricultural cooperative who was also present at the meeting, has never been afraid to try new solutions. He has equipped his machinery with the John Deere AutoTrac system. I am happy to see that farmers are becoming more and more rational. They understand that

receiving enough data for analysis and monitoring machines in the field ensures prompt decision making, which helps to maintain high yields, extend the service life of machines and save time.'

It was decided to establish a special committee, which would work on implementation and development of precision farming in the region. Another important decision was to allocate a part of the regional budget to the development of science and agriculture.

'Food security of the country is one of our key tasks', says Sergey Dudukin, Deputy Head of the Government of Ryazan oblast. 'Modern tillage practices and harvest quality improvement are components of this task.'

*By Tatiana SIMONENKOVA*

## Professional approach

Representatives of Kostroma branch of EkoNiva-Tekhnika have held a seminar on potato growing.

**S**ales managers of the company told the attendees about Grimme, one of the world's leading manufacturers of machinery for growing vegetables, and presented their own solutions for potato farming.

EkoNiva-Tekhnika provides advisory services and supplies machinery tailored to meet the needs of each individual farm.

'It often happens so that people need to buy machinery urgently and have to choose from what there is in stock', shares Kirill Tagantsev, Head of Sales Department of Kostroma branch of EkoNiva-Tekhnika. 'We have a different approach: when we see that a farmer is interested in making a purchase, our specialists go to his farm, talk to him and tailor the machine in accordance with the farmer's requirements to ensure its maximum efficiency. We also help

farmers who have made an impulse purchase to correct their mistakes. It is very convenient that Grimme provides a wide selection of equipment, and we can always recommend additional implements for the machine.'

Specialists of EkoNiva told about the benefits of professional servicing, in particular damage assessment in autumn.

'It is, in the first place, the question of cost saving', explains Kirill Tagantsev. 'Our specialists perform diagnostics and identify problems. We agree the

list of necessary parts with the owner and make inexpensive 'long' orders, which means we collect a large number of orders and get a discount from the supplier. Besides, our clients can pay in installments. They provide a minimum advance payment and pay the rest of the money during the winter.'

After the constructive dialogue at the seminar, the number of EkoNiva's clients has grown, and the company has concluded several agreements for the delivery of machinery and equipment.

*By Tatiana SIMONENKOVA*





AgroVyatka – 2017 regional trade fair is one of the largest events in Privolzhskiy Federal District. The trade fair attracts not only local farmers but also guests from the neighbouring regions.

## AgroVyatka – 2017 opens the new farming season

There is a joke among the farmers that they cannot start the working season until they visit AgroVyatka.

EkoNiva-Tekhnika is one of the constant exhibitors of the trade fair. Every year, the company impresses the attendees of the event with the number and diversity of machines. This year was no exception. The machines displayed at the booth sold out like hotcakes. Special attention was paid to the participants of the demo show, the Haybuster Balebuster 2564 and the JCB 531-70 Agri Telehandler coupled with the BvL V-LOAD Cutter Master 130.

The first distinctive feature of the Haybuster Balebuster is adjustable cutting length. It is the only machine which can ensure 2.5 cm cutting length and a stable granulometric composition. The second feature is the capacity to blow straw out to 20 m with the help of the blower fan which comes with a straw cannon.

The BvL V-LOAD Cutter Master 130 won all hearts by its ability to make immaculately even cuts due to the patented system of double knives. All knives are set in motion simultaneously by one drive cylinder. This is the only silage cutter with an active linear drive.

‘Even cuts reduce the influence of secondary fermentation and increase the nutritive value of silage’, says Gennadiy Nepomnyashchiy, Executive Director of EkoNiva-Tekhnika, ‘as a result we have superior feed quality.’

The John Deere 6170M, a novelty in John Deere’s model range 2017, received special attention of the attendees.

‘It is a truly European machine with an increased comfort level’, says Gennadiy

Nepomnyashchiy, ‘with the capacity of 170 hp, this machine meets all power requirements for this type of tractors.’

The new 6 Series JD tractor is a perfect fit for Parus farming enterprise (Tuzhino district).

‘All our mounted equipment is designed for this type of tractors’, says Vasily Romanov, Head of the enterprise, ‘if we purchase a different tractor, we will have to change all the other equipment, which does not make economic sense. I know that John Deere manufactures outstanding tractors; I have been thinking of buying one for ages, and, finally, I’ve made up my mind.’

The John Deere 8320R was purchased by Krasnoye Znamya farm (Kumeny district) right at the trade fair. This tractor will do a very good job in their fields. It is a 320 hp machine with the PowerShift automatic transmission featuring 16 forward and 5 reverse gears and a 360-degree lighting system, which allows the tractor to work literally day and night.

EkoNiva offered special discounted prices for all presented models, which only

increased the guests’ interest.

John Deere 6135B tractors also enjoyed popularity. They are irreplaceable during the forage harvesting season. These machines are known for their moderate price and versatility. The perfect PTO of the John Deere 6135B allows the tractor to work with all existing models of forage dispensers and mix fodder on the move.

The Fliegl ASW-381 push-off trailer appealed to the visitors as well. It can operate even in low-ceiling facilities. The part of the bottom, which starts moving at the same time as the sidewall, ensures low net weight of the material not allowing it to build up in the middle. The three-axle trailer is equipped with large ribbed tyres that minimise soil compaction while transporting the grain from the harvester.

On the final day of the trade fair, all visitors, including city residents, were granted a free access. Kirov residents used this opportunity to get behind the wheel of a real tractor. Children were the happiest attendees of the show — for them this day became a real feast.

*By Olga ATANOVA*







## Farming seminar in good taste

Specialists of EkoNiva-Chernozemye and EkoNiva-Semena held a joint educational event 'Farming technologies, machinery and after-sales service — the three pillars of successful farm management. Comprehensive solutions' for local farmers at the premises of EkoNivaAgro in Verkhny Ikorets. The seminar was organised by EkoNiva-Chernozemye, while EkoNiva-Semena provided its leading experts to share their professional expertise.

The annual educational event gathered over one hundred participants from Voronezh oblast and the neighbouring oblasts of the Central Black Soil Region.

'The key topic of our seminar is modern solutions for reducing crop production costs by means of cutting-edge technologies and machinery as well as opportunities for saving costs on after-sales servicing', relates Ivan Vorobyev, Executive Director of EkoNiva-Chernozemye. 'Based on the 15 years of our experience, we have learned that good repair work is only half of the success equation. High-quality support of machine operation, preventative maintenance and repair allow farmers to reduce operational costs considerably. Firstly, we monitor the prices of spare parts and servicing; secondly, we guarantee to the clients that their machines will work reliably



well, without any breakdowns during the busy season.'

Among John Deere's new products for Voronezh fields were improved 6, 7, 8 and 9 Series tractors, the most

powerful rotary combine in the world S690, the T Series grain harvester — the largest straw walker in the world, — brand new 8000 Series forage harvester, improved models of headers and seeders and cutting-edge software.

'The 8 Series forage harvester is the most interesting novelty showcased by John Deere', comments Eduard Ivanov, Head of Sales Department of EkoNiva-Chernozemye. 'It is an absolutely new machine: 80% of the assembly parts have been modernised. The engine position has been changed, the drives have been optimised and reduced, the receiving chambers have been widened and the flow rate — increased. The new model is characterised by an optimal distribution of the weight of working implements, which increases the

performance of the machine by 20%.'

Along with the machines, the company also presented John Deere Financial tools facilitating the purchase of John Deere machinery.

'John Deere Financial appeared in Russia in 2012', says Aleksandr Redkin, representative of John Deere Financial. 'Within this period, we have financed



1,700 machinery units, and the portfolio of our company has exceeded eight billion rubles. The financing under our leasing programmes is provided in rubles. The down payment is from 20% to 49% of the total amount. The leasing period is from one to five years.'

Zashchitnoye seed growing enterprise presented its best seed varieties at the seminar. Among the crops showcased by the company were cereals, pulses, oilseed crops and annual and perennial grasses.

All participants had an opportunity to taste natural dairy products from the Academy of Dairy Sciences: fresh yoghurt, milk and kefir.

'There are nine specialists from our enterprise at the seminar', says Boris Bashchev, Head of Vozrozhdeniye farm (Kashira district, Voronezh oblast). 'We have discussed very interesting and important questions. For example, today I have learned that John Deere 7 and 8 Series tractors now feature automatic transmission, which will improve the performance of these machines and reduce fuel consumption. It was extremely interesting to learn about low-pressure tyres also allowing to cut down on fuel costs. Besides, I would like to know more about the seeds produced by EkoNiva at its own seed growing operation. And, of course, I loved the dairy products from the Academy of Dairy Sciences because they are made from natural milk, which is produced on the company's own farms. All the products are delicious, natural and, which is more important, healthy!'

By Oleg PANOV



# JCB opens its doors

EkoNiva-Tekhnika and its partners have visited England, home of JCB, the world's leading manufacturer of loaders.

During the first day, the guests from Russia visited the company's headquarters in Rochester. The tour started with the company museum: JCB has come a long way from a modest enterprise, producing trailers to the world's largest manufacturer of farm machinery. Currently, JCB has 22 factories on four continents and over 750 dealers worldwide.

'It is not our first trip', says Aleksandr Burmak, Sales Manager of EkoNiva-Sibir. 'Many clients can say that they have travelled half the world with us. For them it is, in the first place, an opportunity to see the complete process of production of their favourite machinery.'

The Russian farmers were impressed with the electronic map of the world, which shows all JCB machines in different countries. The machines are shown with either green or red lights. The green light means that the machine is operating, while the red signifies some breakdown. If the machine stays idle for several days, the head office solves this problem by delivering the necessary spare parts.

'This resembles a space operation control centre', shares Andrey Galkin, Executive Director of Yermolovskoye farming enterprise, 'it is a breathtaking sight, I have never seen anything like that before!'

The LiveLink system allows monitoring machines all around the world. All you need to use it is to have your computer hooked up to the Internet. The LiveLink terminal

is built into each machine. It processes the information on the machine and sends signals to the machine owner via mobile phone.

'Farmers of all countries and nationalities have already appreciated the benefits of this system', says Aleksey Burmak, 'it is clearly seen on the map. The only white spot is Mongolia, which was a surprise for our farmers.'

The tour continued with the visit to the telehandler factory. Here the farmers could see how the well-known and time-proven 541-70 Agri loader is produced. The model can lift a load weighing 4.1 tonnes to the height of up to 7 metres. The loader is protected against overheating and equipped with a powerful hydraulic pump, which allows using the machine in the most challenging conditions. The 100 hp Dieselmix engines provide massive low-end torque, which reduces the load on the engine and fuel consumption making



the machine more cost-effective.

Andrey Galkin has been cooperating with EkoNiva since 2005. He purchased his first JCB 531-70 Agri in 2010, and in 2013 he purchased another one. By now, the loaders have done approximately 20,000 engine hours without any breakdowns. Now the farmer is considering buying a JCB 541-70 Agri.

'I am convinced that no other manufacturer of telescopic loaders can even approach JCB in terms of quality', continues Andrey Galkin, 'of course, I have heard a lot about the innovative approach of JCB but when I saw everything with my own eyes, I just could not believe the meticulous precision of every stage of the production process. Everything works to make the client satisfied with each JCB machine.'

JCB also presented the new series of telehandlers equipped with the Dualtech VT system.

'The distinguishing feature of these telehandlers is the DualTech VT transmission combining the hydrostatic and powershift drive systems', says Aleksand Burmak. 'It ensures perfect manoeuvrability at low speed levels and in confined areas, exactly the same as skid steers have.'

On the next day, the group visited the factory producing JCB skid steers and Customer Support Centre. The guests noticed that all major assemblies are manufactured at the company's own factories, which ensures reliable quality. The farmers also praised the patented seamless welding system ensuring robustness of the hydraulic system.

'JCB has excellent manufacturing facilities', says Maksim Babukin, Head of Kalyayevo farming enterprise (Kaluga oblast). 'I have visited many factories but I have never seen anything better than this one. I liked the seamless welding of hydraulic cylinders. It is a very efficient solution impressing with its simplicity.'

solution impressing with its simplicity.'

Currently, Kalyayevo has only construction machinery manufactured by JCB. During the trip, the farmer started thinking of buying farm machines from JCB as well.

Besides the business part of the tour, there were some recreational activities. The farmers visited Doverage Shoot shooting grounds, made a tour of London and visited Stratford-upon-Avon, Shakespeare's motherland.

By Olga ATANOVA



Gadgi Zaynudinov is the head of Stock Breeding Farm named after Dzerzhinskiy, a large enterprise by the standards of Ivanovo oblast. The company produces over 40 tonnes of milk per day, approximately 10 tonnes of grain and 70 tonnes of meat per year.



## Gadgi Zaynudinov: challenging the impossible

The total farmland of the stock breeding farm is 8,000 ha, 6,000 of which is arable land. The overall herd size is 4,500 head, including over 1,000 lactating Holstein cows and 150 Limousin cows.

'I always say that we must challenge the impossible', says Gadgi Zaynudinov, 'that is why we keep expanding our production.'

Gadgi was born and grew up in Dagestan. His family lived in a rural area and had cows, sheep and goats. Recalling his childhood years, Gadgi shared that his parents had never had to make him help about the family farm, he had always been willing to work. After the army, he entered Herd Management Department of Ivanovo Agricultural Institute, from which he graduated with honours. As a young specialist he was offered a job on what was then the Collective Farm named after Dzerzhinskiy.

'I worked as a chief herd manager for 20 years, then I was elected the chairman of the farm, and by now, I have been managing the enterprise for 16 years', relates Gadgi Zaynudinov. 'During this time, we have tripled our milk yields and doubled the amount of grain and beef produced. At the very beginning of my career, I understood that I was undertaking

a challenging task but I was sure that I could make some positive change.'

Gadgi Zaynudinov keeps on setting challenging tasks before himself and his employees. If the tasks are accomplished, it has a direct influence on the employee's salary. Therefore, people are willing to work. It is very hard to improve efficiency feeding on bare enthusiasm, farmers must invest in work, ascertains Gadgi.

Another important task Gadgi managed to accomplish was upgrading the machinery fleet. That laid the foundation for his cooperation with EkoNiva, which has supplied the farm with John Deere tractors and combines, tillage equipment and livestock farming machinery. Currently, the farm also relies on EkoNiva as a supplier of seeds of peas and alfalfa and is considering purchasing corn for maize.

Some time ago, the farm underwent a major reconstruction: due to an African Swine Fever outbreak, the enterprise had to abandon pig farming despite the fact that pork production volume stood at 150 tonnes of meat per year. It was decided to start developing dairy farming, build a modern dairy and increase milk yields. Looking for ideas for his new plan, Gadgi visited EkoNivaAgro (Voronezh oblast).

'I wanted to listen to Stefan and his production specialists', says Gadgi Zaynudinov. 'He wants to solve all dairy problems on his own. I feel deep respect for him! I also have my own opinion about everything. As soon as I arrive at a farm, I see all weak and strong points immediately. Some farmers would make an exact copy of what they saw in EkoNiva. I will choose only those solutions, which will be viable at my enterprise. I am glad that I came here, I have seen a lot of useful things.'

Gadgi Zaynudinov has the titles of Honorary worker of the farming industry of Russia and Honorary Herd Manager. Besides, he was awarded a medal issued to commemorate 100th anniversary since the birth of A. Kosygin and a special award for the merits before Ivanovo oblast for his active optimism and for helping the village to provide for itself despite the difficult economic environment.

Gadgi has two sons and a daughter. Shamil, the elder son, has continued the family tradition: like his father, he graduated from Ivanovo Agricultural Academy, and now he is engaged in farming but at a different enterprise since, like his father, he prefers to make his own way.

By Tatiana SIMONENKOVA





## A giant by BvL

The V-MIX Plus 30-3S vertical mixer wagon, a novelty from BvL, has been tailored to meet the specific needs of EkoNiva's farms. The machines operate at the company's dairies in Tyumen, Novosibirsk, Kaluga and Voronezh oblasts. The mixer wagons can hold up to 10 tonnes of feed and mix 18 loads a day.

**A**t EkoNiva's request, we designed a completely new chassis of the mixer wagon which has no equivalents so far,' says Konstantin Shilling, Export Sales Manager for Eastern Europe, BvL Maschinenfabrik. 'The model has the highest suspension in this class of machines, an increased clearance, good stability and such terrain crossing capability that we often internally refer to it as "an off-roader". It is intended for farms with rough road conditions.'

BvL uses only high-quality steel. Besides, lap joints used instead of traditional butt ones ensure better reliability. All assemblies are easily accessible and do not require complicated maintenance works. Oil level monitoring is hassle-free: the large clear tank facilitates good visibility at all times.

'The machine is equipped with a dual-speed reducing gearbox', continues Konstantin Shilling, 'so we can use a less powerful tractor, thus sparing the gearbox and the PTO and surely saving fuel.'

The mixer wagon chops, mixes, meters and delivers feed to animals. The ration

may include different ingredients: maize silage, haylage, loose and pressed hay and straw, feed concentrates, root crops with liquid and solid supplements. The mixer wagon is equipped with an electronic weighing system including large backlit digital indicators. The equipment is controlled from the tractor cab.

'Chopping entire round and square bales poses no problem at all', says Artyom Konoplyov, Sales Manager of the Kaluga branch of EkoNiva-Tekhnika. 'The powerful conical auger with active knives ensures consistency of the mixture, facilitates its uniform discharge and complete emptying of the mixing hopper. The knives are adjustable directly at the

mixing auger flights - a feature that is unique to V-MIX Plus 30-3S.'

Having determined the optimum placement of the discharge opening for both feed troughs and feed bunks, BvL patented its asymmetrical side door position in relation to the center of the hopper.

'The machine has a hydraulic feeding system', says Artyom Konoplyov, 'which means that the tilt angle of the chute is variable, whereas the competing machines feature a fixed tilt angle. The turbo straw blower has a 360-degree rotating mechanism compared to its counterparts, which are stationary.'

*By Tatiana SIMONENKOVA*





## German quality for Russian farmers

Fliegl trailed machinery is a synonym of German quality and sophistication.

**M**olvest, the largest Russian milk processor, favours Fliegl. The company acquired a Profi spreader mechanism and a multifunctional ASW 4101 push-off trailer. Precision and versatility became the decisive factors in the choice. The Profi spreader mechanism is equipped with a feed rate regulator, which works automatically and ensures a perfectly even spread pattern; the spread mass distribution precision has been independently tested and confirmed by the DLG (German Agricultural Society). The ASW push-off trailer when fitted with certain attachments can serve as a manure spreader or an overhead screw conveyor.

'We use the screw conveyor to spread manure', says Aleksandr Khoroshilov, Purchase Specialist of Molvest. 'We have spread over 30,000 tonnes of manure in

the past 1.5 years. We've chosen it for its versatility, as it is important to optimise the production processes and look for opportunities to control your costs. Fliegl trailers can be easily combined with optional attachments that considerably expand their application range, which, in its turn, helps to save considerably on acquiring new machines.'

Tyurinskiy Agricultural Complex (Tula oblast) is engaged in milk and grain production. It started purchasing Fliegl machinery in 2014. Currently, four Fliegl machines are operating at the enterprise: two overhead screw conveyors and two trailers. None is idling.

'Fliegl machines are indispensable for putting up haylage and harvesting cereals', shares Dmitriy Segal, Purchase Manager of Tyurinskiy Agricultural Complex. 'We have selected this machinery for good price-quality ratio.'

Fliegl overhead screw conveyors can be used for a variety of works and can feed different material to a height of up to 5.30 metres. According to Dmitriy Segal, the fact that EkoNiva-Tekhnika performs the service and maintenance of the machines was one of the key factors determining the choice, as it guarantees the quality and long service life of machines.

Sredneivkino Agricultural Firm (Kirov oblast) works with ASW 381 push-off trailers and Fliegl VFW 20000 vacuum tankers. The vacuum tankers pump slurry on a daily basis. The trailers transport mineral fertiliser and construction material. Each trailer is equipped with the optional Profi spreading mechanism to apply organic fertiliser, lime and phosphorite meal. Besides, during forage and cereal harvesting periods, the trailers haul green staff from the fields.

*By Olga ATANOVA*





## 14 Technical inspection

At the beginning of the meeting, EkoNiva's specialists told the guests about the John Deere FarmSight comprehensive solution. The software ensures increased machinery performance.

'Many farmers have experienced machine breakdown during the high season when downtime costs a lot of money', says Dmitry Fetisov, Head of Servicing Department of EkoNivaTekhnika-Holding. 'We want to avoid this costly downtime, and that is what FarmSight is aimed at. Even if the machine is well-used and requires capital maintenance, our task is to service it when it is not needed in the field.'

FarmSight includes optimisation, diagnostics, analysis, education, technical support, advisory services and timely warning of possible breakdowns.

The JDLink system is a good support for FarmSight as it provides efficient farm machinery fleet management. Since last year, all John Deere machines except for 6 Series tractors are equipped with this system. It allows EkoNiva's engineers to contact machine operators from the service centre, without going directly to the farm.

'The primary goal of JDLink is to enable farmers to monitor their machinery fleets', explains Dmitry Fetisov, 'it



shows all basic parameters of machine operation: whether it is idling or not, how many hours it has been idling, how much fuel it has consumed.'

Machines can be monitored from both computer and telephone. In order to set up an online account, farmers just need to register at MyJohnDeere.com portal. Each user has his/her own individual password. The online account allows users to monitor the operation of the machines and receive the information of the operator's mistakes.

'We had a situation when an operator of one of the farms we work with made a lot of critical mistakes on a John Deere 9 Series tractor', says Vitaly Kozorez, Director of Tula branch of EkoNiva-Tekhnika, 'as a result, the gearbox broke down completely and could not be fixed.'



## Joining efforts to reach new records

Before the start of the new farming season, Tula branch of EkoNiva-Tekhnika gathered farmers to inform them of John Deere's hottest novelties and the new programmes, which will help to optimise production and receive record yields.

By constantly analysing the operation of machines, EkoNiva can provide lists of parts required for the next season to farmers, which in its turn will allow farmers to buy the parts at a discount.

'Prevention is always cheaper than treatment', says Dmitry Fetisov. 'If we know the farmer's needs in advance, we have an opportunity to order these parts before the season and deliver them at better prices. Urgent orders are always more expensive.'

The clients were also happy to learn that since 2017, the Power Guard extended warranty is also available for used machines.

'In the current economic environment, any programmes aimed at saving money are a blessing for farmers', says Aleksandr Popov, Head of Zarya farming enterprise (Tula oblast). 'Besides, I am very interested in the JDLink system. It will allow me to control the machinery on my own and not just trust the engineer's word.'

Besides, farmers can benefit from John Deere Reman programme, which is a perfect alternative to capital repair.

'This programme is aimed at remanufacturing of spare parts, which allows reducing their cost by 30-40%', explains Vitaly Kozorez, 'farmers submit their parts for remanufacture quite willingly. The warranty for such parts is no shorter than for new ones and sometimes even longer.'

John Deere remanufactures starters, oscillators, compressors, transmission systems, hydraulic pumps, drives,

axle clutches, electronic systems, controllers, suspensions, joysticks, displays, meters, fuel pumps, nozzles, engines. The company possesses two remanufacturing facilities: in Canada and the USA. After remanufacturing, the parts are tested with special equipment.

'We will definitely use this programme', says Aleksandr Funk, Deputy Head of Razdolye-AGRO farming enterprise, 'it will allow us to save our costs significantly.'

The John Deere leasing programme can also be a convenient option for farmers. It includes the entire model range. It is an open secret that this year, very few farmers will be able to receive subsidised loans; others will have to find some other solution. John Deere offers beneficial conditions to the farmers in these challenging times.

'Many farmers are already looking for options', says Gennadiy Nepomnyashchiy, Executive Director of EkoNiva-Tekhnika. 'Within the last three weeks, we have had an avalanche of phone calls with the request to purchase machinery in leasing. Over thirty tractors have been sold under the leasing programme to Oryol oblast alone.'

By Olga ATANOVA



# John Deere novelties for your fields

Specialists of the service centre of Tula branch of the company held a pre-season seminar, at which they provided a detailed description of new models. All in all, the company presented four units: the John Deere R4045 self-propelled sprayer, the John Deere DN 350 fertiliser spreader, the John Deere 740A seed drill and the John Deere M962 pulled sprayer. During the presentation, the specialists also told the participants of the seminar about the John Deere T670 grain harvester.

Before the seminar, Aleksandr Popov, Head of Zarya farming operation, one of the largest in Tula oblast (Kireyevsk district), had already been well-acquainted with the W Series harvesters but had known very little about the T-Series machines. The seminar allowed him to ask detailed questions about the characteristics of the new harvesters.

'These machines are the largest straw walker combines in the world', says Vitaliy Kozorez, Director of Tula branch of EkoNiva-Tekhnika, 'John Deere has fully modernised the cleaning and active separation systems.'

The cleaning shoe area has been increased by 41%. The active separation area of 6-straw walker machines has reached 4 m<sup>2</sup>. The John Deere T670 combines ensure maximum efficiency even in the toughest harvesting conditions. The rear separator drum (diameter: 800 mm) and the seven-step straw walkers clean and separate grain thoroughly thus decreasing the load on the cleaning system.

Aleksandr came to the seminar to see some pulled implements. He paid special attention to the John Deere 740A seed drill. John Deere 740 A drills are suitable for low-power tractors. Increased seed hopper capacity — 2,300 litres or 3,500 litres — ensures maximum coverage area per hour non-stop.

'Double-disc openers of the John Deere 740A seed drill are called "gold openers" for the sowing depth precision', says Anton Gusev, Sales Manager of Tula branch of EkoNiva-Tekhnika. 'The disc placement guarantees efficient penetration even into hard or residue-covered soil.'

Farmers from Tula were lucky to be the first to see the John Deere novelties. This chance was given to them by EkoNiva-Tekhnika.



John Deere 740A seed drills are equipped with a system of both inside and outside scrapers. Besides, press wheel scrapers allow working in wet conditions.

The attendees of the seminar also had an opportunity to choose new models of John Deere sprayers to their liking.

The output of the John Deere M962 pulled sprayer is 250 l/min per boom. The boom width is 36 metres, the tank volume is 6,200 litres. The sprayer is equipped with the BoomTrac system, which allows setting boom level and height automatically and turning off boom sections to avoid overlapping.

The John Deere R4045 self-propelled sprayer has combined all the best characteristics of its predecessors. The new sprayer has a larger tank and demonstrates higher capacity. The maximum working speed has been increased up to 40 km/h.

Large farming operations should pay attention to one more novelty from John Deere — the John Deere DN 350

fertiliser sprayer. The sprayer possessing an impressive 9,500-litre tank is compatible with 130-150 hp tractors. The working width varies from 18 to 50 metres. John Deere also offers a 7,200-litre model.

'The highly efficient John Deere DN 350 spreader costs less than similar machines of other brands', says Vitaliy Kozorez, 'which gives it a considerable advantage in the farm machine market.'

By Olga ATANOVA





## 16 Technical inspection



# Haybuster – a true master!

Haybuster bale processors operate at livestock operations virtually all over the world. The equipment is in high demand due to its versatility, high performance and simple design.

The machines are capable of coping with a variety of tasks: shredding bales, distributing the material for feeding and bedding, spreading straw mulch over fields for soil erosion control. Each model has undergone extensive field testing. Excellent workmanship guarantees a long service life. 'As known, livestock performance directly depends on housing conditions', says Artyom Konoplyov, Manager of the Sales Department of Kaluga branch of EkoNiva-Tekhnika. 'Haybuster bale processors are perfect for operations with over 200 head of cattle. The equipment optimises time and labour costs for feeding and bedding.'

### The Balebuster 2564 bale processor design

The model is equipped with an upgraded fan, a discharge conveyor, a

patented chain table in the shredder chamber, a reinforced chain and slat conveyor and a self-loading system.

According to the manufacturers, the chain case equipped with an oil bath improves PTO performance by 20%. The dual chain both maintains the rotor direction and increases speed. The inline drive PTO has a slip clutch protection. The auger moving the material to the blower is equipped with an automatic engagement. The blower is welded onto a 5-cm heavy-duty shaft for improved performance. The fan and the discharge spout are lined with resistant AR (abrasion-resistant) 400 steel.

The heavy-duty shredder chamber with 3 chain slat conveyors is capable of handling bales of any size which is ensured by nine heavy-duty slug bars in a standard bar.

The machine handles two bales at once: it carries one round bale in the chamber and the second one on the loader. Both vertical and horizontal adjustment is hydraulically driven, which allows to position the bale from the tractor cab. The 2564 Model is suitable for a wide range of on-farm applications.

#### FEEDING AND BEDDING DISTRIBUTION

With the help of the blower fan, the bedding can be spread both at an open-air site and in a small confined area. The spout facilitates reaching over fences.

'Hay and silage can be processed in mixer wagons for efficient feeding', says Artyom Konoplyov. 'Optionally, the machine can be equipped with a discharge conveyor thus transforming into a feed distributor.'

#### EROSION CONTROL

The blower throws straw mulch to a distance of up to 30.5 m, depending on wind speed and type of material. The bale processor is equally efficient when working on side hills, slopes and hard to reach areas.

'The spout throws mulch straw almost as well as a cannon and has a variety of options to meet your needs', says Artyom Konoplyov. 'It has a 360-degree turning radius which is controlled via a lever from the tractor cab. It spreads mulch up to 18.3 m with high precision.'

The conveyor without a spout can be used at a distance of up to 12.2 m. Optional hose kits (15.2 m and 7.6 m) allow completing spreading jobs in impassable areas.

By Tatiana SIMONENKOVA







## SIMA – supplier of impressions

EkoNiva-Tekhnika arranged a trip to SIMA International Agribusiness Show for the clients.

Thirty-five partners from Yaroslavl, Kostroma, Ryazan, Kirov, Tula, Kemerovo and Voronezh oblasts visited the capital of France. In total, 250 thousand guests attended the trade fair, and 1,800 manufacturers had their booths presented in the halls.

**John Deere** debuted the highest-horsepower tractor available — the John Deere 8400 R (400 hp) — long-serving, robust, easy-to-use and reliable in a variety of conditions.

The guests could also look at the John Deere 9570 RX tractor fitted with a positive-drive track system and designed to handle tough fieldwork such as cultivation, ploughing, discing, tillage and intensive sowing.

The manufacturer unveiled a new concept of the John Deere T670 grain harvesting combine. High throughput and capacity make it indispensable for grain harvesting.

‘A two-drum machine of this type is exactly what we have been lacking to meet the needs of all our customers looking for a grain harvester’, says Eduard Ivanov, Head of Sales Department of EkoNiva-Chernozemye.

The highest horsepower (615 hp) John Deere S690 rotor combine with the tank volume of 14 thousand litres was also showcased at the trade fair.

‘This year, we are starting to deliver this model to our customers’, shares Eduard Ivanov. ‘With such a combine in the fleet, farmers can expect higher-quality crop due to decreasing loss, as this machine is unrivalled in terms of threshing quality.’

It was announced at the trade fair that the lineup of John Deere 6M Series tractors would be completed with models up to 195 hp, and the 7 Series — up to 310 hp.

The John Deere square baler also deserved special attention.

**JCB’s** booth showcased new 536-60 AgriPro, 535-95 AgriPro and 525-60 Agri telehandlers that will be available in Russia from this year.

The supplier presented an innovative transmission that earned the SIMA medal. The DualTech VT system combines the precision flexibility of Hydrostatic with the speed and acceleration of Powershift in a single transmission.

‘DUALTECH VT is the heart of a new series of highly efficient premium JCB AGRI Pro handlers’, states Sergey Skrobkin, Head of Sales Department of EkoNiva-Tekhnika. ‘The innovative transmission ensures equally efficient operation at low and high speeds needed for specific type of work: handling and hauling. The hydrostatic drive module works at the speeds from 0 kph up to 19 kph, and the efficient Powershift transmission works in the range from 19 kph to 40 kph.’

The gears are switched automatically, there are several modes for completing different types of works. The functions and technical specifications of AGRI Pro handlers make them perfect for all applications, both on farms and in fields.

At **Fliegl’s** exposition, everybody’s attention was drawn to snow blades and pruning saws that are attached to telescopic handlers and special trailers for hauling manure and filter cake.

‘It has been “cured” of all “diseases” of multifunctional machines’, asserts Denis Povalikhin,

Director of Kostroma branch office of EkoNiva-Tekhnika. ‘The machine has power gear and thicker side panels and its elements are secured from clogging with organic material.’

Brand-managers available at the booths of EkoNiva’s suppliers-partners were making presentations and explaining the technical details of innovations and machine operation. Thus, SIMA was the place of a number of preliminary agreements for machinery delivery.

‘Long ago, I stopped selling machinery and started selling EkoNiva’s brand’, says Denis Povalikhin. ‘It is a reliable supplier of equipment and expertise that has gained considerable reputation, the respect of suppliers and the friendship of customers over all these years. Hearty attitude to the partners is one of the major reasons why customers opt for our company, and this trip is yet another proof to it — we’re keeping the standard high.’

Apart from the trade fair activities, the team enjoyed a varied entertainment programme, which included a highlight tour of Paris, ascending the Eiffel Tower, a visit to the Moulin Rouge and the Palace of Versailles and a cruise along the Seine river. The combination of positive emotions, new ideas and impressions have provided the required charge for productive work in the farming season to come.

By Tatiana SIMONENKOVA





## Rigorous selection

Maintaining genetic properties of agricultural crop varieties is a methodical painstaking work requiring high skills. Unless early generation seed production methods are followed, valuable biological and economically important traits of varieties can be lost for a number of reasons, leading to variety degeneration.

Zashchitnoye seed growing enterprise (Kursk oblast) is celebrating its 15th anniversary this year. Over the years, the company has developed a highly professional science-based system of commercial seed growing. Thus, maintenance of genetic properties and economically important traits of varieties in the process of multiplication of pre-basic and basic seeds has become possible. It is the genetic potential of the variety that allows growers to achieve consistently high and stable yields which translate into high returns and profit.

Scientific methods widely employed in the process of early generation seed growing have enabled EkoNiva to secure its position among Russia's top 3 seed companies and sell high-quality seeds all over Russia and the CIS countries.

Variety outdated and, correspondingly, seed quality deterioration is caused by genetic and mechanical contamination. For example, even in self-pollinated crops, cross-pollination is observed within the variety in the range from 0.5% to 1.5%. Natural mutations lead to the emergence of untypical families and loss of valuable genetic properties. The immunity system of plants weakens due to the emergence of new races of pathogens of various diseases, sprouting of volunteer seeds of predecessors,

'foreign' seeds getting into the bulk from improperly cleaned equipment, implements, cleaning lines or packaging. For these reasons, seed material undergoes a systematic strain renovation. When a variety loses its commercial value, a variety change takes place.

'Maintenance plant breeding is a guarantee of preservation of the original genetic properties of a variety, its commercial value', says Andrey Zvyagin, Head of Plant Breeding and Early Generation Seed Production Department of Zashchitnoye. 'The task of early generation seed production is to preserve exactly the traits that are valuable to agricultural producers. To achieve this, we grow seeds at a number of stages on the basis of a comprehensive seed production system.'

The first stage is screening of typical ears in nurseries of basic material selection. We thrash the selected heads, cull them by grain properties and then plant them on the plots according to families. In the trial nursery for assessment of the 1st year progeny (PR-1), line assessment starts when the plants reach full heading.

'Thus, the worst and untypical families are culled', continues Andrey Zvyagin. 'Then we sow each selected family in the trial nursery in order to assess the 2<sup>nd</sup> year progeny.

Each family occupies a 10 m<sup>2</sup> plot.'

Further, we carry out species and varietal hand weeding on the plots, the worst families splitting by a number of traits, lodged or affected by diseases are eliminated, and the best specimens featuring all varietal benefits, resistant to biotic and abiotic environmental factors and producing consistently high yields are selected. These true-to-type lines are harvested by the method of joining and sown in the 1<sup>st</sup> year propagation nursery.

'We ensure that the stands are uniform, free from species and varietal impurities or weeds', says Andrey Zvyagin. 'Uniformity potentially minimises losses for commercial producers which purchase their sowing material from us, and impurity-free stands guarantee varietal purity.'

Until recently, early generation seed production in Zashchitnoye was performed for purely scientific, non-commercial reasons. The seeds acquired this way were used for the company's own purposes. Since 2016, when the company started developing its own plant breeding and submitting winter wheat varieties for state trials, trial nurseries for assessment of 1<sup>st</sup> and 2<sup>nd</sup> year progeny have been planted with the prospect of further sale of high-quality pure variety seeds.

By Tatiana SIMONENKOVA





# Efficient approach

Liquid manure is valuable organic fertiliser containing all essential macro- and microelements. So, how can they be used efficiently, reducing mineral fertiliser costs and preserving the environment?

The content of nitrogen, phosphorus, potassium and microelements in liquid manure varies greatly and depends on the dry matter, type of manure and ration. A more precise composition can be determined by regional agrochemical laboratories; however, average values can also be applied.

(J. Schoop und M. Fischler, AGRIDEA), introduction of liquid manure into soil via hoses with trailing shoes, which cut shallow slots in the soil along the stand, reduces ammonia nitrogen losses by from 30% to 60%. A deeper manure incorporation — up to 8 cm (using a cultivator or a disc harrow) — reduces ammonia nitrogen losses

and the special-purpose steel skids mounted onto them ensure cutting of slots in the sod to the depth of 3-5 cm. Fliegl tankers combined with GUG or RASANT cultivators ensure even deeper incorporation of liquid manure, however, it can be performed only upon seedbed tillage or in a fallow field.

EkoNiva-APK dairies accumulate huge amounts of slurry. The dairy management opts for the hose system for liquid manure incorporation into the soil. This method has been tested at new dairies in Kaluga oblast. It is the most cost-effective and the simplest modern way of applying the set rates of large volumes of liquid manure to fields which are up to 4 km away from the manure storage lagoons. The manure is pumped into the discharge main ending with hoses, from there it flows into the distributor and, finally, into a tractor-drawn cultivator equipped with an injection system. A tine cultivator (working width of 4 metres) injects liquid manure fraction 15 cm deep.

EkoNivaAgro-Vostochnoye favoured this method for its efficiency.

'Apart from other merits, the system is environmentally friendly', says Sergey Chernenko, Chief Agronomist of EkoNivaAgro-Vostochnoye. 'We introduce manure into the soil 20-25 cm deep. In this case, it does not spread over the field but arrives exactly at its destination. Besides, since it does not get washed off and leached into groundwater, it does not pollute the environment.'

By Willi DREWS, Doctor of Agronomy, advisor of EkoNiva

### Average content of major nutrients in liquid manure (kg per 1 tonne/m<sup>3</sup>)

Liquid manure type	Dry matter, %	Nitrogen (N)		Phosphorus P <sub>2</sub> O <sub>5</sub>	Potassium K <sub>2</sub> O	Magnesium MgO	Calcium CaO
		Total	NH <sub>4</sub> -N				
Cattle, liquid	5	2.9	1.7	1.2	3.1	0.6	1.2
Cattle, medium	7	3.5	2.0	1.5	3.9	0.8	1.6
Cattle, thick	9	4.2	2.3	1.8	4.6	1.0	2.0
Swine, liquid	1,5	2.5	2.1	0.8	1.8	0.3	0.8
Swine, medium	3	3.6	2.8	1.7	2.4	0.6	1.5
Swine, thick	4.5	4.4	3.3	2.5	3.0	0.9	2.3
Poultry manure	14	9.2	6.5	7.0	5.0	1.8	15

Source: Tables by Chamber of Agriculture of Schleswig-Holstein, 2016

As the table shows, depending on the consistency, 1 tonne of liquid cattle or swine manure contains from 2.5 to 4.4 kg of total nitrogen. The major part of nitrogen is in a highly volatile form of ammonium (NH<sub>4</sub>). Thus, ammoniacal nitrogen content in cattle manure amounts to 54.8-58.6%, whereas swine dung contains from 75 to 84% of ammoniacal nitrogen causing a strong odour and easily volatilising upon broadcast application. The ammonium form is fast bound by microorganisms and converted to the nitrate form (NO<sub>3</sub>), which is easily-available for the root system of plants, only when manure is incorporated into soil. Based on the scientific research

by 70% as compared to manure broadcasting with a spreader disc. A conventional slurry dosage (20-30 tonnes/ha) incorporated into the soil is equivalent to a whopping dosage of ammonia nitrate — 200 kg/ha. In addition to nitrogen, 20-50 kg/ha of phosphorus (P<sub>2</sub>O<sub>5</sub>), 36-90 kg/ha of potassium (K<sub>2</sub>O) and a variety of other macro- and microelements need to be introduced into the soil. This data has produced a striking impression on Russian agrarians. They are beginning to introduce deep incorporation method using the Skate trailing shoe spreader by Fliegl. It is equipped with hoses, along which organic fertiliser goes into the soil,

Russia underproduces 8 million tonnes of milk. According to Aleksandr Tkachev, Minister of Agriculture, stimulation of investment in the dairy industry is the solution to the problem.



## Heading for the Milky Way

The government has set the goal to build 800 dairy farms by 2020 and increase milk production up to 36 million tonnes a year. EkoNiva-APK Holding has already achieved impressive results on the way to the designated goal. In 2015-2016, the holding company launched three dairy facilities (Vysokoye and V.Ikorets dairies — in Voronezh oblast and Bushovka Dairy — in Kaluga oblast), each with the herd size of 2,800 cows and daily milk output capacity of 75 tonnes.

Three more mega-dairies of the same herd size are being constructed currently.

Ramon Schenk, Deputy Director General for Livestock Production of EkoNiva-APK Holding, believes that the tendency to build larger dairy facilities is boosting the industry development.

'Right at the start, our three mega-dairies showed outstanding performance — the company never produced as much milk before', shares Ramon Schenk. 'The technical and management solutions that we had been thoroughly picking on our tours of foreign farms and at trainings were then systematically implemented at these dairy facilities. Now it is important to

keep up that pace.'

The herd number is not as important as its quality, therefore high-yielding pedigree Holstein cows had been imported for the farms.

Besides, the company employs a systematic and comprehensive set of state-of-the-art technical solutions. Dairy Comp 305 herd management software ensures efficient tracking of cows and planning of daily processes.

'It is a reliable herd monitoring tool', comments Aleksandr Fedotov, Manager of Bushovka Dairy. With the help of the software, we carry out a highly accurate estimation of cows' health, draw up meticulously evaluated plans and promptly respond to any changes in the working process.

The nutrition system is also progressive. Individual diets are formulated, depending on the type and purpose of animals.

'The dairy is "armed" with 46-m<sup>3</sup> BLV mixer wagons', adds Aleksandr Fedotov. 'With their help, we are capable of distributing feed for large groups of cows. In addition, the software enables us to calculate the nutritive value with high precision and estimate the feeding performance.'

All cows are ear-tagged, which provides

100% control of the herd.

'Moreover, our facility is non-polluting', says Ruslan Mydlo. 'Manure removal with vacuum tankers not only ensures good and quick cleaning of barns but also allows using the wastes as fertiliser. First, the slurry is accumulated in the lagoons, then it settles down and after that it is applied in the fields.'

Availability of good specialist is crucial for the dairy business.

'Today, the lack of qualified staff is a sore point for Russia in general', admits Ramon Schenk. 'But we are making progress in solving this problem by implementing our own entry-level and advanced training system — School of Livestock Farming.'

This 'staff factory' has been working for two years. The average age of the specialists is under 30. So, they adapt well to cutting-edge technologies implemented.

'Thanks to this school, we had selected and prepared employees six months before the dairy was launched', shares Aleksandr Sorokin, Manager of Vysokoye Dairy. 'As a result, the commissioning of the dairy and adjustment of all processes went really smoothly.'

*By Aleksandr KUTISCHEV*





## Sharing experience

A group of EkoNiva-Tekhnika's clients from Kirov, Tula and Kostroma oblasts have visited dairy facilities of EkoNivaAgo in Voronezh oblast.

The tour started from V. Ikorets mega-dairy for 2,800 cows, where the guests were welcomed by Stefan Duerr, President of EkoNiva Group, personally. He talked about the business economics, shared how much the production cost per one litre of milk was and answered all burning questions of the colleagues also engaged in dairy farming.

'Starting our dairy business, we also travelled a lot across the country to learn other dairymen's experience', shares Stefan Duerr. 'So, don't be shy and bombard the specialists accompanying you today with any questions; they will give you sincere answers.'

Ramon Schenk, Deputy Director General for Livestock Production of EkoNiva, guided them through all the processes and procedures at the dairy: from manure removal to maternity barn and calf site management. The gigantic 72-stall rotary produced the most astounding impression on everybody.

After the cutting-edge dairy facility, the group moved on to the dairy farms that represented good examples of successful reconstruction of old Soviet collective farms.

The tie-stall farm in Dobrino village is essentially different from the others, as it is the only complete-cycle enterprise: from birth to calving, the animals never leave it.

At the end of the informative day, the guests toured the dairy farm in Shchuchye village, former Tikhii Don collective farm. That is where EkoNiva first got engaged in livestock farming. The cows here are housed in reconstructed typical tie-stall barns and go out onto exercise lots; and the calves live in individual hutches outdoors.

The tour-takers also saw the corporate class room and learnt about the training course designed to tailor young graduates of agricultural universities to the management systems employed by EkoNiva. Willi Drews, Doctor of Agronomy, told the visitors about the cow diets, emphasising that the forages were grown in the fields in the neighbourhood and the perfect composition of grass mixes had been achieved by trial and error. All the guests, without exception, found the trip most instructive and practically useful.

**Aleksandr Sinitsyn,**  
Deputy Chairman of Novy Put'  
cooperative farm (Yaroslavl oblast):

'I liked the modern dairy in V. Ikorets most of all, but old-fashioned systems that we saw afterwards are more comprehensible to us. We have 849 milking cows housed in tie-stall barns. Currently, we are attempting to get "reloaded"; for this reason, actually, we have come here – to see, for example, heifer management at open corrals. The idea is good, and we will implement it

as well. In general, we liked the overall simplicity, organisation of processes and low-cost reconstruction plan; this experience will come in handy.'

**Oksana Vtorykh,**  
Chief Herd Manager of Prigorodnoye  
Agrifirm (Kirov oblast):

'It has been an extremely productive day; we have learnt lots of useful information. We are planning to build a calf site like the one here, install similar hutches and set up a similar maternity pen.'

**Lyubov Tarasova,**  
Director of Pogortsy Agrifirm (Kirov  
oblast):

'We appreciate that the top-level specialists and managers have given us so much attention. We have found a lot of things useful, seen some solutions we have not been able to come up with on our own. Our herd numbers 3,000 head, including 1,200 milking cows, housed in the barn. Until now, we have been wary of taking the cows outside, now we realise that we can and should do it.'

By Tatiana SIMONENKOVA





## Working or playing – always out in the fields

A lot of companies today are following a good trend of promoting a healthy lifestyle. The management provides employees with favourable conditions for both work and leisure, involving them in various corporate sports competitions.

**E**koNiva is one of those companies that pay specific attention to sports events, and the football team that has been representing EkoNiva at municipal, regional or even federal competitions for the past 12 years is a vivid testament to it.

Both the first and reserve squads are trained under the supervision of coach Vladimir Muravlev. The reserve squad consists of the company's employees and young guys born 2003 – 2004 that have yet to 'mature' for further appearance in the first team, which includes EkoNiva's best football players. Sergey Kovalev, the team captain, has been playing for EkoNiva's football club for over five years and, according to him, the core team have hardly changed over these years.

'It is great that our team consists mostly of the company's employees. There is a manager, an agronomist, a security guard and people of other positions among the players, but when on the pitch – we are all one team. Sometimes, it happens that a player quits for whatever reason - there is no avoiding that, then, to replace him, we move a prospective footballer from the

reserve squad', shares Sergey Kovalev. In fact, any EkoNiva's worker can join the team; enthusiasm is the only thing required. However, it is hard to break into the first team from the start. You have to deserve it by doing your best and showing excellent performance in the reserve team. After that, it is up to the supervisor whether the player can be promoted to the first squad.

'If a player is skillful and technically gifted and has good understanding of the pitch, he will play in the first team. But even if he is not up to the level for the first team, he is sure to play in the reserve team anyways', says Vladimir Muravlev, EkoNiva team's head coach. 'We go onto the pitch not for fun only,

we achieve goals and objectives set before the start of each season and also enhance the company's image, which, by the way, is great as it is.'

The 'playing farmers' started preparing for the coming season a few months ago. Their routine includes track and gym workouts aimed at boosting their performance. The players got down to their ball mastery workouts as soon as the snow had melted and Druzhba Stadium had become suitable for training.

'We have three training sessions a week, which should ensure that we get into optimal shape by the start of the season', declares Vladimir Muravlev. 'The year is going to be challenging, as we are going to participate in several competitions: Liski District Championship, Voronezh Oblast Football Competition Dedicated to the Memory of the Soviet Union Hero I. Prosyanyo and several corporate tournaments.'

Looking back at the previous season, we can assert that it was successful for the team. Our footballers took the third place in Liski District Championship, the reserve team won the District Championship in the second team group. Our team also won the AgriCup in Moscow. Vladimir Muravlev's team takes part in the tournament every year and has never come back without a medal.

'We do not have any issues at the moment, the team discipline is good, the guys are like family', continues Vladimir Muravlev. 'I would like to thank EkoNiva's management specifically; it finances the team, incentivises for good performance, funds acquisition of equipment, uniform and participation in competitions. I wish other amateur teams had such managers, then, I am positive, the football level would rise considerably in the region. To express our gratitude, we, in our turn, always carry EkoNiva banner proudly, heading for victory and overcoming any obstacles in our way.'

By Viktor BARGOTIN





## Career Guidance Day

This programme, also sponsored by the Academy of Dairy Sciences, included a tour of Zaluzhnoye Dairy for high-school students of Zaluzhnoye School, Liski district. The students investigated literally each corner of the dairy: checked the housing conditions for cows and calves, learned how the rotary milking parlour operates, visited the Milk Museum, where a career path presentation took place. Besides, they tasted dairy products from the Academy of Dairy Sciences and learned about the processing plant in Shchuchye village, Voronezh oblast.

'Introduction of children in agriculture is one of the major goals of this event', says Konstantin Chernitsyn, a tour guide of the Academy of Dairy Sciences. 'The plan is that today we tell them about sought-after qualifications and specifics of jobs at the dairy, they further enter agricultural universities, and some time later, they come here as young specialists and we hire them.'

Besides, the local schoolers learnt about student and young specialist programmes supported by EkoNiva-APK Holding: cooperation with APOLLO e.V. programme, agricultural universities, organisation of seminars, on-farm trainings and internships, as well as lectures and workshops given by qualified specialists

Today high-school students are facing a challenging issue of a career choice. Quite often, unfortunately, they make a wrong choice. The authorities of Liski district, Voronezh oblast, do not want to leave the young alone at a crossroads in life, therefore a social campaign called 'Career Guidance Day' has been launched.

at universities, Academy of Livestock Farming held every spring and autumn, cooperation with Russian Student Troops and international training projects.

The children asked a lot of questions, eyes kindled with interest, and got

involved so much that did not notice how the tour came to an end. There were no disappointed tour-takers that day; they all left the farm full of positive emotion and imperishable impression, knowing for sure that farming is exciting.

By Viktor BARGOTIN

## Athletic and creative

On the last day of March, over 100 schoolers of Liski district, Voronezh oblast, took part in Healthy Lifestyle Without Exception Competition sponsored by the Academy of Dairy Sciences.

The children delivered different performances, including dances, acrobatic routines, physical exercises and flash mobs. The contests were diverse, but advertising of dairy products was one of the most interesting challenges. The children employed all their creative efforts and truly astounded the jury with their imaginative ways of advertising. The first prize was awarded to the team that performed self-made chastushkas (Russian folk-style humorous rhymes) in the advertisement.

However, there were no losers that day, as all participating children without exception received memorable gifts. The event climaxed with a treat table offering the abundance of products from the Academy of Dairy Sciences.

It is rewarding to know that the schoolers had been eating healthy products, keeping regular hours, doing their morning exercises for several months before that to get ready for the competition. But the most exciting thing is that they involved everybody around

including their parents and friends in this lifestyle and created a real voluntary group.

The Academy of Dairy Sciences thanks the guys for promoting a healthy lifestyle and congratulates all winners and participants.

By Viktor BARGOTIN



**May-June  
John Deere machinery demo shows**

**Venue:** Voronezh oblast  
**Organiser:** EkoNiva-Chernozemye LLC

**9 June  
Seminar on farming technologies**

**Venue:** 2, Promyshlennaya stret, Krasnoozersk, Krasnoozersk district, Novosibirsk oblast, Krasnoozersk service centre  
**Organiser:** EkoNiva-Sibir LLC

**9 June  
Yaroslavl Field Day**

**Venue:** Pakhma farming enterprise, Ivnyaki, Yaroslavl oblast  
**Organiser:** the Department of Agriculture and Consumer Market of Yaroslavl oblast, GOAU Information and Advisory Service of the Farming Sector

**15-18 June  
Korenskaya Trade Fair in Kursk**

**Venue:** Svoboda, Zolotukhino district, Kursk oblast  
**Organiser:** Administration of Kursk oblast, Kursk Korenskaya trade fair exhibition centre

**June 21  
Field Day**

**Venue:** Komsomolsk district, Ivanovo oblast  
**Organiser:** Department of Food and Agriculture of Ivanovo oblast

**21 June  
Field Day**

**Venue:** Ilkino OJSK, Melenkovo district, Vladimir oblast  
**Organiser:** Department of Food and Agriculture of the Administration of Vladimir oblast

**21-22 June  
Siberian Field Day**

**Venue:** Siberian Agricultural Park, Pavlovsk district, Altai Area  
**Organiser:** Ministry of Agriculture of Altai Area

**23-24 June  
Kaluga Oblast Field Day – 2017 trade fair**

**Venue:** Kaluga variety testing station, Peremyshl district, Kaluga oblast, Kaluga Research Institute of Agriculture  
**Organiser:** Agency for the Development of the Farming Sector, Centre LLC, under the auspices of the Ministry of Agriculture of Kaluga oblast

**28 June – 1 July  
Field Day and Variety Fair**

**Venue:** Shatilovo variety testing station, Novoderenkovskoye district, Oryol oblast  
**Organiser:** Department of Agriculture of Oryol oblast

**29-30 June  
Voronezh Field Day**

**Venue:** Talovaya district, Voronezh oblast, Agricultural Research Institute of the Central Black Soil Region named after V. V. Dokuchayev  
**Organiser:** Centre LLC under the auspices of the Government of Voronezh oblast



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**29-30 June**

EkoNiva invites its friends and partners to visit Voronezh Field Day, the 11<sup>th</sup> inter-regional trade fair of farm machinery and technologies

**Venue:** Agricultural Research Institute of the Central Black Soil Region named after V. V. Dokuchayev.

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